Undergraduate Courses 2010

Allied Health (AH)

3101. Health and Wellness for Life (101)
Either semester. Three credits. Prerequisite: BIOL 1103 or 1107 or equivalent. Open only to Allied Health Science majors juniors and above; all others by instructor consent. Not open to students who have passed AH 1201. Wellness, holistic health, mind-body connection, health and wellness models, mental wellness, positive self-concept, preventing heart disease and cancer, licit and illicit lifestyle drugs, stress management, diet, nutrition, weight control, aerobic and anaerobic exercise, healthy lifestyle behaviors, applications to life. All Students are required to participate in at least one Community Based Outreach Engagement Program.

3234. Fitness for Health (208)
Either semester. Three credits. Prerequisite: Open only to Allied Health Sciences majors; others with instructor consent; open to juniors or higher. Emphasizes preventative health practices, which promote healthful lifestyles and reduce risk factors associated with disease. Designed to provide theory and concepts related to the development and maintenance of physical fitness, general health and performance.

3133. Cancer and Your Health (220)
(Formerly offered as CYTO 220.) First semester. Three credits. Three hours of lecture. Prerequisite: One course in Biology or concurrent enrollment in a Biology course. Introduces cancer risk education, causes, early detection, prevention, and public education.

3231. Program Planning for Health Promotion (231)
Second semester. Three credits. Three hours of lecture. Prerequisite: Open only to Health Promotion students; others by consent. Open to juniors or higher. Presents meaningful and constructive tools, methods and techniques for Health Care practitioners to plan, develop and deliver community based (outreach) Health Promotion programs which would provide opportunities to improve the quality of life as well as the quantity.

Dietetics (DIET)

3150. Applied Medical Nutrition Therapy I (206)
First semester. Four credits. Prerequisite: MCB

2000, PNB 2264, 2265; NUSC 1165. Open only to Dietetics majors; others by consent of Dietetics Program Director. Introduction to the nutrition care process, nutrition assessment, planning of special diets, and applications of medical nutrition therapy to selected disease states and conditions.

3250. Applied Medical Nutrition Therapy II (207)
Second semester. Two credits. Prerequisite: Student must earn a “C” or better in DIET 3150, 3155. Open only to Dietetics majors; others by consent of Dietetics Program Director. Kerstetter Medical nutrition therapy for selected disease states and conditions. Continuation of DIET 3150.
Clinical Dietetics Practicum I (211)
First semester. One credit. Prerequisite: MCB 2000; PNB 2264, 2265; NUSC 1165. Open only to Dietetics majors; others by consent of Dietetics Program Director. Abourizk Supervised practice experience in the health care setting.

Clinical Dietetics Practicum II (212)
Second semester. One credit. Prerequisite: Student must earn a “C” or better in DIET 3150, 3155. Open only to Dietetics majors; others by consent of Dietetics Program Director. Kerstetter Supervised practice experience in the health care setting.

Applied Community Nutrition (213WC)
Second semester. Three credits. Prerequisite: Student must earn a “C” or better in DIET 206, 211; ENGL 110 or 111 or 250. Open only to Dietetics majors; others by consent of Dietetics Program Director. Duffy Assessment of community structure, agencies, and resources. Plan, implement, and evaluate nutritional care and nutritional education in the community setting. Participation in computer laboratory experiences.

Community Nutrition Practicum I (214)
Second semester. One credit. Prerequisite: Student must earn a “C” or better in DIET 3150, 3155. Open only to Dietetics majors; others by consent of Dietetics Program Director. Dugdale Supervised practice experience in community agencies.

Health Economics (ECON)
Health Economics (261)
Second semester. Three credits. Prerequisite: ECON 2201. Recommended preparation: One of: MATH 1071Q, 1110Q, 1121Q, 1131Q, or 1151Q. Heffley Economic analysis of the health sector: organization and performance of health care delivery systems; economic behavior of patients and providers; markets for health services; health-care finance and insurance; health-care policy; and cost-benefit analysis of health-care programs.

Health Systems Management (HSMG)
Introduction to Health Care Management (280)
First semester. Three credits. This course introduces basic concepts, principles, and practices associated with the health care delivery system in the United States. The course will examine how this system is organized, and discuss the major issues related to the provision of health care, from both a business and social science perspective. Emphasis will be placed on understanding the components and features of the health care delivery system in the United States as it is developed and applied through a managed care organizational framework.

Health Care Analysis (281)
Second semester. Three credits. Prerequisite: HSMG 3240: open to juniors or higher. This course deals with the application of economic theory, health services research, policy development and analysis, operations research, and management science techniques for analyzing and evaluating the performance of health care services and organizations.
4242. Health Care Information Technology (282)
First semester. Three credits. Prerequisite: HSMG 3243 and 4891; open to juniors and higher. This course provides an introduction to information technology (IT) within the context of health care planning, managerial decision-making and strategic analysis. The course examines how health care organizations apply information technologies in decision-making and considers factors that influence investments in healthcare IT. Students will learn to define appropriate IT terms, fit IT into an appropriate marketing plan, describe the IT project lifecycle, and identify key IT issues within the major healthcare markets. Topics include business model development, branding of services, and decision support.

4244. Advanced Topics in Health Care Management (283)
Second semester. Three credits. Prerequisites: HSMG 3240, 3243, and 4891; open to juniors or higher. This course provides health care management students with opportunities to apply tools and concepts learned throughout the program. Through real world consulting projects and hands-on projects, students develop and refine their skills in project organization and management, analysis, reporting, and presentation. Project areas include applications that integrate all business disciplines.

4448. Clinical and Social Issues in Health Care (285)
First semester. Three credits. Open to juniors or higher. This course covers clinical and social issues affecting health care provider organizations, such as the health needs of special population groups, public health concerns, epidemiological issues, and health care quality. Discussion will include how health care organizations address such issues through methods including clinical studies, disease management, partnership between private and public sectors, and legislative initiatives.

4891. Internship in Health Care Management (290)
Either or both semesters. Six credits. Hours by arrangement. Prerequisite: OPIM 3103 and 3104, senior standing, and consent of instructor. Supervised field work in a health care organization where students work with health care professionals to expand their expertise in solving health systems problems and increase their awareness of the issues involved in the day to day operations of a health care institution. Student performance will be evaluated on the basis of an appraisal by the field supervisor and a detailed written report submitted by the student.

Human Development and Family Studies (HDFS)

4255. Living with Chronic or Life-threatening Illness (255)
Either semester. Three credits. Prerequisite: Open to juniors or higher. Chronic and/or life-threatening illness from diagnosis through long term management. Psychological, interpersonal, family, and ethical aspects of the chronic illness experience across the life span, in contexts of culture and health policy.

3442. Latino Health and Health Care (267)
(Also offered as PRLS 3250.) Either semester. Three credits. Prerequisite: Open to juniors or higher. Overview of health and health care issues among Latinos in the United States. Particular attention is paid to cultural and social factors associated with health and well being (e.g. migration, acculturation, SES).
Kinesiology (EKIN)

3170. Health and Medicine (255)
First semester. Three credits. Prerequisite: Open only to Athletic Training majors. Graham
Knowledge, skills, and values that a health professional must possess to recognize, treat, and refer, when appropriate, the general medical conditions and disabilities of athletes and others involved in physical activity.

3100. Prevention and Care of Athletic Injuries (264)
First semester. Three credits. Prerequisite: Open only to students in Kinesiology programs. Mazerolle
An introductory class to explore general considerations of preventing, recognizing, and treating athletic injuries.

Nursing (NURS)

3560. Clinical and Nursing Science for Psychiatric and Mental Health Nursing (264)
Both semesters. Two credits. Prerequisite: To enroll in this course, a student must have earned a “C” or better in NURS 3215W, 3220, 3230, 3292; NURS 3592 concurrent. Open to Nursing majors only. Not open to students who have not completed NURS 262, 263.
Major theoretical perspectives regarding etiology and treatment of psychiatric illness are described and discussed including biological, psychological, sociological and environmental factors. The evolving role of the nurse with regard to promoting mental health, patient advocacy, preventing and/or minimizing adverse sequelae to psychiatric illness are explored, including use of therapeutic communication, critical thinking and application of the nursing process to assist individuals and families with a variety of behavioral health problems.

Nutrition Sciences (NUSC)

3267. Principles of Community Nutrition (267)
First semester. Three credits. Prerequisite: NUSC 2200 which may be taken concurrently. Perez-Escamilla. Role of community structures, agencies, services and the professional nutritionist in community health.

Anthropology

3302. Medical Ecology (261)
Anthropological perspectives on the interrelationships between culture, biology, environment, and disease. Major topics include ecology and adaptation, population dynamics, nutrition, reproduction, disease in sociological context, health seeking behavior, and the complexity of the interaction of western and non-western medical systems.
Psychology (PSYC)

3105. Health Psychology (251)  
Either semester. Three credits. Prerequisite: PSYC 1100, and PSYC 1101 or 1103.  
The interface between psychology and health is examined using a biopsychosocial model. Topics  
include stress and coping, health promotion, adjustment to chronic illness, and the psychology of  
health behaviors.

Women Studies (WS)

3453. Women and Health (241)  
(Also offered as SOCI 3453.) Either semester. Three credits. Open to juniors or higher. Ratcliff  
Social factors shaping women’s health, health care, and their roles as health-care providers.

Graduate Courses 2010

Allied Health (AH)

GPAH 6324. Critical Issues in Health Promotion, Disease and Disability Prevention (324)  
3 credits. Lecture. An in-depth study of health promotion, disease and disability prevention  
policies, programs and strategies.

GPAH 5328. Cancer Intervention for Allied Health Professionals (328)  
3 credits. Lecture. Introduction to cancer from the biologic, pathologic, Wellness Testing and  
Cancer Prevention, public education, professional education and policy issues perspectives.  
With this knowledge each student designs and implements a Cancer Intervention Program  
pertinent to their field of study. Development and use of media models is encouraged in each  
project emphasizing distant learning, teleconferences and video conferences as a means to  
present Cancer Intervention Programs.

GPAH 5331. Nutrition for Healthy Communities (331)  
3 credits. Lecture. Development of knowledge and skills in public nutrition including  
community assessment, development of program policies, and program planning,  
implementation, and evaluation.

GPAH 5360. Cross Cultural Health Care (360)  
3 credits. Lecture. Exploration of the relationships between culture/ ethnicity and health status,  
health care beliefs and behaviors. Develops greater understanding of, and sensitivity toward the  
patient’s way of life utilizing case examples from the United States and international settings.

GPAH 366. Environmental Health (5366)  
3 credits. Lecture. Focuses on the environmental health consequences of exposure to toxic chemicals,  
food contaminants and radiation. Basic principles of environmental health are discussed, followed by  
lectures on specific topics such as: cancer and reproductive risks, occupational hazards, radiation,  
genetic biomonitoring, risk assessment techniques, risk/benefit analysis, social/legal aspects of  
regulating toxic chemicals, and other related topics.
GPAH 6094. Health Promotion, Disease and Disability Prevention Research Seminar (403)
3 credits. Seminar. Inquiry into the theory and nature of research in health promotion, disease and disability prevention. Students are encouraged to meet regularly with their major advisors.

GPAH 6405. Exercise Intervention for Health Promotion in Persons with Chronic Disease and Disability (405)
3 credits. Lecture This course provides in-depth information for determining functional capacity and developing appropriate exercise programming for optimizing functional capacity of persons with chronic disease and/or disabilities. Understanding the effects of exercise on the disease process as well as the effects of disease on the exercise responses in chronic disease and disability are explored.

GPAH 6420. Clinical Management Models for Health Promotion (420)
3 credits. Seminar. Systematic design and analysis of the roles of health service managers and clinicians in the delivery of services for managed care are addressed. The course will analyze health care delivery from an integrated management-clinician perspective. Attention will focus on patient care and the use of clinical algorithms and critical pathways in healthcare delivery.

GPAH 6421. Design and Implementing Health Promotion Programs (421)
3 credits. Lecture. Designed to assist students with the skill development necessary to design and implement health promotion programs via a settings approach. Various program development models will be presented. Experts from the field will be integrated into the course from various programmatic settings.

GPAH 6423. Advanced Topics in Stress and Health Promotion (423)
3 credits. Seminar. Selected topics in assessing and treating stress related disorders in health care delivery are examined. Emphasis on diagnosis, treatment, and prevention interventions are examined. Current measures used in assessment along with self-management skills for patients are the focus of this course.

3 credits. Lecture. The course is designed to critically review the evolving modalities of alternative therapies and mind-body interventions. The major components of alternative medicine, providing a review of the scientific basis, physiology and psychoneuroimmunology of the disciplines of holistic mind-body therapies will be presented. The role of energetics and spirituality in human health promotion and disease prevention will be discussed.

Anthropology (ANTH)

ANTH 5376. Ethnomedicine (376)
3 credits. Seminar. Medical systems in cultural context. Traditional healers, herbal medicine, culture bound systems, the meaning of illness, curing and disease. Impact of biomedicine on traditional and alternative medical systems.

ANTH 5377. International Health (377)
3 credits. Seminar. The role of anthropology in international health, morbidity and mortality, population, maternal and child health, nutrition, infectious diseases and epidemiology, health care infrastructure and underdevelopment.
Human Behavior (HBEL)

HBEL 5301. Substance Abuse II: Prevention and Treatment of Alcohol and Other Drug Abuse (301)
3 credits. Lecture. Open to students in both the M.S.W. program and the STEP program. Prerequisite: HBEL 5300. Elective course for Substantive Area: Focused Area of Study on Mental Health and Substance Abuse in Social Work Practice. Builds upon HBEL 5300, an overview of the various classes of drugs and the acute and chronic effects of drugs on human behavior and the body. Focuses on traditional and new intervention techniques that could be applied to social work practice. Provides knowledge of clinical applications and the empirical validation of effectiveness of major intervention strategies used in treatment of addictions.

HBEL 5393. Emerging Issues in Mental Health and Substance Abuse (393)
3 credits. Lecture. Required course for Substantive Area: Focused Area of Study on Mental Health and Substance Abuse in Social Work Practice. This course is designed to introduce students to current issues confronting providers of mental health and addiction services and consumers of these services as we enter the 21st Century. Philosophies about people with mental health, addiction and cooccurring disorders are changing in response to the developing knowledge base and the rise of consumer movements. Specific emphasis on the growing need for broad based multi cultural services systems for consumers will be fostered. Issues of poverty and the “severely and predominantly mentally ill” will be discussed.

HBEL 5395. Scientific Foundations of Child/Adolescent Development, Mental Disorders, and Substance Abuse (395)
3 credits. Lecture. Open to students in the M.S.W. program and STEP program. Prerequisite or corequisite: BASC 5361 in the past two years or permission of the instructor. A Web-based course on knowledge for practice in children’s services, mental health (all ages), and addictions. It can be used to meet an elective requirement in some substantive areas, by permission of the area chair. No class attendance required, one optional session. Students become familiar with current and emerging knowledge in these areas. They become proficient at accessing cutting-edge practice relevant information to address issues and challenges that arise day-to-day. Class members discuss issues and questions with each other and the instructor via the World-Wide Web. Class members can collaborate with each other on assignments if they wish. An optional class session at the beginning of the semester is offered to help students become comfortable with Web technology, and to get to know each other and the instructor in person.

Human Development and Family Studies (HDFS)

HDFS 5340. Prevention, Intervention, and Public Policy (331)
3 credits. Seminar. Survey course of the theory, practice and science of primary prevention of human problems. Prevention concepts and case studies are presented. Students give analysis and critique of course content and develop personal and professional perspectives on prevention practice and possible social policy initiatives.
Nutritional Sciences (NUSC)

NUSC 5314. Nutrition for Healthy Communities (314)
3 credits. Lecture. Development of knowledge and skill in public nutrition, including community assessment, development of program policies, and program planning, implementation, and evaluation.

NUSC 5390. Field Work on Community Nutrition (370)
1-6 credits. Practicum. Supervised field studies of community nutrition problems and visits with community agencies and families. Readings, conferences and reports required.

Nursing (NURS)

NURS 5250. Community Health Nursing Theory: Enhancing Wellness (334)
3 credits. Lecture/Practicum. Prerequisites or Co-requisites: NURS 5010 and PUBH 5401, both may be taken concurrently. Offered in odd-numbered fall semesters. Theoretical formulations from nursing, public health, and related sciences are used to enhance the levels of wellness of selected population groups in the community. A needs assessment is conducted to develop a community diagnosis as the basis for developing a plan for health promotion.

NURS 5265. Community Health Nursing Theory and Practice: Risk Reduction (335)
4 credits. Lecture/Practicum. Prerequisite: NURS 5250. Prerequisite or co-requisite: NURS 5080. Analysis of risk factors for selected populations/communities through an integration of nursing and public health theories. Opportunity for development, implementation, and evaluation of risk reduction interventions is provided.

NURS 5275. Community Health Nursing Theory and Practice: Health Maintenance (336)
4 credits. Lecture/Practicum. Prerequisite: NURS 5265. Analysis of health maintenance issues and interventions for groups sharing a common health problem. Opportunity to apply integrated knowledge of nursing and public health principles in the development and evaluation of plans to maintain optimum levels of health is provided.

Pathobiology and Veterinary Science (PVS)

PVS 5632. Vaccines: Mechanisms of Immune Protection (306)
3 credits. Lecture. Also offered as ANSC 5632. The focus is on several different approaches to inducing prophylactic immunity in the host. Both traditional and modern molecular approaches to vaccine design will be discussed. In addition, the mechanisms employed by pathogenic microbes to avoid hosts’ immune responses will be examined in the context of vaccine design. The students will gain an appreciation for the transition from basic research to practical applications.

Psychology (PSYC)

PSYC 5120. Health Psychology (309)
3 credits. Lecture. Interaction of biological, psychological, and social factors in health. Topics include disease prevention and health promotion, psychosocial factors in treatment of illness, and stress and coping processes.
PSYC 5122. Clinical Health Psychology (402)
3 credits. Seminar. Examines the interaction of biological, psychological, and social factors in health and the application of psychological interventions for physical illness, psychological problems secondary to physical illness, and health promotion.

PSYC 5123. Occupational Health Psychology (401)
3 credits. Seminar. Prerequisite: STAT 5101 or NURS 5020 or PUBH 5434. Introduction to research in occupational health and the field of occupational health psychology. Topics include work stress, worker participation in hazard management, epidemiology of occupational exposures, workplace incivility, and design of safe work environments.

PSYC 5121. Health Psychology Research Methods (403)
3 credits. Lecture. Prerequisites: STAT 3115Q and STAT 5015, or equivalent statistics course preparation as determined by the instructor. Research designs, methods, and data analysis strategies used in health promotion and disease prevention research (e.g., case control studies, randomized clinical trials).

Public Health (PUBH)

PUBH 5400. Introduction to Public Health (400)
3 credits. Lecture. Provides an introduction to the discipline, its scientific foundations, and its relationship to other fields including clinical medicine. The basic concepts and skills necessary for a practitioner of public health are explained. Students gain a better appreciation of epidemiology to guide public health interventions and the development of public health policy.

PUBH 5404. Environmental Health (404)
3 credits. Lecture. Explores the policy, political and public health implications of such issues as air pollution, drinking water, exposure to hazardous chemicals, indoor air pollution, food protection, lead poisoning, housing, international issues, etc. Provides the student with some basic technical information and familiarity with terms for a better understanding of policy and political decisions and health effects of environmental exposures.

PUBH 5405. Social and Behavioral Foundations of Public Health (405)
3 credits. Lecture. An introductory survey emphasizing basic social science concepts in the analysis of public health including orientations toward health, disease and health care, the origins and distribution of health care resources, and the role of social movements and research in improving public health.

PUBH 5431. Public Health Research Methods (431)
3 credits. Lecture. Introduction to conceptualization, methods, and analysis in public health research including: formulation of research questions and hypotheses, development of research and analytic models, use of qualitative (inter viewing and observation) and quantitative (secondary and survey data) data collection methods, and qualitative and quantitative data analysis leading to the formulation of research projects.
**PUBH 5438. Investigation of Disease Outbreaks (438)**
3 credits. Lecture. Provides students with the basic skills and perspectives necessary to investigate acute disease outbreaks. The emphasis is on the use of epidemiology to investigate outbreaks of infectious diseases, guide public health interventions, and develop public health policy. Students will participate in an outbreak investigation conducted by the state health department.

**PUBH 5450. Public Health Practice (450)**
3 credits. Lecture. Discussion of initiatives to define the practice of public health, including the Institute of Medicine (IOM) Report on the Future of Public Health and the Public Health Service’s “essential functions” of public health. Includes review of expenditures studies and estimates of actual public health infrastructure resource needs, as well as discussion of appropriate future roles for public health.

**PUBH 5451. Maternal and Child Health Services (451)**
3 credits. Lecture. Maternal and child health services are examined, highlighting the past successes and future challenges to the health care delivery system. Current topics which include nutritional influences, reproductive technology, injury control, domestic violence, child abuse/neglect, emerging infections, perinatal risk behaviors and mental health provide case studies for evaluation of maternal and child health policy development.

**PUBH 5452. Injury and Violence Prevention (452)**
3 credits. Lecture. Injury and violence are major preventable public health problems with predictable patterns. The purpose of this course is to familiarize the student with the epidemiological literature of intentional and unintentional injuries. The course is designed to focus on the knowledge and skills required to design, implement, and evaluate scientifically sound community injury prevention and control programs.

**PUBH 453. Chronic Disease Control (5453)**
3 credits. Lecture. Chronic diseases are examined from clinical, epidemiological and program planning perspectives. Diseases examined include: selected neoplastic diseases, cardiovascular diseases, chronic obstructive pulmonary diseases, cerebrovascular disease and diabetes. The role of public health agencies, for profit and non-profit entities in research, education, and risk reduction activities also are covered.

**PUBH 5454. Infectious Disease Control (454)**
3 credits. Lecture. Over view of microbiology. Agent-host environment relationship in causation and control of infectious diseases. Epidemiological patterns of major infectious diseases, with emphasis on sexually transmitted diseases, respiratory conditions and nosocomial infections.

**PUBH 5455. Health Education (455)**
3 credits. Lecture. Methods for planning, presenting, and evaluating health education programs in communities, schools and worksites. Includes use of the Precede Model, setting of goals and objectives, behavior modification theory, group processes, teaching techniques and activities for developing and presenting workshops or courses.

**PUBH 5462. International Health (462)**
3 credits. Lecture. Examines primary health care as a model suited to the health needs of developing nations. Provides a broader understanding of the genesis of illness in developing countries and analyzes the kind of care required to have an impact on these illnesses.
PUBH 5472. Disability and Public Health (472)
3 credits. Lecture. Examines both developmental and acquired disabilities from a public health perspective. Public health issues of cognitive and physical disability, including: prevention, diagnostic and definitional considerations, epidemiological and statistical controversies, legal and ethical aspects, treatment considerations and research concerns.

PUBH 5473. Women, Public Health and Reproduction (473)
3 credits. Lecture. The history of reproduction and public health issues in the U.S.; underlying ethical issues in modern reproductive health care and key components of opposing views; major financial, social and emotional considerations in policy making and the increasing role that reproductive health plays in public health as a whole.

PUBH 5476. Community Mental Health (476)
3 credits. Lecture. Overview of mental illness, substance abuse and related conditions, including epidemiological patterns and interventions. Chronic mental patients, the homeless mentally ill and other special groups. The community mental health movement and role of government. Regulations and mental health law.

Social Welfare (SWEL)

SWEL 5370. Social Work in Health Care: Introduction to Knowledge, Policy and Practice (370)
3 credits. Lecture. Open to students in both the M.S.W. program and the STEP program. Bio-psycho-social-cultural aspects of health, illness, and disability in the context of individual, family, and community life. Attention is given to health care systems, social work roles and tasks in health care, the impact of health policy, and the concerns of planning, administration, supervision, and consultation in health care and in social work services in health care.

SWEL 5378. AIDS and Social Work (378)
3 credits. Lecture. Open to students in both the M.S.W. program and the STEP program. Addresses common grounds and concerns as related to most people with HIV/AIDS regardless of gender or modes of transmission. Examples are: enhancing quality of life for people living with AIDS; initiating support groups; and caring for the care givers. HIV/AIDS has affected some groups of people more than others. For this reason, differences related to HIV/AIDS prevention, education, human services, and social work practice among women, children, drug users, gay men and lesbians, and people of color will also be explored.
Social Work (GRWK)

GRWK 5341. Group Work with Substance Abusing Women (341)

3 credits. Lecture. Open to students in both the M.S.W. program and the STEP program. Elective course for Substantive Area: Focused Area of Study on Mental Health and Substance Abuse in Social Work Practice. Provides 1) a basic orientation to current knowledge on problems of women substance abusers, and 2) opportunities for students to develop clinical group work skills in working with the population. Provides specific kinds of group experiences which deal with restoration and improvement of self-image, interpersonal competence and coping skills of substance abusing women through experiencing the use of an array of practical techniques in class.