This chapter is a compendium of the courses of instruction offered by the University of California, San Francisco. Additional courses are offered by the schools (see Addresses section) under their programs of Continuing Education. Courses are arranged in numerical order under alphabetically listed subject headings. As these headings do not in every case correspond to a department, the responsible department or other instructional unit is indicated at the end of the course description. Abbreviations used for these departments or instructional units are spelled out in the list below. Inquiries about individual courses should be addressed to the indicated department or instructional unit for information that is not included here, nor in the separately published bulletins of the four schools or of the Graduate Division. These bulletins, available from the respective schools or the Graduate Division, indicate, for example, the place of various courses in the different established curricula.

Course Description. Course information is arranged in three paragraphs. The first paragraph includes course number, title, units (in parentheses), session offered, prerequisite, format and breakdown of hours per week. The second paragraph names the instructor(s) in charge. The third describes the course content, followed by department or other instructional unit.

Course Numbers. All courses are numbered according to the following system: 100 series = upper division professional course, 200 and 300 series = graduate academic course, and 400 series = postdoctoral professional course. The meaning of the second (tens) and first (units) digits varies among the schools. A detailed explanation of course numbering is available from the office of the dean of each school. The symbol § following the units designates a course approved for credit toward a graduate academic degree. Sessions: Su = summer term, SS = summer session, F = fall quarter, W = winter quarter, Sp = spring quarter.
Departments and Other Instructional Units

ANATOMY
Department of Anatomy, School of Medicine

ANESTHESIA
Department of Anesthesia, School of Medicine

BIOCHEM
Department of Biochemistry and Biophysics, School of Medicine

CL PHARM
Division of Clinical Pharmacy, School of Pharmacy

DENT PUB HLTH
Department of Dental Public Health and Hygiene, School of Dentistry

DERMATOL
Department of Dermatology, School of Medicine

EPID & BIOSTAT
Department of Epidemiology and Biostatistics, School of Medicine

FAM CM MED
Division of Family and Community Medicine, School of Medicine

FAM HILTH
Department of Family Health Care Nursing, School of Nursing

GR DEVEL
Department of Growth and Development, School of Dentistry

HIST HL SC
Department of History of Health Sciences, School of Medicine

LAB MED
Department of Laboratory Medicine, School of Medicine

MEDICINE
Department of Medicine, School of Medicine

MENT HLTH COM ADM
Department of Mental Health, Community, and Administrative Nursing, School of Nursing

MICROBIOL
Department of Microbiology and Immunology, School of Medicine

NEURO SURG
Department of Neurological Surgery, School of Medicine

NEUROLOGY
Department of Neurology, School of Medicine

OB GYN R S
Department of Obstetrics, Gynecology and Reproductive Sciences, School of Medicine

OPHTHALMOL
Department of Ophthalmology, School of Medicine

ORAL & MAX SURG
Department of Oral and Maxillofacial Surgery, School of Dentistry

ORTHOSURG
Department of Orthopaedic Surgery, School of Medicine

OTOLARYN
Department of Otolaryngology, School of Medicine

PATHOLOGY
Department of Pathology, School of Medicine

PEDIATRICS
Department of Pediatrics, School of Medicine

PHARM CHEM
Department of Pharmaceutical Chemistry, School of Pharmacy

PHARMACOL
Department of Pharmacology, School of Medicine

PHARMACY
Department of Pharmacy, School of Pharmacy

PHYS THER
Curriculum in Physical Therapy, School of Medicine

PHYSIO NURS
Department of Physiological Nursing, School of Nursing

PHYSIOLOGY
Department of Physiology, School of Medicine

PSYCHIATRY
Department of Psychiatry, School of Medicine

RADIOLOGY
Department of Radiology, School of Medicine

RESTOR DENT
Department of Restorative Dentistry, School of Medicine

SOC BEH SC
Department of Social and Behavioral Sciences, School of Nursing

STOMATOLOGY
Department of Stomatology, School of Dentistry

SURGERY
Department of Surgery, School of Medicine

UROLOGY
Department of Urology, School of Medicine

Hospitals

AB
Alta Bates Hospital, Berkeley

AS
Atascadero State Hospital, Atascadero

C
Children’s Hospital of San Francisco, San Francisco

CC
Crippled Children’s Hospital, Phoenix

CCP
Center for Training in Community Psychiatry, Berkeley

CHF
Valley Children’s Hospital, Visalia

CHMC
Children’s Hospital Medical Center of Northern California, Oakland

CHS
Community Hospital of Sonoma County, Santa Rosa

CM
Ernest V. Cowell Memorial Hospital, Berkeley

CSP
Center for Special Problems, San Francisco

DCH
Sutter-Davis Hospital, Davis

DMC
Davies Medical Center-Franklin Hospital, San Francisco

FCH
Fresno Community Hospital and Medical Center, Fresno

FR
French Hospital Medical Center, San Francisco

GS
Good Samaritan Hospital of Santa Clara Valley, San Jose

H
Highland General Hospital, Oakland

IMBB
Irwin Memorial Blood Bank, San Francisco

K
Kaiser Foundation Hospital, San Francisco

KH
Kaiser Permanente Medical Center, Honolulu

KHDY
Kaweah Delta District Hospital, Visalia

KP
Kaiser Foundation Hospital, Oakland

KSSF
Kaiser Foundation Hospital, South San Francisco

KWC
Kaiser Foundation Hospital, Walnut Creek

L
Letterman Army Medical Center, San Francisco

LBL
Lawrence Berkeley Laboratory, Berkeley

LH
Laguna Honda Hospital and Rehabilitation Center, San Francisco

LPHC
Langley Porter Psychiatric Institute-Hospitals and Clinics, San Francisco

MC
Maricopa County Hospital, Phoenix

MG
Marin General Hospital, Greenbrae

MHLB
Memorial Medical Center, Long Beach

MZ
Mt. Zion Medical Center of UCSF, San Francisco

NAT
Natividad Medical Center, Salinas

NRMC
Naval Regional Medical Center, Oakland

NS
Napa State Hospital, Napa

OC
O’Connor Hospital, San Jose

P
Peralta Hospital, Oakland

PH
Mills-Peninsula Hospitals, Burlingame

PMC
Pacific Presbyterian Medical Center, San Francisco

Q
Queen’s Medical Center, Honolulu

RLA
LAC-Rancho Los Amigos Hospital, Downey

S
Stanford University Hospital, Palo Alto

SCC
Santa Clara Valley Medical Center, San Jose
Anatomy

100A. Systemic Regional & Devel Anat. (5) § F. Lecture 3 hours. Lab 2 hours.
Sutherland and Staff
The gross structure of the human body is studied by means of dissection, demonstration, X-ray, surface, developmental, and cross-sectional anatomy with special reference to the functional aspects of the structures examined. ANATOMY

100B. Systemic Regional & Devel Anat. (4) § W. Lecture 2 hours. Lab 6 hours.
Sutherland and Staff
The gross structure of the human body is studied by means of dissection, demonstration, X-ray, surface, developmental, and cross-sectional anatomy with special reference to the functional aspects of the structures examined. ANATOMY

100C. Systemic Regional & Devel Anat. (5) § SS. Lecture 3 hours. Lab 6 hours.
Sutherland and Staff
The gross structure of the human body is studied by means of dissection, demonstration, X-ray, surface, developmental, and cross-sectional anatomy with special reference to the functional aspects of the structures examined. ANATOMY

103. Nervous System: Form & Function. (4-6) § Sp. Prerequisite: Consent of instructor required for graduate students. Lecture 5 hours. Lab 3 hours. H. Raslon, Stryker and Staff
The structure and function of the mammalian nervous system studied in lectures, conferences, demonstrations, and laboratories, with emphasis on the human nervous system and its organization. Intended for students in the School of Medicine and as an introductory course for graduate students. ANATOMY

150. Gross & Regional Anatomy. (1.5 per week) § Su, F. Prerequisite: Program must be approved by department and adviser prior to quarter previous to enrollment. Aaling
Individual or group dissection, advanced review of gross anatomy. Intended as a block elective course for advanced medical or graduate students. ANATOMY

150.01. Gross Anatomy & Embryology. (2.5) F. Prerequisite: Dental Hygiene standing. Lecture 5 hours. Lab 4 hours.
S. Fisher
The gross structure and developmental anatomy of the head and neck and abdominal regions are studied by means of lectures, laboratory exercises, and demonstrations. The functional significance of the structures is emphasized. STOMATOLOGY

150.02. Head & Neck Anatomy. (3) F. Prerequisite: Dental Hygiene standing. Lecture 2 hours. Lab 3 hours.
S. Fisher
The gross anatomy of the head and neck is studied by lectures and demonstrations. Clinical applications and functions of importance to the dental hygienist are emphasized. STOMATOLOGY

170. Advanced Head & Neck Anatomy. (1-5) Sp. Prerequisite: General histology, gross anatomy of the head and neck, and oral histology. Lecture 1 hour. Lab 0-12 hours.
Staff
Designed for postgraduate specialty certificate students enrolled in the clinical specialty training programs in the School of Dentistry. Seminar presentations and demonstrations of head and neck anatomy are correlated with their application to clinical dentistry. RESTOR. DENT

170.01. Medical Scholars Program Workshops. (1) F, W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour. Lab 1 hour.
Sutherland, Ralston
Workshops in anatomy and neuroanatomy, offered concurrently to the first-year course, will present challenging material in the form of problem sets which students will solve in groups. Material, geared toward high-achieving students, will augment basic coursework with clinical and basic science information. ANATOMY

170.02. Survey of Congenital Defects. (2) Su or Sp. Prerequisite: Gross anatomy and consent of instructor. Restriction: Open only to students enrolled in Physical Therapy program. Lecture 2 hours. Offered in summer or spring of even-numbered years.
McKenzie
This course is designed to provide physical therapies with information on the more common human congenital defects. Environmental and genetic factors that produce malformations are considered and possible mechanisms discussed. ANATOMY

179.09. Language of Anatomy. (1) § Su, F. Prerequisite: Concurrent enrollment in Anatomy 100. Lecture 1 hour.
Asling
A three-component elective, fostering vocabulary-building in anatomico-medical terminology, reflecting history of medical and cultural themes influencing development of anatomical nomenclature, and through student oral reports on etymonic terms, introducing some major figures in anatomy. ANATOMY
Anatomy


Aging

Clinically oriented survey of human anatomy through analysis of representative cross-sections of the body. Course provides an anatomical background for understanding computed tomography. Student will prepare and keep an anatomy atlas usable in radiologic tomography. ANATOMY

198. Supervised Study. (1-5) Su, W, F, Sp. Staff

Library research and directed reading under supervision of a member of the faculty with the approval of the chairman of instruction. ANATOMY

199. Laboratory Project. (1-5) Su, F, W, Sp. Staff

A laboratory research project under direction of a member of the faculty with the approval of the chairman of the department. ANATOMY

201. Radiation Effects on Genes & Chromosomes. (2) W. Sr. Prerequisite: Consent of instructor. Lecture 2 hours.

S. Wolff

Concepts and mathematics of target theory relating to damage of genetic apparatus. Biochemical and biological studies on induction of intragenic and intergenic mutations that give insight into the structure of chromosomes and the interaction of radiation with biological material. ANATOMY


S. Rosen, Werb

Course introduces the literature and provides training in topics such as lipid, carbohydrate, peroxidation, membrane enzymes, nucleic acids, immunology, and viral and cellular functions. Content of course will vary depending upon students’ needs and interests. ANATOMY

204. Cytogenetic Techniques. (3) Sp. Prerequisite: Consent of instructor. Lab 6 hours.

W. Wert

Course covers instruction in various methods of chromosome banding as well as cell cycle analysis by autoradiography. ANATOMY

207. Neuroanatomy. Physiology. (3) W. Prerequisite: Basic Human Neuroanatomy or consent of instructor. Lecture 2 hours.

Garoutte

A study of the physiology of striated muscle and peripheral nerve in relationship to controlling mechanisms within the nervous system. ANATOMY

215. Laboratory Rotation. (4) F, W, Sp. Prerequisite: Consent of instructor. Lab 12 hours.

Werb and Staff

A laboratory rotation course to familiarize new departmental graduate students with various approaches in research. ANATOMY


Staff

Students, staff, or guest present selected topics concerned with current research in anatomy for criticism and discussion. ANATOMY

223. Experimental Neuroanatomy. (4) 1st, 2nd, 3rd. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 6 hours. Lab 12 hours. Offered for 2 weeks. Offered in alternate years. Offered 1991-92.

M. LaVal, Raskin, J. LaVal, Baalbaki

Lectures and laboratory projects provide an introduction to the principles and experimental methods of analyzing the neural organization of the central and peripheral nervous systems. Topics include neurocytology, axon transport, neural degeneration, immunocytochemistry, autoradiography, electron microscopy, quantitative data acquisition methods, and photornicrography. ANATOMY

230. Developmental Biology. (3) F. Prerequisite: Biochemistry 245 and 346 or consent of instructor. Lecture 3 hours.

Calarco, Pedersen

Principles of development presented with emphasis on cell and molecular research approaches. Topics to be included are early development, cell-cell interactions, and terminal differentiation. Lectures and student discussions of current and classical research approaches. ANATOMY

231. Devel of Cellular & Molec Biol. (3) W. Prerequisite: Consent of instructor. Lecture 3 hours. Lab 3 hours. Offered in alternate years. Not offered 1991-92.

Calarco

Molecular and cellular events relating to differentiation and development. A variety of developmental phenomena will be surveyed and related, where possible, to genotypic and epigenetic control mechanisms. ANATOMY


Pedersen

Course focuses on procedures for producing mammalian chimeras and the use of chimeras in analysis of development. Topics to be covered include analysis of parthenogenesis, cell commitment, differentiation, growth control, neoplasia, germ cells, and reproduction. ANATOMY

235. Developmental Neurobiology. (1-3) W. Prerequisite: Consent of instructor. Lecture 1-3 hours. Offered every three years. Offered 1991-92.

J. LaVal, M. LaVal, I. Reichardt

Involves the structure and functional development of the nervous system as well as detailed consideration of the development of several specific regions of the mammalian central nervous system. Lectures, student presentations, and discussions of classical and current literature. ANATOMY


Staff

ANATOMY

273. Biologic Scanning Electron Micros. (1) W. Prerequisite: Consent of instructor. Lecture 1 hour. Lab 2 hours for three sessions. Enrollment limited.

J. Long and Staff

Principles of electron microscopy including tissue preparative techniques and applications. Laboratory sessions include participation in preparing and viewing biological specimens. ANATOMY

278. Thesis. (0) F, W, Sp. Prerequisite: Advance to candidacy and permission of the graduate advisor.

Staff

For graduate students engaged in writing the thesis for the master’s degree. ANATOMY

299. Dissertation. (0) F, W, Sp. Prerequisite: Admission to candidacy and permission of the graduate advisor.

Staff

For graduate students engaged in writing the dissertation for the Ph.D. degree. ANATOMY

300. Practicum in Teaching. (1-4) F, W, Sp. Prerequisite: Consent of instructor.

Staff

Training in teaching a course offered by the Department of Anatomy under the supervision of an instructor in charge. Laboratory teaching, presentation of lecture material, experience in setting up and correcting examinations, and participation in course are included. ANATOMY

400. Clin Anat through Cross-Section. (2) Su, W, F. Prerequisite: Consent of instructor. Lab 1 hour. Clin 3 hours.

Aging, Rossi

Clinically oriented survey of human anatomy through analysis of representative cross-sections of the body. Course provides an anatomical background for understanding computed tomography. Student will prepare and keep an anatomy atlas usable in radiologic tomography. ANATOMY

Anesthesia

110. Anesthesia Core Clerkship. (3) Su, W, F. Prerequisite: Course 130, 131, A-B-C, Physiology 100, Pharmacology 100A-B, and Psychiatry 130.

Staff

Instruction and experience in operating room anesthetia including preoperative and postoperative evaluation and care.Caudal epidural saculation and care of the unconscious patient are stressed. The course is offered at SFHC, UC, VA, C, FR, and AB hospitals. ANESTHESIA

140.01. Advanced Anesthesia Clerkship. (1.5 b.wk) Su, W, F. Prerequisite: Anesthesia 110.

Shapiro

Clinical assignment in operating room anesthesiia, care of the unconscious patient, and management of patients in the recovery room. Not scheduled through elective lottery. Contact Department of Anesthesia, extension 63224, to schedule. ANESTHESIA

140.02. Off-Campus Clerkship. (1.5 per week) Su, F, W. Prerequisite: Anesthesia 110.

Shapiro

Off-campus clinical clerkships in approved hospitals by special arrangement and approval of the Director of Medical Student Education, Department of Anesthesia. ANESTHESIA

140.03A. Intensive Care Clerkship-SFGH. (3.5 per week) Su, W, F. Prerequisite: Anesthesia 110, Medicine 110, and Surgery 110.

Schlobohm, Luce, Katz, Schecter

Clinical clerkship on techniques of intensive care with primary emphasis on respiratory, cardiovascular, and renal pathophysiology. Patient population includes adult and pediatric patients with medical and surgical illnesses, a significant percentage of whom have been severely traumatized. ANESTHESIA

140.03B. Intensive Care Clerkship-UC. (1.5 per week) Su, W, F. Prerequisite: Anesthesia 110, Medicine 110, and Surgery 110.

Cohen, Matthay

Clinical clerkship on techniques of intensive care with primary emphasis on respiratory, cardiovascular, and renal pathophysiology. Patient population includes adult and pediatric patients with medical and surgical illnesses, a significant percentage of whom have undergone cardiac surgery. ANESTHESIA

140.04. Obstetrical Anesthesia. (1.5 per week) F, W, Sp. Prerequisite: Anesthesia 110. Course must be taken concurrently with 140.05 to create a four-week advanced anesthestic rotation.

Rosen

Course covers anesthesia and analgesia for vaginal delivery and cesarean section. Emphasis is placed on effects of anaesthetic techniques and drugs on normal physiologic changes in labor and delivery, placental transfer of drugs, and remiscination of the newborn. Not scheduled through elective lottery. Contact Department of Anesthesia, extension 63224, to schedule. ANESTHESIA

140.05. Advanced Clerkship in Anesthesiology. (1.5 per week) F, W, Sp. Prerequisite: Anesthesia 110. Course must be taken concurrently with 140.04 to create a four-week advanced anesthesia rotation.

Rosen

Course covers anesthesia and analgesia for vaginal delivery and cesarean section. Emphasis is placed on effects of anaesthetic techniques and drugs on normal physiologic changes in labor and delivery, placental transfer of drugs, and remiscination of the newborn. Not scheduled through elective lottery. Contact Department of Anesthesia, extension 63224, to schedule. ANESTHESIA

150.01. Research in Anesthesia. (1.5 per week) Su, F, W. Prerequisite: Anesthesia 110.

Eger
Anesthesia/Animal Science/Anthropology

Students conduct research projects under guidance of faculty members. Projects must be approved by instructor involved in supervising student. Students may initiate or become involved in established research programs under faculty guidance. Requires approval of the Dean and Department. ANESTHESIA

160.01. Basic CPR, (0.5) F, W, Sp. Lecture 1 hour. Lab 2 hours.
Cohen, Cahalan, Strong
Two-week CPR skills course training students in basic life support skills, cardiac compression and ventilation, management of airway obstruction, and assessment of need to initiate or terminate CPR. Sessions include presentations by Anesthesiology faculty and skills practice for students. ANESTHESIA

178. General Anesthesiology, (6) Sp. Prerequisite: Interns and residents. Clinic. Hamilton and Staff
Course covers the systemic effects of the various muscle relaxants, sedatives, and stimulants and the administration of general anesthetic agents. ANESTHESIA

199. Laboratory Project. (1-5 per week) Su, F, W, Sp. Eger
A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. ANESTHESIA

400. Anesthesia Staff Conference. (2) F, W, Sp. R.D. Miller
Course includes didactic lectures in sciences basic to the specialties of anesthesiology, as well as case reviews, clinical discussions, and seminars on current medical literature in anesthesia. ANESTHESIA

450. Anesthesia Clinical Work. (1.5 per week) Su, F, W, Sp. Eger
Clinical work during first year of residency, and during either second or third year.
R.D. Miller
Residents are responsible for anesthetic care and management of patients in the operating rooms and outpatient departments, under immediate supervision of the staff. Proactive and postoperative evaluation of patients, oxygen therapy, and resuscitation are covered. ANESTHESIA

460. Special Assignment. (1.5 per week) Su, F, W, Sp. Eger
Assignments include instruction in anesthesia for children, problems related to open heart surgery, cardiology, and opportunity for research in related fields. ANESTHESIA

Animal Science

166. Introduction to Laboratory Animal Science. (3) Sp. Prerequisite: Course in general biology or consent of instructor. Lecture 2 hours. Lab 3 hours.
Hoener

Ancestry/Anthropology

The courses listed below are offered through the Department of Epidemiology and Biosociology.

200. Off-Campus Study. (0.5, 1, 2, 3) F, W, Sp. Prerequisite: Approval of the graduate advisor. Open only to students enrolled in the graduate program in Medical Anthropology.
Staff
Full-time graduate study in the Medical Anthropology program through the intersession exchange or consortium program. EPID & BIOSAT

205A-B. Intro to Sociocultural Aspects. (3-4, 3-4) F, W, Sp. Prerequisite: Intended primarily for doctoral students in medical anthropology, and others at graduate standing with consent of instructor. Lecture 3 hours, plus 3 hours independent study for 4 units. Required and open only to first-year students in the UCSF Ph.D. Program in Medical Anthropology. Two-quarter course.
Justice and Staff
Seminar in the history and theory of social anthropology as applied to problems of health and illness. Major concepts and problems will be illustrated through critical review of selected research literature. EPID & BIOSAT

206A-B. Intro to Biomedical Anthropology. (3-4, 3-4) F, W, Sp. Prerequisite: Consent of instructor. Lecture 3 hours, plus 3 hours independent study for 4 units. Open only to first-year students in the intersession Program in Medical Anthropology. Required for students in the UCSF Ph.D. Program in Medical Anthropology.
F. Dunn, Staff
Survey of the biocultural areas of medical anthropologists: anthropology in relationship to biomedicine and human biology. EPID & BIOSAT

211A-B. Research Training Seminar. (4, 6-8, 6-8) F, W, Sp. Prerequisite: Required for and open only to second-year students in the intersession Ph.D. Program in Medical Anthropology. Lecture 1 hour F, Sp. Seminar 1 hour F, Sp. 2 hours W. Field work 5-7 hours F, 12-18 hours W, Sp.
Ablon, Mitteness
Fundamentals of anthropological research design, methods, and analysis through lectures, readings, and field assignments. EPID & BIOSAT

212A-B. Research Apprenticeship. (2-5, 2-5) F, W, Sp. Prerequisite: Consent of instructor. Lab 6-15 hours.
Staff

Students work with individual faculty members in the use of laboratory animals in a research environment. Topics will include the ethical/human use of laboratory animals, selection of biomedical models, anesthetics, protocols, in vivo, in vitro, general principles of anesthesiatics, analgesics, acute surgery, and humane methods of euthanasia. PHARMACY

Animal Science

225. Contemporary Issues. (2-3) F, W, Sp. Prerequisite: Consent of instructor. Lecture 3 hours, plus 3 or 4 hours independent study for 3 or 4 units.
Staff
Introduction to selected controversies and current issues in medical anthropology, including issues of globalization and social context, sociocultural impact of biomedicine on society, abortion, contraception and the right to life; status of research on the etiology of mental disorders; women's and the social construction of medicine. EPID & BIOSAT

Abdon
Examination of social attitudes toward stigmatized conditions as defined by racism, stoicism, disease, and physical disabilities. Self-help groups organized around such conditions will be examined. Guest speakers who have experienced these conditions will contribute to an understanding of their experiences and their work. EPID & BIOSAT

Abdon
This course will survey the range and categories of indigenous community resources for health and mental health, informal and formal community organizations, therapeutic self-help groups, voluntary associations, and alternative healing modalities will be analyzed for their functions as health and mental health resources. EPID & BIOSAT

230. Culture & Personality. (3-4) F. Prerequisite: Consent of instructor. Lecture 2 hours, plus 3 weeks independent study for 3 weeks.
Kief
Exploration of the relationship between culturally conditioned ways of perceiving, thinking, and communicating, and individual behavior and personality development. Application of cultural and personality findings in medical and nursing settings. EPID & BIOSAT

231. Euthanasia. (0-4) F, W or Sp. Prerequisite: Consent of instructor. Lecture 2 hours, plus 3 hours independent study for 3 units.
Staff
Course examines principles of healing systems in the treatment of mental disorder including folk healing, cross-cultural comparisons, research methods, and implications for community psychiatry. Students study local examples of folk healers or folk healing institutions. EPID & BIOSAT

233. Anthropology of Aging. (2-3) F, W, Sp. Prerequisite: Consent of instructor. Lecture 2 hours, plus research project for 3 units.
Kief
Cross-cultural approaches to roles, statuses, and problems of aged populations. Cultural factors influencing the condition and adaptation of the aged in American society. Topics to be covered include cultural attitudes and values, social relationships, and health problems. EPID & BIOSAT
234. Culture & Symbolic Systems. (2–3) S. F. Pre¬
required: Anthropology 200A or equivalent, or
consent of instructor. Lecture 2 hours, plus 3 hours
independent study for 3 units.
Staff
Symbolic expression behavior is considered from
perspective of life-style and psychosocial perspec-
tives. Various projective systems are analyzed: psy-
chological tests, dreams, folklore, myths, religious
rituals, altered states of consciousness, and healing
procedures. EPID & BIOSTAT

235. Cross-Cultural Aspects of Childhood. (3) S.
F. Prerequisite: Consent of instructor. Open to stu-
dents in medicine, nursing and graduate departments.
Lecture 2 hours, plus research paper.
Mistenes, Barker
A review of child development, child rearing and fam-
ily dynamics in various non-Western cultures and in
selected ethnic subcultures of the United States; from
biological, psychological, and anthropological perspec-
tives. EPID & BIOSTAT

239. Comparative Family Systems. (3) S, F, W or
Sp. Prerequisite: Consent of instructor. Lecture 2
hours, plus 3 hours independent study.
Ablon
Anthropological approaches to family study. Structure
and dynamics of varying family systems examined,
emphasizing changing family forms and ways family
life-style and values contribute to modes of coping
with stress, illness, and crises. EPID & BIOSTAT

245. Development in Late Adulthood. (3) S, F, W,
Sp. Lecture 2 hours. Lab 3 hours.
Kayser-Jones
course covers developmental theory and research in
ageing. Emphasis is on anthropological and sociologi-
cal studies, but biological and psychological perspec-
tives are included. Current issues in ageing with
emphasis on implications for health care are discussed.
EPID & BIOSTAT

246. Comparative Medical Systems. (2–3) S.
Prerequisite: Consent of instructor. Lecture 2–3 hours.
Staff
Popular medicine in the Third World with emphasis on
how people use indigenous and biomedical health care
resources. Theoretical aspects of health and disease,
social and symbolic dimensions of healing, and rele-
ance of traditional medicine for health maintenance and
primary care in the United States. EPID & BIOSTAT

247. Contemporary American Society. (3) S, F,
W or Sp. Prerequisite: Consent of instructor. Lecture 2
hours, plus 3 hours independent study.
Ablon
A review of anthropologically oriented research on
basic American values, social organization, and eth-
nicity. Emphasis is on socio-economic diversity and
changing institutions, values, and life styles. EPID &
BIOSTAT

248. Group Study. (1–3) S, W, Sp. Prerequisite:
Consent of instructor.
Staff
Groups of two or more collaborate on special problems in
anthropology under the direction of faculty. Stu-
dents may select areas related to their long-term interest
and future research program. EPID & BIOSTAT

249. Directed Reading. (1–5) S, F, W, Sp. Prerequi-
tise: Consent of instructor. Staff
Independent study. EPID & BIOSTAT

250. Research. (1–4) S, W, Sp. Prerequisite: Con-
sent of instructor.
Staff
EPID & BIOSTAT

251. Social Gerontology. (2–4) S, W or Sp. Prerequi-
tise: Consent of instructor. Lecture 2 hours, plus
3 or 6 hours independent study for 3 or 4 units.
Staff
An overview of the theoretical, empirical, and applied
literature on the social processes of aging in the country.
Special emphasis on health-related problems and the
delivery of services to the elderly. EPID & BIOSTAT

252. Culture & Health Policy. (3) S, F, W. Seminar 3
hours.
Justice
Combining the perspectives of anthropology and
health policy, this course will examine the effec-
t of culturally linked beliefs and values on utilization
of health services and the impact of health policies on
medical care in the United States and other countries.
EPID & BIOSTAT

253. Late Life Family. (3) S, F, W, Sp. Prerequisite:
Consent of instructor. Seminar 3 hours.
C. Johnson, L. Trott
A review of research on the late-life family with a
critical analysis of the conceptual and methodologi-
- al issues guiding research. Interpretations of the care-
giving and social support literature will be associated
with social, cultural, and psychological theories on
the family. EPID & BIOSTAT

254. The Aged Patient & Dementia. (1–3) S. F.
Restriction: Open to students and postdoctoral fel-
lowers in dentistry, medicine, pharmacy, nursing, and
graduate academic programs. Lecture 2 hours. Semi-
nin 2 hours. Conference 2 hours. Clinical 2 hours.
Patient contact 2 hours.
Mistenes, Moseley, Kramer, Finley, Dimirro
Participate in Alzheimer's Center Multidisciplinary
Assessment Clinic. Focus on assessment of the
demographically specialized dementia assessment,
degression assessment, differential diagnosis, home visit
assessment of environmental match and caregiver competence,
pharmacological management, family and cultural
issues as care of elderly patterns. EPID & BIOSTAT

260. Epidemiology & Med Anthro. (2–5) S.
Prerequisite: Training in epidemiology and consent of
instructor. Lecture 2 hours plus 3 or 6 hours inde-
pendent study for 3 or 4 units.
F. Dunn
Individual or small group directed reading and discus-
sion of epidemiological and medical ecological pre-
spectives, methods, and findings relevant to the field of
medical anthropology. EPID & BIOSTAT

297. Special Study. (1–5) S, F, W, Sp. Prerequisite:
Consent of instructor.
Staff
Independent study. EPID & BIOSTAT

299. Dissertation. (0) S, F, W, Sp. Prerequisite: Ad-
vancement to candidacy and permission of the gradu-
ate adviser.
Staff
For graduate students engaged in writing the disserta-
tions for the Ph.D. degree. EPID & BIOSTAT

Biochemistry

100. Human Metabolism. (5) S. Prerequisite: In-
terdisciplinary Studies 150: Cell and Tissue Biology.
Or consent of instructor. Lecture 4 hours. Conference 2
hours.
Colby
Lectures and conferences in the metabolism of carbo-
hydrates, lipids, amino acids, and nucleotides, with
emphasis on physiological regulation. Primarily for
medical students. BIOCHEM

110A-B. Cellular Structure & Function. (4-4) F,
W. Lecture 4 hours.
Colby, Michaeli
Lectures in biochemistry include aspects of cell phys-
ology and cellular ultrastructure, with emphasis on the
area of connective and mineralizing tissues. Founda-
tional knowledge is presented in the context of its appli-
cability to clinical health sciences. Primarily for
dental students. BIOCHEM

112A-B. Cellular Structure & Function. (4-4) F,
W. Lecture 4 hours. Conference 1 hour.
Michaeli, Beneon
Lectures and conferences in biochemistry including
aspects of cell physiology and cellular ultrastructure,
with some emphasis in the area of drug metabolism.
BIOCHEM

150. Research in Biochemistry. (1 per week) F,
W, Sp. Prerequisite: Consent of instructor.
Staff
Research in biochemistry. BIOCHEM

170. Molecular Biology of Medicine. (1–2) W.
Prerequisite: Consent of instructor. Seminar 2 hours.
Colby
Seminar on molecular and cellular biological approach-
ps to disease processes. BIOCHEM

170. Medical Scholars Program Workshops. (1) F.
Prerequisite: First-year standing. Seminar 2 hours.
Colby
Workshops in cell and tissue biology (F) and human
metabolism (W) will present challenging material in
the form of weekly problem sets which students will
solve in groups. The material presented augments re-
quired coursework with basic science and clinical
information. BIOCHEM

198. Supervised Study. (1–5) F, W, F. CoBy
Library research and directed reading under supervi-
sion of a member of the faculty with the approval of the
chairperson of the department. BIOCHEM

Prerequisite: Consent of instructor.
Staff
A laboratory research project under direction of a
member of the faculty with the approval of the chair-
person of the department. BIOCHEM

200A. Structure of Macromolecules. (5) S.
Prerequisite: Calculus, physical chemistry, organic
chemistry, and an advanced course in biology. Lecture 5
hours.
Fietterbeck and Staff
Fundamental principles governing the behavior of,
and modern techniques for, study of biological macromo-
lecules. Topics covered are: thermodynamics (entropy,
equilibrium, cooperative interactions); kinetics and
enzyme catalysis; structure and function of macromolecules
(DNA, membranes, proteins) by X-ray and electron
microscopy, microscopy, and electron microscopy.
BIOCHEM

200C. Chromosome Structure & Function. (1.5) S.
Prerequisite: Calculus, physical chemistry, organic
chemistry, and an advanced course in biology are rec-
ommended. Lecture 3 hours for one-half quarter.
Sedat
Structure and function of chromosomes in eukaryotes
will be discussed in depth, beginning with basic under-
standing of replication and leading to the most recent
approaches to structure. Emphasis will be both theoret-
al and experimental approaches to this area of cell and
molecular biology. BIOCHEM

200E. Enzymology. (3) F. Prerequisite: Calculus,
physical chemistry, organic chemistry, introductory
biochemistry, and an advanced course in biology, or
consent of instructor. Lecture 3 hours. Offered in alter-
Saito, Kyen
Biochemically important chemical transformations
from the physical organic point of view, emphasizing
catalytic mechanisms prevalent to enzyme reactions,
and some aspects of the developing enzyme model sys-
tem. Intermolecular forces and enzyme substrate in-
teractions. Techniques of investigating enzyme mechanisms
and kinetics. BIOCHEM

201A-B. Biological Regulatory Mechanisms. (3, 1.5) S.
W. Prerequisite: Calculus, physical chemis-
try, organic chemistry, introductory biochemistry,
and an advanced course in biology. Lecture 3 hours.
Yamamoto
The discovery of principles forming the foundation of
molecular biology and recent advances in rapidly de-
veloping fields of the area. Topics covered are: RNA
transcription, protein synthesis, DNA replication,
control mechanisms, and genome structure and orga-
nization. BIOCHEM
210. Special Topics. (0-5) S. W. Sp. Prerequisite: Consent of instructor. Lecture 1-3 hours.
Staff
Discussion of selected areas in biochemistry, biophysics, and biomatics. BIOCHEM

215. Laboratory Rotation. (3) S. W. Sp. Prerequisite: Consent of instructor. Lab 9 hours.
C. Gough
A laboratory rotation course to familiarize new departmental graduate students with various approaches to biochemical and biophysical research. BIOCHEM

220. Selected Topics. (0-5) S. W. Sp. Lecture 1 hour. Alberts
Lectures and discussion on topics of current interest in biochemistry and biophysics. BIOCHEM

221. Selected Topics. (0-1) S. W. Sp. Lecture 1 hour.
Staff
Presentations of selected topics in biochemistry by graduate students in the Department of Biochemistry. BIOCHEM

242. Protein Crystallography. (3) S. W. Prerequisite: Consent of instructor. Lecture 3 hours. Lab 3 hours. Offered in alternate year. Not offered 1991-92.
Strong
Principles of X-ray crystallography applicable to protein structure analysis will be presented in a course oriented toward research level understanding of the field. Course will involve group participation and some experimental work. BIOCHEM

246. Cell & Developmental Biology. (3) S. Prerequisite: Calculus, physical chemistry, organic chemistry, and an advanced course in biology are recommended. Lecture 3 hours.
Lunst
Modern aspects of cell biology and development with emphasis on structure-function relationships and multi-Indar organization. BIOCHEM

Staff
BIOCHEM

297. Special Study. (1-3) S. W. Sp.
Staff
Reading and conferences for properly qualified students under the direction of a member of the staff. BIOCHEM

299. Dissertation. (0-6) S. W. Sp. Prerequisite: Advancement to candidacy and permission of the graduate adviser.
Staff
For graduate students engaged in writing the dissertation for the Ph.D. degree. BIOCHEM

Bioengineering

198. Supervised Study. (1-5) S. W. Sp. Prerequisite: Consent of instructor and an advisor.
Staff
Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department.

200. Off-Campus Study. (0) S. W. Sp.
Bauernfeind
Full-time study in bioengineering at another location through the UCEF/UCl Gradut Group in Bioengineering.

Peretz-Mendiz
Basic physics of radioactivity and alpha, beta, gamma, and fission processes. Interactions of radiation with matter, basic radiation detection for counting and determining energies of charged particles, neutrons, and gamma rays. Counting statistics and radiation protection. Applications in biology, chemistry, engineering.

Baumrind, Bhatnagar
Presentation and discussion of student and faculty research in progress.

251. Orthopaedic Mechanics & Materials. (2) S. W. Lecture 2 hours.
Skinner
This course is intended to introduce the student to the mechanics of the joints in the human body, to acquaint the student with common biomaterials (and their properties) used in orthopaedics, and to discuss those uses with respect to joint mechanics and joint displacement.

210A. Physics of Medical X-ray Imaging. (3) S. Prerequisite: Baccalaureate degree in engineering or a physical science, differential equations, Fourier analysis, or consent of instructor. Lecture 3 hours.
Hasegawa, Cann, Gould
Basic interactions of photons and particles with matter; detection and detector electronics; radiation quantity and quality, contrast, spatial resolution, noise, and image perception; radiation protection.

210B. Physics of Medical X-ray Imaging. (3) S. W. Prerequisite: First quarter course in Physics of Medical X-ray Imaging or equivalent, or consent of instructor.
Hasegawa, Cann, Gould
X-ray production, x-ray scatter and scatter production, video imaging, image intensifiers, linear tomography, computed tomography, xeroradiography, digital subtraction angiography, photodetectors; phosphor technology, solid-state image processing techniques, bone-mineral densitometry, and quantitation of vascular flow.

240. Principles of Nuclear Magnetic Resonance Imaging. (3) S. Prerequisite: Baccalaureate degree in engineering or a physical science; knowledge of Fourier analysis, electromagnetic waves and radiation; or permission of instructor. Lecture 3 hours.
Hylton, Carlson, Crooks, Orentad, Kaufman
Fundamentals of nuclear magnetic resonance and magnetic resonance imaging; parameterization of image acquisition, image optimization, and display. Emphasis on Fourier imaging methods and instrumentation.

249. Group Studies. (1-8) S. W. Sp. Prerequisite: Graduate standing.
Staff
Advanced study in various subjects through seminars on topics to be selected each year. Informal group studies of special problems, group participation in comprehensive design problems, or group research on complete problems for analysis and experimentation.

250. Research. (1-6) S. W. Sp. Prerequisite: Graduate standing.
Staff

260. Clinic Aspects of Bioengineering. (2) S. Sp. Prerequisite: Consent of instructor. Lecture 1.5 hours. Lab 1.5 hours.
List
Important clinical issues relevant to bioengineering will be reviewed to help students appreciate the potential and pitfalls of contemporary technologies. Students will contact scientists, physicians, nurses, technicians, and patients to identify important medical issues that require advanced bioengineering support.

297. Special Study. (1-6) S. Sp. Cons of instructor. Lecture 1.5 hours.
Staff
Reading and conferences for properly qualified students under the direction of a member of the staff.

298. Thesis. (0) S. W. Sp. Prerequisite: Advancement to candidacy and permission of the graduate adviser.
Staff
For graduate students engaged in writing the thesis for the master's degree.

299. Dissertation. (0-6) S. W. Sp. Prerequisite: Advancement to candidacy and permission of the graduate adviser.
Staff
For graduate students engaged in writing the dissertation for the Ph.D. degree.

Biometrics

180. Algebra & Calculus for Biomed. (3) S. Sp. Prerequisite: Consent of instructor.
Licko
Mathematical concepts and processes for planning, representation, and analysis in biomedical research. Review of algebraic operations, equations, matrices, and graphs. Introduction to functions, sequences, convergence, derivatives, integrals, and infinite series. Applications to growth, binding, enzyme kinetics, tracer studies, population dynamics.

190. Biology Modeling through Diff. Equ. (3) S. Prerequisite: Biometrics 180 or equivalent. Lecture 2 hours. Lab 3 hours.
Licko

Bioengineering/ Biomatics/ Biophysics

Development of intuitive notions regarding differential equations. Quantitative and qualitative aspects of differential equations are explored by analog, digital, and analog techniques. Applications to selected problems in compartmental analysis, enzyme and drug kinetics, and metabolic and biological control dynamics.

214. Endocrine Dynamics. (3) S. W. Prerequisite: Biomatics 193A-B or equivalents, or consent of instructor.
Licko
Reviews of relevant parts of compartmental and tracer analysis and control theory. Analysis of dynamics of secretory process, distribution, binding and metabolism of hormones, and hormonal control. Differential equations and both analog and digital computers are utilized throughout the course.

Biophysics

The Graduate Group in Biophysics is an interdisciplinary group offering a Ph.D. in Biophysics. For details, refer to the Graduate Studies Bulletin.

200. Off-Campus Study. (0) S. W. Prerequisite: Approval of the graduate adviser. Restriction: Open only to students enrolled in the graduate program in Biophysics.
Staff
Full-time graduate study in the biophysics program through the intercampus exchange or consortium program.

201. Cellular Biophysics. (3) S. W. Prerequisite: Biophysics 200A. Lecture 3 hours.
Cooke, Papahadjipoulos, Rothman
Topics covered: membrane structure and dynamics; transport and permeability; cellular motion and muscle contraction; cell energetics; DNA replication and information transfer, cell cycles.

203. Mending Human Genes. (3) S. W. Prerequisite: Consent of instructor. Lecture 2 hours.
Cleaver
Introductions to enzymatic DNA repair mechanisms. Emphasis is on cells damaged by UV light, ionizing radiation, and chemical carcinogens. The genes involved in regulating repair in various inherited diseases involving mutagenesis, carcinogenesis, and aging will be described.

205. Mammalian Genomic Rearrangement. (1.5) S. Lecture 1.5 hours.
Morgan, Munne
This course will focus on the mechanisms of recombination, specific DNA rearrangements and how they are manifested cytogenetically, factors influencing the rate of DNA rearrangements, and the consequences of DNA rearrangements in mammalian cells.

207A. Image Cytometry: Theory, Methods & Applications. (2) S. W. Prerequisite: Consent of instructor. Lecture 1.5 hours. Mayall, Chowi
Biostatistics

The courses listed below are offered through the Department of Epidemiology and Biostatistics.

171. Introduction to Linear Algebra. (3) F. Prerequisite: One year of college-level mathematics. Lecture 3 hours. Offered in alternate years: Offered 1991-92.

180A. Intro to Probability & Statistics. (4) W. Prerequisite: Working knowledge of algebra. Lecture 3 hours. Lab 2 hours.

185A. Biostatistics. 185A and 185B are conceptually oriented introductory courses that prepare the student for 200-level course work. Topics covered include descriptive statistics, probability, random variables, sampling, estimation, confidence intervals, and hypothesis testing. This course is primarily concerning population means. EPID & BIOSTAT.

185B Probability & Statistics. (4) Sp. Prerequisite: Completion of Biostatistics 185A. Lecture 3 hours. Lab 2 hours.

185C. Regression Analysis & ANOVA. (4) W. Prerequisite: Biostatistics 185A-B or Biostatistics 187 or permission of instructor. Lecture 3 hours. Lab 3 hours.

191A. Clinical Trials & Life Tables. (3) Sp. prerequisite: Biostatistics 185 or equivalent or permission of the instructor. Lecture 3 hours. Offered in alternate years: Offered 1991-92.

191B. Regression Analysis & ANOVA. (4) Sp. Prerequisite: Biostatistics 185A-B, Biostatistics 210A or Biostatistics 187 equivalent. Lecture 3 hours. Lab 3 hours.

Bionometrics

Cal Cell Biology

210. Selected Topics in Cell Biology. (2) F., W. Prerequisite: Cell Biology 245. Lecture 2 hours. Staff

212. Selected Readings in Cell Biology. (2) F. Prerequisite: Previous or concurrent enrollment in Cell Biology 245, and consent of instructor. Walter

245. Cell and Developmental Biology. (3) F. Prerequisite: Calculus, physical chemistry, organic
chemistry, and an advanced course in biology are highly desirable. Lecture 3 hours.

Walter, White
Modern aspects of the molecular basis of cell function are examined with emphasis on how cells move, secrete, divide, and communicate with each other. BIOCHEM

247. Specialized Topics in Cell Biology. (3) F. W. Sp. Prerequisite: Cell Biology 245, Lecture 2 hours.

Staff
Topics in Cell Biology will be discussed: a tutorial form, with student presentation of papers. The goals are an in-depth study of a few areas of cell biology, and critical reading of the scientific literature. BIOCHEM


Staff
BIOCHEM

299. Dissertation. (0) §§ S, F, W. Sp. Prerequisite: Advanced to candidacy and permission of the graduate advisor.

Staff
For graduate students engaged in writing the dissertation for the Ph.D. degree. CELL BIOLOGY

Chemistry

112. Intro to Organic Chemistry. (3) F, W. Sp. Prerequisite: Completion of 8 units of organic chemistry. Lecture 1 hour. Lab 4 hours.

Craig
Survey of basic organic chemistry-structure and reactivity; an introductory study of the nomenclature, stereochemistry, spectroscopy, and reactions of the major organic compounds of carbon, including aromatic compounds. PHARM CHEM

113. Organic Chemistry. (5) F. W. Sp. Prerequisite: Chemistry 112 or passing grade in the Chemistry 112 equivalence examination. Lecture 3 hours.

Ketcham, Craig
A continuation of the study of the reactions of organic compounds including some aromatic, hydro-aromatic, and heterocyclic compounds. PHARM CHEM

115. Physical Chemistry. (3) F. Prerequisite: Chemistry 5 or equivalent. Laboratory course in quantitative analysis and differential and integral calculus. Lecture 4 hours. Conference and demonstration 3 hours.

Kuntz
Elementary physical chemistry with emphasis on thermodynamics. PHARM CHEM

116. Physical Chemistry. (2) W. Prerequisite: Chemistry 115 or equivalent. Lecture 1.5 hours. Conference and demonstration 1.5 hours.

T. James
Elementary physical chemistry with emphasis on chemical kinetics. PHARM CHEM

117. Organic Chemistry Laboratory. (2) Sp. Prerequisite: Chemistry 112 or passing score in Chemistry 112 equivalence examination. Chemistry 113 or concurrent enrollment in Chemistry 113, or consent of instructor. Lecture 1 hour. Lab 4 hours.

Ketcham
Laboratory experiments in identification and quantification of organic substances. PHARM CHEM

151. Physical Chemistry. (1-3) Sp. Prerequisite: Consent of instructor. Lecture 1-3 hours.

Kuntz
Selected topics at an introductory level, which vary from year to year. Past topics included structure of nucleic acid and proteins, quantum chemistry and spectroscopy. PHARM CHEM

158. Physical Chemistry Laboratory. (1) Sp. Prerequisite: Chemistry 115 and 116. Lab 3 hours.

Kuntz
Laboratory exercises in spectroscopy. PHARM CHEM


Kahl
A study of the reactions of organic compounds by applying a system of qualitative analyses to the determination of characteristic groups. PHARM CHEM

170. Group Studies Course. (1-4) F, W. Sp. Prerequisite: Consent of instructor. Lecture 1-4 hours.

Cashman
Group studies in selected topics in chemistry. PHARM CHEM


Staff
Library research and directed reading under supervision of a member of the faculty with the approval of the chairman of the department. PHARM CHEM

199. Laboratory Project. (1-5) F, W. Sp.

Staff
A laboratory research project under direction of a member of the faculty with the approval of the chairman of the department. PHARM CHEM


Oppenheimer, Burlingame
A study of the detailed procedures associated with organic reactions. PHARM CHEM

203. Applied Kinetics. (3) F. Prerequisite: A course in advanced organic chemistry or consent of instructor. Lecture 3 hour.

Cashman
The course will consist of one unit of basic chemical kinetics, one unit of organic chemical kinetics, and one unit of enzyme kinetics. PHARM CHEM

205. Advances in Synthetic Methods. (2) F. Chemistry 113 and 165 or equivalent. Lecture 2 hours.

J. Craig
Recent advances in synthetic methods, comprising specific oxidizing agents, specific reducing agents, and other specific reagents. PHARM CHEM

208. Advanced Organic Chemistry. (3) Sp. Prerequisite: Chemistry 113 and 165 or equivalent. Lecture 3 hours.

Craig, Whitney
Teorpes and steroids. Occurrence, chemistry, stereochemistry and structure function relationships of natural products such as carotenoids, fat-soluble vitamins and steroids, and their precursors. PHARM CHEM

209. Chemistry of Heterocyclics. (3) F. Prerequisite: Chemistry 113 and 165 or equivalent. Lecture 3 hours.

J. Craig, Kenyon
A survey of the main nitrogen, oxygen, and sulfur-containing heterocycles. PHARM CHEM

260. Advanced Physical Chemistry. (4) W. Prerequisite: Two quarters of physical chemistry or consent of instructor. Lecture 4 hours.

Kuntz
Molecular thermodynamics. PHARM CHEM

262. Advanced Physical Chemistry. (4) F. Prerequisite: Chemistry 200 or equivalent. Knowledge of differential equations recommended. Lecture 4 hours.

Kollman
Quantum mechanics and applications to molecular problems. PHARM CHEM

263. Biophysical Chemistry. (5) F. Prerequisite: Chemistry 200 or consent of instructor. Lecture 3 hours.

Shafar
Basic principles of biophysical chemistry. Properties of biomolecules and macromolecules, and physical principles of experimental methods including scattering, hydraulodynamics, sedimentation, gels, chromatography. PHARM CHEM

264. Advanced Statistical Mechanics & Molecular Mechanics. (5) F. Prerequisite: Chemistry 260 or consent of instructor. Lecture 2 hours.

Kollman
Advanced aspects of statistical mechanics and molecular mechanics: topics covered vary from year to year. PHARM CHEM

Clinical Dentistry


Staff
Responsibility for patient dental care in the wards and comprehensive clinic under the direction of the attending staff. Dental consultation and treatment are coordinated with medical care. Residents take histories and perform physical examinations, laboratory tests, and dental treatment. STOMATOLOG

Clinical Pharmacy

110. Orientation. (2) F. Conference and field observation 3-4 hours.

R. Levin
An introduction to the scope of pharmaceutical practice including field trips to and participation in various settings where the pharmacist and patient interact. CL PHARM

130. Therapeutics. (6) F. Prerequisite: Successful completion of all required first- and second-year courses or consent of instructor. Lecture 5 hours. Conference 2 hours.

Koo, Kaputnik
Orientation to selected areas of medical practice, the clinical evaluation and comparison of drugs used in these areas, and the bio-pharmacodynamics of drug combinations and products. CL PHARM

151. Therapeutics. (6) W. Prerequisite: Clinical Pharmacy 130 or consent of instructor. Lecture 5 hours. Conference 2 hours.

L. Hart, A. F. Wong
Continuation of Clinical Pharmacy 130. CL PHARM

132. Therapeutics. (7) Sp. Prerequisite: Clinical Pharmacy 131 or consent of instructor. Lecture 6 hours. Conference 2 hours.

Dong, Stagg
Continuation of Clinical Pharmacy 131. CL PHARM


McSweeney
Clinical aspects of nutrition in ambulatory and institutional practice with emphasis on special needs of different populations. Nutritional supplementation, enteral and parenteral products will be discussed as they apply to these populations. CL PHARM

134. Topics in Pharmacy Administration. (2) Sp. Prerequisite: Third- or fourth-year standing. Lecture 2 hours.

Kishi
Survey of major world health problems, and programs and agencies concerned with their control. Relationships of pharmacy to topics such as emergency medical services, communicable diseases, nutrition, vaccination, occupational health, maternal and child hygiene, mental health, and public health administration. CL PHARM

135A. Drug Information Orientation. (1.5) Su, F, W. Sp. Prerequisite: Third-year standing. Concurrent or subsequent enrollment in Clinical Pharmacy 130, 131 or 132.

L. Hart
Orientation to clinical services including patient interview techniques and monitoring; training and actual experience in literature retrieval, analysis and dissemination of drug information. CL PHARM
Clinical Pharmacy


Kaye and Staff

Supervised clinical pharmacy experience in an inpatient setting. Students develop and explore their roles in an interdisciplinary health care team, take medication histories, monitor drug therapy, provide patient education, and research patients’ specific drug information questions. CL PHARM


Kaye and Staff

Continuation of Clinical Pharmacy 148.A. CL PHARM

148.01A. Inpatient Clerkship—UCSD. (9) F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year courses and Clinical Pharmacy 130 series comprehensive examination. Clinic: 40 hours per week for 6 weeks.

Adler and Staff

Supervised clinical pharmacy experience in an inpatient setting. Students develop and explore their roles in an interdisciplinary health care team, take medication histories, monitor drug therapy, provide patient education, and research patients’ specific drug information questions. CL PHARM

148.01B. Inpatient Clerkship—UCSD. (9) F, W, Sp. Prerequisite: Clinical Pharmacy 148.01A or 148A. Clinic: 40 hours per week for 6 weeks.

Adler and Staff

Continuation of Clinical Pharmacy 148.01A or Clinical Pharmacy 148A. CL PHARM

149.02A. Inpatient Clerkship—UCI & MHB. (9) F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year courses and Clinical Pharmacy 130 series comprehensive examination.

Shinomura and Staff

Supervised clinical pharmacy experience in an inpatient setting. Students develop and explore their roles in an interdisciplinary health care team, take medication histories, monitor drug therapy, provide patient education, and research patients’ specific drug information questions. CL PHARM

149.02B. Inpatient Clerkship—UCI & MHB. (9) F, W, Sp. Prerequisite: Clinical Pharmacy 148.02A. CL PHARM

Shinomura and Staff

Continuation of Clinical Pharmacy 148.02A. CL PHARM

149.03A. Inpatient Clinical Clerkship—UCD. (9) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year course work and the comprehensive examination. Clinic: 40 hours per week for 6 weeks.

Sauer and Staff

Supervised clinical pharmacy experience in an inpatient setting. Students will develop and explore their roles in an interdisciplinary health care team, take medication histories, monitor drug therapy, provide patient education, and research patients’ specific drug information questions. CL PHARM

149.03B. Inpatient Clinical Clerkship—UCD. (9) Su, F, W, Sp. Prerequisite: Clinical Pharmacy 148.03A. Clinic: 40 hours per week for 6 weeks.

Sauer and Staff

A continuation of Clinical Pharmacy 148.03A. CL PHARM


A. Leeds and Staff

Supervised clinical experience in an outpatient setting. Students develop and explore their roles in an interdisciplinary health care team, take medication histories, monitor drug therapy, and provide patient education. Experience in community pharmacies. CL PHARM

149.01. Ambulatory Extremity/Therapeutic—UCSD. (13) F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year courses and Clinical Pharmacy 130 series comprehensive examination.

Weilbert and Staff

Supervised clinical experience in an outpatient setting. Students develop and explore their roles in an interdisciplinary health care team, take medication histories, monitor drug therapy, and provide patient education. Experience in community pharmacies. CL PHARM

149.02A. Azusa Extremity/Therapeutic—UCI & MHB. (6.5) F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year courses and Clinical Pharmacy 130 series comprehensive examination.

Shinomura and Staff

Supervised clinical pharmacy experience in an inpatient setting. Students develop and explore their roles in an interdisciplinary health care team, take medication histories, monitor drug therapy, and provide patient education. Experience in community pharmacies. CL PHARM

149.02B. Azusa Extremity/Therapeutic—UCI & MHB. (6.5) F, W, Sp. Prerequisite: Clinical Pharmacy 149.02A. CL PHARM

Shinomura and Staff

Continuation of Clinical Pharmacy 149.02A. CL PHARM

149.03A. Ambulatory Extremity/Therapeutic—UCD. (9) F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year required courses and the comprehensive examination. Clinic: 39 hours per week for 6 weeks.

Sauer and Staff

Supervised clinical experience in an ambulatory care setting. Students develop and explore their roles in an interdisciplinary health care team, take medication histories, monitor drug therapy, and provide patient education. Experience in community pharmacies. CL PHARM

149.03B. Ambulatory Extremity/Therapeutic—UCD. (9) F, W, Sp. Prerequisite: Clinical Pharmacy 149.03A. Clinic: 39 hours per week for 6 weeks.

Sauer and Staff

A continuation of Clinical Pharmacy 149.03A. CL PHARM

155.10. Pharmacy Systems. (3) F, W, Sp. Prerequisite: Third-year standing or higher. Lecture 1 hour. Conference and special project 6 hours.

Herfindal

Orientation to inpatient and outpatient pharmacy systems. Projects in design, justification, and implementation of distribution systems, such as unit dose, intravenous additives services, and computer applications will be the major grading criteria. CL PHARM

155.20. Drug-Induced Disease Problems. (5) F, W, Sp. Prerequisite: Pathology 135. Third-year standing or higher. Lecture 2 hours. Special project 4 hours.

Tong

These syndromes of iatrogenic diseases will be studied with major emphasis on their significance, pathology and management. Assessment of collection and analytic methods of adverse drug reaction information and evaluation of literature will be considered. Special projects will be assigned. CL PHARM

155.30. Infectious Diseases Topics. (3) F, W, Sp. Prerequisite: Clinical Pharmacy 130, 131 and 132. Consent of instructor. Lecture and seminar 3 hours.

Guggemos

Course provides students with intensive, systematic approaches to management of patients with selected infectious diseases. Emphasis is on contemporary management. Infectious diseases in specialized circumstances also included. CL PHARM


Levin

Preworship for Clinical Pharmacy 110 conference. One sophomore and one junior preceptor per conference will be responsible for conducting oral presentations. One senior conference will be responsible for taking students on tour of clerkship sites. CL PHARM


Ignofof

Discussion in detail of topics in oncology that focus upon the pharmacologic management of various neoplastic disorders or cancer-induced problems. CL PHARM


Shinomura, W. E. Smith

Course provides students with an overview of management and increases their awareness of major components of pharmacy services administration. CL PHARM


Staff

Group studies of selected topics in clinical pharmacy. CL PHARM

170.01. Geriatric Pharmacy. (2) F, W. Sp. Lecture 2 hours.

Lipton

The medical and social problems associated with the geriatric population will be reviewed, with emphasis on the use of medications and the role of the pharmacist in providing care for this patient population. CL PHARM

170.05. Issues Facing Women in Pharmacy. (1) Sp. Lecture/seminar (one Saturday and one weekday evening) 10 hours total.

Kimble, Sauer

Through lecture and discussion, issues facing women in pharmacy will be explored. Specific topics to be addressed include: career planning and management; balancing career and personal life; job vs. career commitment; alternative work-time options; mentorship; and issues related to increasing number of women entering the profession. Successful female role models will be assisted to share experiences and perspectives, providing additional discussion topics. CL PHARM


Kimble, Ropp, Inaba

A survey course that addresses the physical and mental effects of drug abuse; intervention and treatment strategies; legal and ethical issues surrounding drug abuse; and substance abuse among health care professionals. CL PHARM

170.08. Current Topics in Cancer. (2) Sp. Lecture 2 hours.

Ignofof

This interdisciplinary course is designed to provide a framework of concepts and skills about preventive medicine, focusing on cancer prevention. CL PHARM
170.60. Pharmac传统文化. (1-5) Sp. Prerequisite: Fourth-year standing and basic life support certification. L 1 hour plus prep. Kayser

175.01. Infectious Pediatric Care-U. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148A or 149A and 149B. Consent of instructor. Bolinger

Students participate in the activities of the Infectious Pediatric Service. Activities include routine review of patients' charts, monitoring patients' response to drug therapy, attendance at conferences, seminars and rounds, and participation in selected therapeutic consultations. CL PHARM

175.02. Renal Medicine-U. (1-8) F, W. Sp. Prerequisite: Clinical Pharmacy 148A or 149A and 149B. Consent of instructor. Gaudet

Hemodialysis

Students participate in the activities of the Renal Medicine Service, including patient monitoring, attendance at conferences, seminars and rounds, and application of pharmacokinetics to drug therapy. Where appropriate, students prepare detailed consultations regarding individual patient therapy. CL PHARM

175.03. Infectious Diseases-U. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148A or 149A and 149B. Consent of instructor. Guglielmo

Students attend Infectious Disease Service therapeutic consultations and evaluate patients' responses to recommended therapy by following chart records and by direct interviews. Students attend conferences, seminars and rounds. Special projects assigned. CL PHARM


Students participate in the clinical service of the Clinical Pharmacokinetics Laboratory. Course includes reviewing drug levels, selecting patients to be monitored, preparation and presentation of reports, attendance at seminars, and experience in leading one. CL PHARM

175.07. Neonatal ICU-U. (1-8) SS1, SS2, SS3, F, W. Sp. Prerequisite: Successful completion of all first- and third-year required coursework. Consent of instructor. A. Wong

Participate in activities of Neonatal ICU, including patient monitoring, rounds, drug consultation, and education. Patients are primarily premature and newborn infants with congenital heart defects. Work under supervision of clinical pharmacist in management of these patients. CL PHARM


Students participate with pediatric staff dealing with problems frequently encountered in general pediatric medicine, in addition to those which affect children from low income, overcrowded and underserved conditions. Activities include rounds, conferences and participation in special projects. CL PHARM

175.22. Infectious Diseases-U. (1-8) F, W. Sp. Prerequisite: Clinical Pharmacy 148A or 149A and 149B. Consent of instructor. Winter, Rose, and others

Students gain experience on the Infectious Disease Consult Service. Activities include rounds, medication consultations and provision of pharmacokinetic monitoring. CL PHARM


Students observe, interview, evaluate drug therapy, interact with patients in acute phases of psychiatric disorders, accompany outpatient physicians to court, attend interdisciplinary team conferences, and make specific comments on drug therapy. CL PHARM

175.25. Inpatient Medicine-U. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148A or 149A and 149B. Consent of instructor. Winter, Korman and Staff

Experience in various medical services at VA. Activities include interview patients, monitoring drug therapy, consultation with housestaff, and participation in conferences, seminars and rounds. Special projects assigned. CL PHARM

175.26. Infectious Diseases-U. (1-8) SS1, F, W, Sp. Prerequisite: Clinical Pharmacy 148A or 149A and consent of instructor. Kapoian, Mills

Students round with SFGH Infectious Diseases Consult Service, evaluate antibiotic selection and monitor patients' therapy for efficacy and toxicity; serve as drug consultants to the medical staff on the service. A special project related to the effect of infectious diseases in drug therapy will be completed. CL PHARM

175.27. Burn Unit-U. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 130, 131, 132 and consent of instructor. Winter, DeMatoire, and others

Students work in Burn Unit Satellite, monitoring patients' wound cultures, antibiotic therapy and drug regimen, and patient's nutritional and pain management. Students are involved with patients from surgical intervention through rehabilitation. CL PHARM

175.36. Clinical Toxicology-Pharmacology-S. (1-8) SS1, F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework. Consent of instructor. Winter, Jacobs

In an interdisciplinary setting, student assess clinical problems relating to the selection, pharmacodynamics and therapeutic merits of drugs and drug products. Activities include participation in inpatient and outpatient conferences, collaboration on selected consultations, and terminal and evaluation of drug literature. CL PHARM

175.31. Clinical Pharmacology-S. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148A or 149A and 149B. Consent of instructor. Winter, Kondo

Students participate in the activities of the Division of Clinical Pharmacology. Activities include utilization of computerized patient drug profiles to monitor adverse drug reactions, and participation in conferences and seminars. Special projects assigned. CL PHARM

175.33. Inpatient Family Practice-U. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148A or 149A and 149B. Consent of instructor. Dong

Students participate in the activities of the Family Practice Inpatient Service. Students will be responsible for drug surveillance, drug monitoring, management of consultations, and patient education. A minimum of two patient-specific drug consultations is required. CL PHARM

175.34. Psychopharmacology-U. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148A or 149A and consent of instructor. Winter, Rogers and O'Brien

Provides student opportunity to follow patients from admission until housed on treatment unit. Initial reasons for prescribing medication, acute illness, and in some cases, evolution of psychiatric symptoms will be observed by student. CL PHARM

175.37. Inpatient Psychiatry-U. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148A or 149A and consent of instructor. Winter, Beall and others

Students participate in acute care psychiatric ward. Activities include monitoring and interviewing patients, participation in team meetings, conferences, and pharmacist medication classes, presenting in-service programs to psychiatric staff. CL PHARM

175.39. Oncology/Nutrition-U. (1-8) SS1, F, W, Sp. Prerequisite: Clinical Pharmacy 148A or 149A and consent of instructor. Winter, Jacoby

Work on oncology unit monitoring patients on chemotherapy, nutrition support, pain control, and antiemetic therapy. Gain in-depth knowledge of role of clinical pharmacist in private hospital oncology unit. CL PHARM

175.40. Thyroid-U. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148A or 149A and 149B. Consent of instructor. Dong

Students participate in the activities of the Thyroid Clinic, including patient monitoring, attendance at conferences and seminars. Work under supervision of the clinical pharmacist and attending in the chronic management of selected patients. CL PHARM


Experience in various subspecialty areas in the Dermatology Clinic. Students take medication histories, and instruct patients on proper medication usage. They participate in conferences, seminars and rounds, and provide therapeutic consultations where appropriate. Special projects assigned. CL PHARM

175.42. Ob-Gyn-U. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148A or 149A and 149B. Consent of instructor. Winter, Roggiero

Experience in various subspecialty areas in the Obstetrics and Gynecology Clinic. Students work with other health professionals and attend in the clinic, participating in conferences and seminars. Prepare detailed consultations regarding drug therapy where appropriate. CL PHARM

175.43. Diabetes-U. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148A or 149A and 149B. Consent of instructor. M. Kimble

Students participate in the activities of the Diabetes Clinic, including patient education, drug therapy consultation and management, and attendance at conferences and seminars. At option of student, a special project may be undertaken in addition to regular clinic activities. CL PHARM

175.45. Anticoagulation-U. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148A or 149A and 149B. Consent of instructor. Kayser

Students participate in the activities of the Anticoagulation Clinic. Special project is required, the subject of which shall be chosen by the student, with the consent of the preceptor. CL PHARM

175.46. Hematology-Oncology-U. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148A or 149A and 149B. Consent of instructor. Stagg

Students participate in the daily activities of the Hematology-Oncology and/or Oncology Clinic. Special project is required. CL PHARM

175.47. Rheumatology-U. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148A or 149A and 149B. Consent of instructor. A. L. Levis
175.70. Skilled Nursing Facility Clerkship. (1-8) Su, F, W, Sp. Prerequisite: Clinical Pharmacy 141A or 149A. Consent of instructor.

Winter, Nico, Rhoades, Fickel
Students gain experience in both the skilled nursing facility and Pharmaceutical Services Pharmacy. Activities include evaluating drug therapy and other collaborative roles in skilled nursing facility service, participation in unit dose medication system, and researching drug information. Special project required. Consent of instructor.

175.79. Home Care Services. (1-8) SS1, SS2, Su, F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework. Consent of instructor.

Winter, Alexandre
Projects in Home Health Care Services, including fluid compounding, patient monitoring, multidisciplinary meeting, interacting with nurses in the home setting, patients both pre- and post-discharge and with physicians in their office setting to become familiar with all aspects of home specialty care. CL PHARM


McSweeney
Students participate in IV fluid therapy selection and preparation, and monitor patients receiving intravenous medications. Conferences are held on topics related to problems in the use of intravenous fluid therapy in various disease states. CL PHARM

175.82. IV Additives Clerkship—VA. (1-8) Su, F, W, Sp. Prerequisite: Clinical Pharmacy 130, 131 and Consent of instructor.

Winter, Kornman, Wong and Staff
An introduction to the administrative, professional and technical aspects of requisitioning and maintaining IV additive service. Students will participate in workshops and conferences. CL PHARM

175.83. IV Additives & Unit Dose—VAM. (1-8) Su, F, W, Sp. Prerequisite: Clinical Pharmacy 130, 131 and Consent of instructor.

Winter, Eck, Carr, Lopez, J. Gee
Students participate in decentralized IV administration and unit dose systems of distribution, with involvement in the decentralized clinical activities, including patient profile reviews. CL PHARM

175.84. Drug Utilization Review—VAM. (1-8) Su, F, W, Sp. Prerequisite: Clinical Pharmacy 141A or 149A. Consent of instructor.

Winter, Eck, Gee
Students participate in establishing and presenting the protocols for a drug utilization review. Students will complete the study during the rotation, and present results to the physicians and other disciplines involved. CL PHARM

Clinical Pharmacy

are drug dose regimen. Emphasis will be placed on integrating knowledge of patients' problems with the knowledge of the drug's kinetic and pharmacologic properties. CL PHARM

187.60. Home Care—Thurm Enterprises Inc. (1-85) F, W, Sp. Prerequisite: Clinical Pharmacy 100, 131, 132 and consent of instructor.

Shimomura, Martinez, Henry Students in need with both health care team; in hospitals, extended care facilities, and homes. Involves mobile monitoring; total parenteral nutrition; chemotherapy, pain and symptom management, anesthesia, and related services for home care patients. CL PHARM

187.61. Foster Infusion Care—(1-85) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second-, and third-year required coursework.

Shimomura, Campbell Students will be exposed to various aspects of a home care pharmacy including pre-discharge patient assessment, patient training and education, manufacturing of parenteral solutions and home delivery, and patient follow-up visits. CL PHARM

187.65. FHP-HMO Clinical Pharmacy Clerkship—(1-85) F, W, Sp. Prerequisite: Completion of all first-, second- and third-year required coursework.

Shimomura, Giambraone, Peneda Students participate in providing clinical pharmacy services as an HMO setting. Activities include attending inpatient service rounds, providing clinical services to inpatients and outpatients, providing inpatient education classes and preparing pharmacy and therapeutic committee drug reviews. CL PHARM


Shimomura, Towne, Schweigert Students will be provided the opportunity to develop the skills required to work in a drug information service, which includes organization and retrieval of drug information, drug literature evaluation, and effective verbal and written communication. CL PHARM

187.81. IV Additives—UCD—(1-85) F, W, Sp. Prerequisite: Fourth-year standing and consent of instructor.

Shimomura, McGuire Students participate in the activities of an intravenous additives lab at the major university teaching hospital. Students will learn about aseptic technique, compatibility and stability of drugs in intravenous solution, total parenteral nutrition, prefilled syringe programs, hyperalimentation and piggyback CS. CL PHARM


Shimomura, Charbel An on-line experience to a drug information center services at a large multidisciplinary teaching hospital. Through a series of experience modules, in addition to day-to-day information requests received by the center, students will be expected to demonstrate competence

in drug literature evaluation and drug information retrieval skills. Students will be exposed to drug therapy as it relates to different disease states seen in the unit. CL PHARM


Shimomura, Casselman Clerkship provides an opportunity for students to develop and use skills relating to all areas of a central IV additive service. Students will make routine case presentations regarding patients receiving different types of intravenous therapy, including parenteral nutrition. CL PHARM

188.01. Oncology—UCD—(1-85) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year coursework and consent of instructor.

Sauer and Staff A supervised clinical pharmacy experience in inpatient and outpatient settings which allows students to develop skills in clinical pharmacy settings involved with oncology practice. Through observation and performance, students will develop and explore their roles as clinical pharmacists. CL PHARM

188.02. Psychiatric Medicine—UCD—(1-85) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year coursework. CL Clinical Pharmacy 148 or 149 and consent of instructor.

Sauer and Staff Students participate on the UCD Medical Center inpatient acute care psychiatric ward. Activities include monitoring and charting patients, participation in team medical rounds, conferences, and pharmacy medication classes. Students will also present inpatient case presentations to the psychiatric staff and pharmacy staff. CL PHARM

188.03. Poison Information—UCD—(1-85) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year coursework. CL Clinical Pharmacy 148 or 149 and consent of instructor.

Sauer and Staff Students participate in poison control center activities, e.g., answering phone, taking poison histories, drawing patient samples, and giving poison presentation talks to the public and health care professionals. CL PHARM

188.04. Neonatal Intensive Care—UCD—(1-85) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second-, and third-year courses and consent of instructor.

Sauer and Staff Students will become members of Neonatal Intensive Care Team. Attend rounds, conferences, consultation and evaluate drug therapy, and provide drug therapy-related consultation. CL PHARM

188.05. Medical Intensive Care—UCD—(1-85) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year coursework, Clinical Pharmacy 148 and consent of instructor. Sauer and Staff The student will work with pharmacist in the Medical Intensive Care Unit (MICU) and satellite pharmacy providing both clinical and distributive pharmacy services. Students will be exposed to drug therapy as it relates to different disease states seen in the unit. CL PHARM

188.06. Surgical Intensive Care—UCD—(1-85) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year coursework. Clinical Pharmacy 148 and consent of instructor.

Sauer and Staff The student will be placed as a liaison from the Department of Pharmacy to the Surgical Intensive Care Unit. He/she, under the supervision of a pharmacist, will assume responsibility for the pharmacologic management of critically ill patients. CL PHARM


Sauer and Staff The clinical pharmacist affords the student an extensive experience in clinical pharmacy services to the Gastroenterology and Clinical Nutrition services at UCD Medical Center. The student will manage patients requiring parenteral nutrition and become an integral member of the Gastroenterology Consult Team. CL PHARM

188.08. Microcomputer Applications in Pharmacy Practice—UCD—(1-85) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework and consent of instructor. Sauer and Staff The student will identify and develop a solution for a problem in pharmacy practice that can be solved by the use of microcomputers. In addition, the student will review the utility of various software used in pharmacy practice. CL PHARM


Sauer and Staff Upon familiarization with the literature, the student will design and conduct a drug utilization review and present the results to the Hospital Pharmacy and Therapeutics Committee. CL PHARM

188.10. Infectious Diseases—UCD—(1-85) F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework and comprehensive examination.

Sauer, King Students will be active participants in the UCD Medical Center Infectious Diseases Consult Service. They will work closely with the Infectious Disease Consult Service, evaluating antibiotic selection, monitoring therapy and providing drug information. A project will be completed during the rotation. CL PHARM

188.11. Pharmacokinetics—(1-85) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework, and consent of instructor.

Sauer and Staff Students will concentrate on developing skills in the clinical arena utilizing state-of-the-art technology, while dealing with a variety of patients in the community hospital setting. Communication with other healthcare disciplines is stressed. CL PHARM

B. Sauer, Dager, Incaluka Students will be exposed to the application of pharmacokinetic principles while monitoring patients receiving a selected group of drugs. They will work under the supervision of an assigned clinical pharmacist. CL PHARM


Sauer, Christensen Under supervision of the clinical pharmacist, students will become members of the pediatric ward team. They will attend rounds and conferences, monitor patients, evaluate drug therapy, and when appropriate, recommend therapy. Patients vary in age from 2 weeks to 16 years. CL PHARM

188.20. Oncology/Sutter Community Hospitals—(1-85) F, W, Sp. Prerequisite: Fourth-year standing only.

Sauer, Spencer, Jee A supervised clinical pharmacy experience in inpatient and outpatient settings which allows students to develop clinical skills involved with oncology, nutritional support, and hospice. Through observation and performance, the students will develop and explore their roles as clinical pharmacists. CL PHARM

188.21. Cardiology Inpatient Clerkship—(1-85) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework and consent of instructor.

Sauer, Jee, Kel, Hall, Spencer A supervised clinical pharmacy experience in an inpatient setting which allows students to develop skills in clinical pharmacy involved with cardiology. Through observation and performance, students will develop and explore their roles as clinical pharmacists. CL PHARM

188.25. Pharmaceutical Sales in Managed Health Care Organizations—(1-85) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework, and consent of instructor.

Sauer, Mikuska Students will become familiar with principles and operation of a managed health care organization. The student will then identify an area of potential cost containment and develop a written policy and procedure to effect a positive clinical and economic solution. CL PHARM

188.26. Community Hospital Critical Care—(1-85) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework, and consent of instructor.

Sauer, Dallas Students will concentrate on developing skills in the clinical arena utilizing state-of-the-art technology, while dealing with a variety of patients in the community hospital setting. Communication with other healthcare disciplines is stressed. CL PHARM
Community Dentistry/Craniofacial Anomalies/Dental Aux Utilization/Dental Health Education

168. Community Health Methods. (2) W. Lecture 1 hour. Lab 3 hours.

Tobin

Dental hygiene students work in the North Oakland community with the Children and Youth Project staff. Students are assigned to area schools where oral screening is done. Students also make home visits. DENT PUB HLTH

Craniofacial Anomalies

170.21. Craniofacial Function. (2) F. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry programs or consent of instructor. Lecture 2 hours.

A. Miller

This course emphasizes those topics of the neuromuscular system that modify the craniofacial morphology and structure. GR DEVEI

171. Diagnosis & Treatment. (2) F, W, S. Lecture 1 hour. Seminar and clinic 3 hours.

Chiclet, Vargervik

Diagnostic, preventive, and corrective methods relative to patients with congenital malformations of the orofacial region are discussed. GR DEVEI

171.22. Craniofacial Anomalies. (2) W. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry programs or consent of instructor. Lecture 3 hours.

Vargervik

Demonstration of various types of craniofacial anomalies, assessment of growth and development of abnormal and normal craniofacial structures, diagnosis and evaluation of the more common anomalies and associated imparted functions and therapeutic needs of the individual patient. GR DEVEI

186.01. Abnormal Orofacial Development. (3) F, W. Prerequisite: Fourth-year standing or consent of instructor. Seminar and clinic 3 hours.

Vargervik

The pathogenesis of jaw deformities, dental malocclusions, and speech disorders associated with congenital malformations is discussed. Instruction in diagnosis and preventive and corrective treatment methods is given in the clinic. GR DEVEI

Dental Auxiliary Utilization

120. Use of Dental Auxiliaries. (1) Sp. Prerequisite: Restorative Dentistry 116. Lecture 1 hour.

Ried

Lecture, clinical and field work covering the principles of dental ergonomics, operator and patient positioning, instrument transfer techniques, and an orientation to efficient chairside auxiliary utilization and their legal functions. DENT PUB HLTH

Dental Health Education

150A. Communication Theory in Dental Hygiene. (1) F. Lecture 1 hour.

Walsh

Introduction to communication theories and models. Considers personal and professional aspects of communication, intrapersonal, interpersonal, verbal, and nonverbal communication and listening skills. Emphasis is placed on the dental hygiene-patient relationship and the development of communication skills for dental hygiene and chairside education. DENT PUB HLTH

150B. Human Dev & Oral Health Education. (2) W. Prerequisite: DHHE 150A. Lecture 2 hours.

Ishida, Poupard

Introduces student to basic concepts of preventive oral hygiene, learning and motivation theories, and an overview of human development, including physical, dental, cognitive, emotional, and psychosocial aspects across the life-span. Considers aspects of development, from infancy, childhood, adolescence, to young, middle, and late adulthood, and related health care and oral health education needs. DENT PUB HLTH


M. Walsh

Analysis of theories and research in education emphasizing teaching strategies, evaluation methods and principles of curriculum development for use in planning educational programs in schools of dental hygiene. Includes research and didactic micro-teaching for application and evaluation of selected teaching interactions. DENT PUB HLTH


Francisco

Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. DENT PUB HLTH

199. Laboratory Project. (1-5) F, W, Sp. Prerequisite: Dental Health Education 150A-B and 160A-B. Lecture 1 hour. Lab 0-12 hours.

Francisco

A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. DENT PUB HLTH
150.04. Dental Hyp Care for Patients with Spec- 
159. Clinical Dental Hygiene Care. (2) Sp. Pre-
nal Needs. (2) Sp. Prerequisite: DH 150.01, 150.02 \- requirence: DH 155A-All. Clinic 6 hours. 
& 150.03. Lecture 2 hours. 
Wong 
Miyazaki 
Course addresses the role of the dental hygienist in preventive dentistry and non-surgical periodontal therapy. 
with emphasis on the objective and principles of comprehensive dental hygiene care for special 
needs patients. Modernization of dental hygiene care for special needs patients will include the 
integration of the dental hygienist into the interprofessional 
record keeping, education, and communication. 

152. Introduction to Research. (1) W. Sp. Prerequi-
tite: To be taken concurrently with Dental Public Health and Hygiene 121. Lecture 1 hour. 
Compendium 
Consistent with Dental Public Health and Hygiene 
121, each student will prepare an annotated biblio-
pn a research topic of choice. DENT PUB HLTH 

care of patients throughout the dental office. 

135A-B. Clinical Dental Hygiene Seminar. (1-1) 
F. W. Prerequisite: DH 153A is prerequisite to DH 
153B. Seminar 1 hour. 

160. Ethics and Jurisprudence. (1) W. Lecture 1 hour. 
Hansebrink 
Introduction to the ethical, legal, and professional 
responsibilities of the dental hygienist. Emphasis on 
the California Dental Practice Act, malpractice pre-
vention, and professional organizations. DENT PUB 
HLTH 

161. Orientation to Dentistry. (2) S. Lecture 2 hours. 

151A-B. Clinical Dental Hygiene Seminar. (1-1) 
F. W. Prerequisite: DH 153A is prerequisite to DH 
153B. Seminar 1 hour. 

162B-C. Research Design. (4-4) W. Lecture 1 hour. 
Poupad 
Continuation of Dental Hygiene 162A. Implementa-
tion of a research project and preparation for publish-
ing, table clinic or poster session. DENT PUB HLTH 

163.01. Comprehensive Dental Hygiene Care. 
(2) F. Lecture 2 hours. 
M. Walsh 
Study and integration of additional clinical proce-
dures into the dental hygiene process to ensure 
and enhance quality comprehensive dental hygiene care. DENT PUB HLTH 

163.02. Comprehensive Dental Hygiene Care. 
(2) W. Prerequisite: DH 163.01. Lecture 1 hour. 
D. Perry 
Continuation of the study and integration of addi-
tional clinical procedures into the dental hygiene 
process to ensure and enhance quality comprehensive 
dental hygiene care. DENT PUB HLTH 

164. Clinical Dental Hygiene Seminar. (0-1) W. 
W. Prerequisite: Second-year dental hygiene 
standing. Seminar 1 hour. 
Yamamoto, Heckman 
Clinical seminar to discuss clinical policies and proce-
dures, dental hygiene treatment planning, and related 
topics. DENT PUB HLTH 

166. Expanded Clinical Functions (2) F. Lecture 1 hour. Lab 3 hours. 
Hansebrink 
Study of the anatomical, physiological, pharmacologi-
ocal, and periodontal aspects of the administration 
of local anesthetics, esthesia oxide-oxygen sedation, 
and performance of soft tissue curare. Students 

167A-B-C. Compre Clinical Dental Hygiene 
Care. (4-5) F, W. Sp. Prerequisite: Dental Hygiene 
150.01, 150.02, 150.03, 150.04, 155A, 154.01, 
154.02, 154.03, 159. Concurrent enrollment in Den-
tal Hygiene 169. Clinic 12 hours F, 15 hours W, Sp. 
Yamamoto 
Assessment of patient histories and signs of deviation 
from normal in the oral-facial complex, and planning, 
interpreting and evaluating comprehensive dental 
hygiene care within a human needs framework. In-
cludes advanced techniques of periodontal nonsur-
cal and maintenance therapy, pain control, gingival 
care, for the periodontally-affected patient. DENT 

182. Research Design. (0-2) F. Prerequisite: DH 
152. 
Poupad, M. Walsh 
Fundamentals of research design and the scientific 
method. Each student will expand their her experi-
ences from DH 152 and prepare a research protocol.

189. Independent Study. (0-4) W. Sp. Prerequi-
tive: Second-year standing in dental hygiene and con-
sent of instructor. 
Poupad 
Students select an area of interest for independent study or research. These may include clinical, com-
unity, educational, institutional, or other areas. 

189.01. Mobile Clinic. (0-3) S. Clinic variable. 
R. Miller 
Clinical experience in mobile dental clinics. 

189.02. Community Health Clinic. (0-2) F, W. 
Sp. Prerequisite: Winter or spring quarter standing of 
fourth-year dental hygiene curriculum; or fall, winter 
quarter standing of second-year dental hygiene 
curriculum. 

Walsh 
One-half unit of credit for every five-three hours visits made to off-campus clinics or institutions. Objective is 
to secure community experience and involvement. 
This elective is above the required eight visits to off-
campus clinics and institutions. DENT PUB HLTH 

199. Laboratory Project. (1-5) F, W. Sp. Lecture 1 
hour. Lab 0-12 hours. 
Walsh 
A laboratory research project under direction of a 
member of the faculty with the approval of the chair-
person of the department. DENT PUB HLTH 

150.01. Theoretical Foundations for Dental Hy-

150.02. Assessments in the Dental Hyg Process. 
(2) F. Prerequisite: DH 150.01. Lecture 2 hours. 
Heckman 
Course will focus on the principles of assessment as 
the first phase of the dental hygiene process of 
assessment, planning, goal setting, implementation, and eval-
uation in providing dental hygiene care. The rationale 
for collection of assessment data, associated 
clinical techniques, and documentation procedures 
will be presented. DENT PUB HLTH 

150.03. Dental Hyg Planning, Implementation, 
and Evaluation. (2) W. Lecture 2 hours. 
Heckman 
The planning, implementation, and evaluation phases 
of the dental hygiene care process will be emphasized 
as a continuation of DH 150.02. The use of assess-
ment data to plan care and set goals for the patient 
will be emphasized. Clinical techniques and administra-
tion of highly technical skills of dental hygiene practice. 
Evaluation of dental hygiene care is emphasized as an essential 
component of the dental hygiene process. DENT PUB HLTH
Dental Practice Management/Dental Hygiene & Hygiene


Walsh, Ishida
A seminar series for dental hygiene students enrolled in the Master's Program in Oral Biology with a special track in Dental Hygiene. Included are issues and research related to dental hygiene in a systematic manner. Current literature will be critically reviewed by students under faculty supervision, by faculty, or guest lecturers. DENT PUB HLTH

Walsh
Analysis of theories and research in education, with an emphasis on curricular development, teaching strategies and evaluation methods for use in planning educational programs in school of dental hygiene. DENT PUB HLTH

203A-B-C. Current Topics II. (1-1-1) F, W, Sp. Prerequisite: DH 201A-B-C. Seminar 1 hour.
Walsh, Ishida
A seminar series for dental hygiene students enrolled in the Master's Program in Oral Biology with a special track in Dental Hygiene. Included are issues and research related to dental hygiene in a systematic manner. Current literature will be critically reviewed by students under faculty supervision, by faculty, or guest lecturers. DENT PUB HLTH

301. Teaching Practicum in Dental Hygiene Education. (SF, SF, SF. Prerequisite: Dental Hygiene 202. Lab 3 hours.
Walsh
Practical teaching experiences in selected dental hygiene courses under the supervision of dental hygiene faculty members. DENT PUB HLTH

Dental Hygiene

116. Epidemiology & Preventive Dentistry. (2) F, Lecture, lab, and field work.
Pollick and Staff
Students learn basic methods of epidemiology and preventive dentistry in a personal and practical manner by collecting, analyzing, and presenting dental data from each other and from San Francisco school children, with a focus on prevention and examination of dental disease in dental students and school children. DENT PUB HLTH

117. Professional Issues in Dentistry. (6.5) F. Lecture and seminar 16 hours.
Wycoff, Gerbert, Pollick, Sacher, S. Silverstein, M. Walsh
Lectures and seminars on professional issues in dentistry. Topics include: modes of practice, dental needs of special groups, stress management, drug abuse, preventive dentistry and research design, ethics and history of dentistry. DENT PUB HLTH

120. Behavioral Sciences. (1) F. Lecture 1 hour.
Gerbert
Introduction to the basic concepts, theories, and findings of the social sciences. Emphasis in on the application of these concepts and ways of addressing them as the delivery of health services. DENT PUB HLTH

130. Dental Personnel & Patient Management. (1) F. Lecture 1 hour.
Bird
Provides skills in communicating effectively with employees, patients, and others associated with the practice of dentistry. Personnel management, recruitment, retention, benefits and patient management, legal responsibilities, financial arrangements are covered. DENT PUB HLTH

140A-B-C. Multidisciplinary Topics in Dentistry. (6-6) F, W, Sp. Prerequisite: Senior dental students. 20 hours per week for 3 weeks.
Bird and Staff
A comprehensive course designed for fourth-year dental students. Reinforces significant aspects of clinical and biomedical sciences, biostats, and dental practice management and updates students on new developments in dentistry. DENT PUB HLTH

140B. Multidisciplinary Topics in Dentistry. (6-6) F, W, Sp. Prerequisite: Senior dental student. 20 hours per week for 3 weeks.
Bird and Staff
A comprehensive course designed for fourth-year dental students. Reinforces significant aspects of clinical and biomedical sciences, biostats, and dental practice management and updates students on new developments in dentistry. DENT PUB HLTH

150. Dental Morphology. (2) F. Prerequisite: Consent of current enrollment in Dental Hygiene 130A. Lecture 2 hours.
Wong
The development and form of deciduous and permanent dentition and occlusion. Study of individual tooth and arch form and relationships as well as endodontic morphology. DENT PUB HLTH

175. Dental Public Health Practice & Clinic. (1-9) Su, F, W. Prerequisite: Pongraduate standing and permission of instructor.
Silverstein and Staff
To provide the dental public health residents with the opportunity to participate in the Family and Preventive Dental Service. They will learn about marketing strategies, computer billing services, office management, expanded function dental auxiliaries, and the delivery of preventive dental services. DENT PUB HLTH

186. Multidisciplinary Geriatric Care. (1.5) F. Sp. Lecture 2 hours. Field work 2 hours. Conference 1.5 hours (optional).
Bird, Rogers, Becker, L. Leed
A seminar and clinical rotation in which the students function as members of a multidisciplinary health care team. Students evaluate geriatric patients and formulate comprehensive treatment plans. Seminar topics include functional assessment, home assessment, social responsibilities, and dental management. DENT PUB HLTH

Greene
This course is designed to give structure and guidance to the experience of students with an interest in leadership and governance. DENT PUB HLTH

186. Communication Skills in Dentistry. (1) F. Prerequisite: Junior or senior standing. Seminar 1 hour.
Yes, Bird, and Staff
An interactive seminar course to improve overall communication skills in direct patient care in dentistry. The course will refine students' skills in the behavioral sciences so that they can render more effective dental care to patients by understanding patients' needs and coping with those needs effectively. DENT PUB HLTH

186.30. Dental Private Practice: Career Guidance and Planning. (1) W. Prerequisite: Junior or senior standing. Seminar 1 hour.
Yes, Bird, and Staff
An interactive seminar to help dental students focus on their career goals, have a written plan and action steps to achieve those goals, and to explore career options in private practice, in specialties, and in other fields. Learn to put together an attractive resume, do well on job interviews, and how to start the first practice. DENT PUB HLTH

186.40. Dental Private Practice: Financial Planning and Management. (1) Sp. Prerequisite: Junior or senior standing. Seminar 1 hour.
Yes, Bird, and Staff
An interactive seminar course to introduce effective financial management principles to run a private dental practice. Concepts on debt management, cash flow, break-even analysis, fee setting, budgeting, and staff compensation will be discussed. DENT PUB HLTH

Bird
Advanced concepts of dental practice management utilizing dental practice case studies, computer simulations and practice analysis techniques, and independent study. Orientation to dental practice management systems will be included. DENT PUB HLTH

Gerbert, Wycoff
A seminar course designed to provide an overview of research design, data collection strategies, methods of collecting and interpreting data, and assessment of threats to validity. Hypothesis development, protocol preparation, and grant writing will also be included. DENT PUB HLTH

188.10. Dental Science and Health Education I. (1) F. Prerequisite: 115 or consent of instructor. Restrictions: Limited to 6-10 students. Seminar 1 hour. Research 0-1 hour. Field work 0-3 hours.
Pollick
Review of literature on dental science projects and dental health education for grades 6-8 in the San Francisco Unified School District. Students will develop their own project to assess needs and plan, implement, and evaluate a program to address those needs. In conjunction with the Science and Health Education Partnership between UCSP and San Francisco Unified District middle schools. DENT PUB HLTH

188.20. Dental Science and Health Education II. (1) W. Prerequisite: DPHH 188.10 or consent of instructor. Restrictions: Limited to 6-10 students. Seminar 1 hour. Research 0-1 hour. Field work 0-3 hours.
Pollick

Review of literature on dental science projects and dental health education for grades 6-8 in the San Francisco Unified School District. Students will develop their own projects to assess needs and plan, implement, and evaluate a program to address those needs. In conjunction with the Science and Health Education Partnership between UCSF and San Francisco Unified School District middle schools. DENT PUB HLTH

185.00. Dental Science and Health Education III. (1) Prerequisite: DPHM 185.00 or consent of instructor. Restriction: Limited to 6-10 students. Seminar 1 hour. Research 1-3 hour. Field work 0-3 hours. Pullick Review of literature on dental science projects and dental health education for grades 6-8 in the San Francisco Unified School District. Students will develop their own projects to assess needs and plan, implement, and evaluate a program to address those needs. In conjunction with the Science and Health Education Partnership between UCSF and San Francisco Unified School District middle schools. DENT PUB HLTH

Dental Technics
185. Intro to Basic Dental Technics. (2) SS4. Lab 18 hours for three weeks. Hoskins Technical orientation to the basic technics taught in the first year of dentistry such as morphology, physiology, biochemistry, biomaterials, operative dentistry. RESTOR DENT

Dermatology
First-Year Coordinated Instruction-Medicine
131A-B-C. Lecture-demonstrations and section work devoted to the supervised examination of patients. Core Clerkship-Family and Community Medicine 110 includes lectures and case demonstrations on the examination and diagnosis of dermatological diseases. This includes instruction in physical diagnosis, history-taking, and diagnostic and therapeutic procedures.
140.01. Advanced Dermatology Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor. Odom Activities of students are determined after an initial interview with the instructor. Emphasis is placed on routine outpatient and inpatient care methods, according to individual interest. DERMATOL
140.02. Off-Campus Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor. Wintroth Clinical clerkship in approved hospitals by special arrangement and approval of the dean and chairperson of the department. DERMATOL
140.03. Advanced Dermatology Clerkship-Fresno. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and consent of instructor. Harlin Activities of students are determined after an initial interview with the instructor. Emphasis is placed on routine outpatient and inpatient care and research methods, according to individual interest. DERMATOL
140.04. Inpatient Clinical Dermatology. (1.5 per week) Su, F, W, Sp. Prerequisite: Dermatology 140.01. Odom Four-week block rotation. Students will work with inpatient Dermatology resident and share primary responsibility for inpatient, hospital consultations and outpatient dermatology patients. DERMATOL
150.01. Dermatology Research. (0.5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor. Wintroth A research project under the direction of a member of the faculty. DERMATOL
400. Staff Conference. (2) F, W, Sp. Wintroth and Staff Residents prepare and present case histories of patients at conferences; make reference to appropriate literature, special studies and laboratory work. Conferences include discussions of new developments and research investigation by staff members and faculty from other UC departments and other universities. DERMATOL
401. Dermatopathology. (2) Su, F, W, Sp. Lecture 2 hours. Leboit Lectures and demonstrations of the histopathology of skin diseases with special emphasis on correlation with clinical findings. Activities include study of microscopic sections and discussion of material presented. DERMATOL
402. Dermatological Literature. (1) F, W, Sp. Seminar 1 hour. Malbisch and Staff Seminar covers recent literature in dermatology. Included is assigned reading with required reports which are evaluated by members of the faculty. DERMATOL
403. Specialty Seminar. (2) F, W, Sp. Seminar 2 hours. Wintroth and Staff Seminar includes discussions, required reading, and reports on dermatology and related basic sciences such as embryology, myology, histopathology, and paraneurology in relation to dermatologic conditions, and oncology as it relates to the skin. DERMATOL
404. Clinical Evaluation. (1) F, W, Sp. Seminar 1 hour. Wintroth and Staff Seminar involves the evaluation of recent clinical cases of special interest. Cases are presented by the faculty and resident staff. DERMATOL
485. Research. (3) Su, F, W, Sp. Lab 9 hours. Wintroth Instruction in the conduct of research projects dealing with electron microscopy, biology, biochemistry, and immunology of the skin under normal and pathological conditions. DERMATOL
486. Related Science Seminar. (10) Su, F, W, Sp. Seminar 1 hour. Wintroth and Staff In-depth discussion of the sciences basic to an understanding of the function and dysfunction of skin, including anatomy, physiology, microbiology, pharmacology, biochemistry, genetics, and pathology. Over a three-year period, course covers all aspects of basic sciences relevant to dermatology. DERMATOL
487. Cutaneous Microbiology. (2) Su, F, W, Sp. Prerequisite: Consent of instructor. Lecture 2 hours. Aly Course is designed to familiarize dermatology residents with the techniques of isolation and identification of dermatophytes, skin bacteria, and viruses. Occasional lecture on specialized topics are given. DERMATOL
490. Clinical Care Clerkship. (10) Su, F, W, Sp. Wintroth and Staff Residents, under supervision, are responsible for patient care in the wards and outpatient clinic. Duties include history-taking, physical examinations, and consultations. In addition, the senior resident has certain administrative, teaching, and clinical responsibilities. DERMATOL
451. Clinical Care Clerkship. (1.5 per week) Su, F, W, Sp. Wintroth Residents, under supervision, are responsible for patient care in the wards and outpatient clinic. Duties include history-taking, physical examinations, and consultation. In addition, the senior resident has certain administrative, teaching, and clinical responsibilities. DERMATOL
545. General Endocrinology. (5) F Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours. Seminar 1 hour. Dallman, Conning Laboratory and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. PHYSIOLOGY
546. General Endocrinology. (5) F Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours. Seminar 1 hour. Dallman, Conning Laboratory and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. PHYSIOLOGY
202. Mechanisms of Hormone Action. (3) Prerequisite: Physiology 101 and/or Human Biology 200-A, B. Lecture 2 hours plus independent study. Nissenson, Bourne Course covers classical and current literature concerning known and speculative mechanisms of hormone action. Major topics are: G proteins, adenylate cyclase, Ca2+ as a second messenger, oncogenes, growth factors, and steroid hormone action. PHYSIOLOGY
250. General Endocrinology. (5) F Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours. Seminar 1 hour. Dallman, Conning Laboratory and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. PHYSIOLOGY
210. Clinical Endocrinology Seminar. (1) F, W, Sp. Shoback Clinical and basic seminar in endocrinology presented in a format which provides both lecture and discussion. Emphasis is placed on clinical applications of research at the frontier of modern endocrinology. PHYSIOLOGY
Epidemiology

Courses in Biostatistics and Anthropology, which are also offered through the Department of Epidemiology.

100. Medical Parasitology. (2) Prerequisite: Microbiology 100 (without parasitology) or equivalent, or concurrent enrollment. Lecture 2 hours. Heymann.

An introduction to protozoa and helminthes and human diseases they produce. Parasite epidemiology and life cycles, diagnosis, clinical aspects, treatment, and control are considered in lectures, films, and Kadochore slides. Laboratory demonstrations keyed to lectures are displayed throughout the week. EPID & BIOSTAT

101. Fundamentals of Epidemiology. (3) Prerequisites: MiiW, W. Prerequisite: Consent of instructor. Petakis

Survey and discussion of major papers in the epidemiology of major cancer sites. Emphasis is on etiologic and methodologic aspects and implications for prevention. EPID & BIOSTAT

105. Intro to International Health. (2) Lecture 2 hours. Heymann.

106. Leprosy Laboratory Project. (1-3) Prerequisite: Consent of instructor. Gehle.

A laboratory research problem of leprosy under the guidance of a member of the staff of the Leprosy Research Unit at Seton Medical Center. The unit's major research areas are the pharmacology, immunology, and chemotherapeutics of leprosy in animals and man. EPID & BIOSTAT

107. International Health Policy. (2) Lea.

108. Occupational Epidemiology. (1-2) Prerequisite: Environmental Epidemiology 101 or 190. Seminar 1 hour. Prerequisite: Consent of instructor. Mustachi.

109. Medicine in Developing Countries. (1.5 per week) Prerequisite: Epidemiology 100 or consent of instructor. Kardassis.

110. Tropical Medicine Lectures. (1.5 per week) Prerequisite: Consent of instructor. Goldsmith.
Clinical epidemiology, health services, or behavioral sciences. Course approaches are applied to the study of selected areas in family medicine or community health. FAM CM MED

160.91. Community Medicine Field Work. (1.5- 3.0) S, F, W. Prerequisite: Medical student standing. Consent of instructor. Field work 4-8 hours. Barbecue. Non-block assignments to community health agencies where students have patient contact. Students choose agency and type of work assignment. FAM CM MED

160.92. Family Practice Continuity. (2) S, F, W. Prerequisite: Consent of instructor. Course must be taken for one full academic year.

160.93. Family Practice Continuity. (1.5-3) Su, F, W. Prerequisite: Medical student standing. Consent of instructor. Field work 4-12 hours. S. Lane Non-block assignment with a family physician in a private office or community clinic for a minimum of four hours a week. Pre-clinical students observe their preceptor’s practice to gain an introduction to family care. FAM CM MED

160.94A-B. Sports Medicine. (2-2) F. Open only to students in School of Medicine or graduate students in School of Nursing. Lecture 2 hours, optional 4 hours clinic. Runner Athletic medicine ranging from youth athletics to senior participation. Emphasizes evaluation and prevention of injury and conditioning, and rehabilitation directed at the community. Course consists of lectures and optional field work. FAM CM MED

160.94B. Advanced Sports Medicine. (2) W. Prerequisite: Family and Community Medicine. 160.94A. Medical students only. Lecture 2 hours. Lab optional 1 hour. Runner Diet, treatment, and rehabilitation of specific athletic injuries organized by anatomical areas, basically on-the-job training. Emphasis on non-surgical treatment per European and American techniques using community resources and joint surgical referral when necessary. FAM CM MED

160.95. Mission Community Health Elective. (1-3) Su, F, W. Prerequisite: Consent of instructor. Lab 2-6 hours. Field work 2-8 hours. D. Sanchez, D. Fink. Explores health care attitudes, health problems and health care resources in the multi-ethnic Mission District of San Francisco. Students receive clinical assignments in core or more community health and social service agencies. Field experience is analyzed in seminars and tutorials. FAM CM MED

160.07. Family Health Care & (2) F. Seminar 2 hours.

160.70. Community Medicine in International Perspectives. (1.5 per week) SS1, SS2, Su, F, W, Sp. Prerequisite: Consent of instructor. Brawerman, Londe, Goldsmith, Petrini. An elective involving placement at a supervised primary care training and/or service site abroad. Placement will be made according to student interest and language capability as well as availability of appropriately supervised sites. FAM CM MED

170.01A-B-C. Special Issues in Health Care. (0.- 3) A, B, and C are offered in all of the following quarters: Su, F, W, Sp. Prerequisite: Consent of instructor. Lecture and reading 1-3 hours. Rodnick and Staff. Explores in systematic (lecture/readings/discussion) format new issues in health care or special content areas related to family and community health. Topics are developed and prepared according to faculty student interest. FAM CM MED

170.02. Elderly Community Programs. (2) W. Lecture 1 hour. Conference 2 hours. Enrollment limited. Barbacina, Robinson, Weiss. This course offers the student a survey of the aged in San Francisco. Lectures cover the socio-demographic, cultural, and health status factors of the city's aged. On-site conferences are held at representative programs and facilities serving the aged. FAM CM MED

170.03. Developmental Disabilities. (2-5) Su, F, W. Prerequisite: Consent of instructor. Field work 4-8 hours. L. Cramer. Resource overview with reading assignments correlated with field observations of the spectrum of community and institutional services, including comprehen- sive diagnostic, therapeutic, and counseling services for children and adults with developmental disabilities. FAM CM MED

170.04. Rehabilitation in Primary Care. (1) Su, F, W. Prerequisite: Consent of instructor. Seminar 2 hours. Byl, Berrol. Course explores medical and other health science aspects of the principles of rehabilitation and common therapeutic strategies. Emphasis will be on the development of a basic theoretical foundation on which the student can build clinical rehabilitation skills in practice. FAM CM MED
Multi-component rotation including seminars, patient group presentations, specialty grand rounds and comprehensive patient care. Supervised clinic and seminar experience in community setting. Students develop and explore their roles as members of the health care team and learn to meet community needs.

**DENT PUB HUTH**

**Genetics**

**200A. Principles of Genetics.** (3) F. Lecture 3 hours. Kornberg, Herskowitz

In-depth analysis of genetic mechanisms in selected procaryotes, eucaryotes. Topics include genetic exchange (conjugation, generalized and specialized transduction, transformation), recombination (general, site-specific, " illegitimate"), mapping, mutagenesis (induction and consequences), mobile genetic elements, gene expression, meiotic and mitotic segregation, allelic position effects. BIOCHEM

**215. Laboratory Rotation.** (3) F, W, Sp. Lab 9 hours. Guthrie

A laboratory rotation course to familiarize first-year students with various approaches to research. Students are required to rotate through three different laboratories in at least two subject areas, and give an open seminar at the end of each quarter. BIOCHEM

**220. Current Topics.** (0.5) F, W, Sp. Prerequisite: Consent of graduate adviser in genetics. Seminar. Herskowitz and Staehly

Students will lead a discussion on a topic of special interest in genetics. A different faculty member will act as adviser each week. This is a required course each quarter for first- and second-year students in genetics. BIOCHEM

**224. Advanced Human Genetics.** (1.5) 5 hours. Offered in alternate years. Offered 1991-92. Epstein, Kan, Cox, Gittleson, Packman, Wolfe

Course covers topics in current human genetics research, including molecular approaches to the mapping of human chromosomes, molecular analysis of mutant human genes, use of restriction fragment length polymorphisms for linkage analysis and diagnosis, effects of chromosome imbalance, gene therapy, and environmental mutagenesis. BIOCHEM

**250. Research.** (1-8) 5 hours. Wolfe, Sp. Staff

BIOCHEM

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**General Dentistry**

**109.01. Community Dentistry Rotation.** (9-9) F, W, Sp. Prerequisite: Consent of instructor. Lecture 2 hours. Scardino

The course focuses on instructional techniques and strategies useful for the beginning instructor. Emphasis is placed on teaching proficiency students in the School of Pharmacy. Open to graduate students, residents and new faculty. PHARMACY
History of Health Sciences

150. History of Pharmacy, (2 or 3) F. Lecture 2 hours. Term paper (optional) for 3 units.

Sader

Emphasis is on the historical development of pharmacy, its relation to other health professions, and the personalities who significantly contributed to the advancement of health care. HIST HL SC

150.01. Issues in American Medical Practice, (3) F. W. Sy: Prerequisite: Third- or fourth-year standing and consent of instructor. Seminar 3 hours. Research project required.

Risse

Two-week non-clinical block devoted to reading, library research, discussion and presentations on the historical development of topics considered central to the practice of medicine: character of scientific medicine, role of technology, medical ethics and malpractice, corporate medicine, and the physician-patient relationship. HIST HL SC

170.01. Historical Perspectives in Medicine, (3-3) F. Sy: Lecture 1 hour. Optional seminar, conference, or independent study 1-2 hours.

Staff

Course intends to develop a sense of historical perspective and the ability to assess present issues in the light of past experience. Readings and visual aids will focus on the scientific and social aspects of the health sciences. HIST HL SC

198. Supervised Study, (1-5) F, W. Sy: Prerequisite: Consent of instructor.

Staff

Research and/or directed reading under supervision of a faculty member with approval of the department chairperson. HIST HL SC

200A. Introduction to Medical History, (2-4) F. Sy: Prerequisite: Consent of instructor. Lecture 2 hours. Seminar 1 hour (optional). Term paper (optional).

Risse

General survey chronologically arranged from prehistoric to the Renaissance. This course examines the changing burdens of disease across cultural and geographic boundaries and presents broad conceptual developments that in each period influenced the evolution of medical knowledge and professional activities. HIST HL SC

200B. Introduction to Medical History, (2-4) F. W. Sy: Prerequisite: Consent of instructor. Lecture 2 hours. Seminar 1 hour (optional). Term paper (optional).

Risse

Continuation of the general survey from the Renaissance to the emergence of modern medicine. HIST HL SC

200C. Introduction to Medical History, (2-4) F. Sy: Prerequisite: Consent of instructor. Lecture 2 hours. Seminar 1 hour (optional). Term paper (optional).

Risse

Continuation of the general survey from the nineteenth century to the present, examining in detail the emergence of medical science, germ theory, medical technology, and twentieth-century therapeutic agents. HIST HL SC

201A. Health and Plagues: Ecology and History, (2-4) F. W. Sy: Prerequisite: Consent of instructor. Lecture 2 hours. Seminar 1 hour. Term paper (optional).

Risse

General overview of health conditions across cultural and geographic boundaries from prehistory to the present, including leprosy and the Black Death. The focus will be on factors, both biological and social, responsible for the shifting ecology of disease. HIST HL SC

201B. Health and Plagues: Ecology and History, (2-4) F. W. Sy: Prerequisite: Consent of instructor. Lecture 2 hours. Seminar 1 hour. Term paper (optional).

Pressman

Continuation of the general overview of health conditions in prominent past societies from the Renaissance to the Industrial Revolution, with emphasis on topics such as the appearance of epidemics, the transmission of epidemic disease to America, and the decline of plague. HIST HL SC

201C. Health and Plagues: Ecology and History, (2-4) F. Sy: Prerequisite: Consent of instructor. Lecture 2 hours. Seminar 1 hour. Term paper (optional).

Risse

Last segment of the general overview of health conditions in prominent past societies from the mid-nineteenth century to the present with emphasis on the effects of industrialization on urban health, and the epidemiological transitions from acute infections to chronic degenerative diseases. HIST HL SC

204A. Historical Research I., (2-4) F. Sy: Prerequisite: Consent of instructor. Seminar 2 hours. Optional term paper & reports.

Pressman, Risse

Introduction to medical historiography. Discussion of the different approaches employed in writing and interpreting history. HIST HL SC

204B. Historical Research II., (2-4) F. W. Sy: Prerequisite: Consent of instructor. Seminar 2 hours. Optional term paper & reports.

Pressman

Introduction to research in medical history. Survey of bibliographical tools available to historians. Visit to archives and libraries in the Bay Area. Interviewing skills and preparatory research for oral history. HIST HL SC

204C. Historical Research III., (2-4) F. Sy: Prerequisite: Consent of instructor. Seminar 2 hours. Optional research paper.

Pressman

Introduction to the craft of interpreting and writing medical history. Directed and assisted research and writing of historical topics. HIST HL SC

206. History of Psychiatry, (2-4) F. Sy: Prerequisite: Consent of instructor. Lecture 2 hours. Seminar 1 hour

Pressman

Evolution of conceptions of madness and treatment of the mentally ill, from the Renaissance to present. These developments are explored through a focus on cultural and social contexts. Particular attention is paid to the development of the insane asylum. HIST HL SC

210. Topics in the History of Nursing, (2-3) F. Sy: Prerequisite: Consent of instructor. Seminar 2 hours. Term paper (optional).

Flood

Selected topics in nursing history since the time of Florence Nightingale examined within the context of professional education, women's roles, and health care. HIST HL SC

211A. History of Hospitals I., (2-4) F. W. Sy: Prerequisite: Consent of instructor. Lecture 2 hours. Seminar 1 hour

Risse, Pressman

Analysis of institutional developments from pre-Church times, Christian hospitality and segregation schemes, to the secularization and medicalization of the hospital during the Enlightenment. HIST HL SC

211B. History of Hospitals II., (2-4) F. Sy: Prerequisite: Consent of instructor. Lecture 2 hours. Seminar 1 hour

Risse

Course begins with the early Industrial Revolution and emphasizes the modern technologically intensive institutions that dominate contemporary medicine. HIST HL SC

213. Topics in American Medicine, (2-4) F. Sy: Prerequisite: Consent of instructor. Lecture 2 hours. Seminar 1 hour

Pressman, Risse

The rise of the American health care system and the broadening cultural authority of the medical expert are examined historically. Topics include medical education, nursing, the Progressive movement, intelligence testing, pharmaceuticals, and the role of government. HIST HL SC


Risse

Clinical developments in Europe and America with emphasis on diagnostic and therapeutic procedures. The course examines both patients and professionals within the scientific, behavioral, and social contexts of medical practice. HIST HL SC

220. Selected Topics, (2-3) F, W, or Sp. Sy: Prerequisite: Consent of instructor. Lecture 1 hour. Seminar 1 hour. Term paper (optional).

Staff

Seminar allowing individual staff or guest lecturers to present selected topics in the history of the health sciences based on their current research and publications. HIST HL SC

250. Research, (1-8) F, W. Sy: Prerequisite: Consent of instructor. Seminar 1-4 hours.

Staff

Supervised independent research, including presentations and critiques of research sources, methods, and papers. HIST HL SC

252. Women, Health, & Healing, (2-4) F. W. Sy: Prerequisite: Consent of instructor. Lecture 2 hours. Seminar 1 hour (optional). Term paper (optional).

Clarke

Historical perspectives on women's health status as patients, providers, and reformers with a focus on nineteenth- and early twentieth-century developments in the US and Great Britain. HIST HL SC

279. Special Study, (1-4) F, W. Sy: Prerequisite: Consent of instructor. Seminar 1-4 hour. Term paper/independent study (optional).

Staff

Supervised independent study intended to provide directed reading in subject matter not covered in scheduled seminar offerings. HIST HL SC

298. Thesis, (0) F, W. Sy: Prerequisite: Advancement to candidacy and permission of the graduate adviser.

Staff

For graduate students engaged in writing the thesis for the master's degree. HIST HL SC

299. Dissertation, (0) F, W. Sy: Prerequisite: Advancement to candidacy and permission of the graduate adviser.

Staff

For graduate students engaged in writing the dissertation for the Ph.D. degree. HIST HL SC
Human Development & Aging

200. Off-Campus Study. (0) F, W, Sp. Prerequisite: Approval of graduate advisor.

Staff
Full-time graduate study in the Human Development and Aging program through the intercampus exchange consortium program. PSYCHIATRY

201A-B-C. Fundamental Theories & Methods. (1-4) F, W, Sp. Prerequisite: Consent of instructor. Seminar 4 hours.

Staff
Psychological and sociological theories and methods in the study of the human life cycle. Topics include models of development, life cycle, social stratification, age stratification, intergenerational issues, cognition, historical and demographic perspectives, personality, stress, transitions, age-comparative coping, and psychopathology. PSYCHIATRY


Staff
Three-quarter course covers major methods and techniques of life course/life span research including surveys, field observations, analysis of qualitative and quantitative data, and longitudinal research. PSYCHIATRY

204. Personal Development. (2) F, W, Sp. Prerequisite: Consent of instructor. Lecture 2 hours.

Kierke
Representative works from behavioral science literature and world poetry and prose are brought together in the study of personality development in adult life. Comparisons are drawn from the two fields on the development of men and women, social, historical, and psychological challenges. PSYCHIATRY

205. Data Analysis. (3) F, W, Sp. Prerequisite: Consent of instructor. Lecture 3 hours.

Mullan
Students either provide their own or use accessible data from ongoing research projects. Emphasis is on training in data organization, analysis, and research report writing. PSYCHIATRY

207. Methods of Survey Research. (3) F, W. Prerequisite: Consent of instructor. Lecture 3 hours, plus field work.

Pearlin
Course covers the major tasks of survey research. Topics such as conceptual specification, the development of indicators and measures, the construction of questionnaires, sampling, field testing, interviewing, and analysis are covered. PSYCHIATRY

214. Adv Personal Development. (2-3) F, Sp. Prerequisite: Human Dev 204, or consent of instructor. Seminar 2 hours, optional extra unit.

Kierke
The prerequisite, Human Dev 204, combines study of mainstream theories of adult personality development with literary works as case material. This course, Hum Dev 214, proceeds to the study of alternative modes of the younger known Western and Asian traditions: C. G. Jung, William James, Hindu, Buddhist, Taoist, and Judeo-Christian spiritualism writings — and literary examples based on these. PSYCHIATRY

220. Pro-Seminar. (1) F, W, Sp. Prerequisite: Consent of instructor. Lecture 2 hours, given in alternate weeks.

Staff
Students, staff, or guest lecturers present selected topics based on current research. PSYCHIATRY

230. Research Project Seminar. (6) F, W, Sp. Prerequisite: Graduate standing in Human Development and Aging Program, or consent of instructor. Seminar 4 hours. Six hours additional research work.

Staff
Students are required to conduct individual research projects. Seminar is organized around methodological issues including reliability, validity and development of scales and measures, and specific problems related to formulation of goals of the studies and collection and analysis of data. PSYCHIATRY

249. Special Studies. (2-8) F, W, Sp. Prerequisite: Consent of instructor.

Staff
Students select special problems to investigate on an individual or collaborative basis. These studies may be conducted through readings, the collection and analysis of empirical data, or the development of conceptual analysis or methodologies. PSYCHIATRY


PSYCHIATRY

299. Dissertation. (0) F, W, Sp. Prerequisite: Advanced to candidacy and permission of the graduate advisor.

Staff
For graduate students engaged in writing the dissertation for the Ph.D. degree. PSYCHIATRY

Human Sexuality


R. Day
Social, behavioral, and clinical aspects of human sexuality are covered in a series of lectures. Lectures will present didactic material. PHARMACY

Interdepartmental Studies


Colby, Wissig, Michaei
Course covers the basic principles of molecular and cell biology, as well as the microscopic organization of cells, tissues, and organs with emphasis on relationships of structure and function. The histology of endocrine and reproductive systems is covered in a separate course. ANATOMY & BIOCHEM

110. Core Clerkship in Surg Specialties. (1.5 per week) Su, W, F, Sp. Prerequisite: Third-year standing.

A four-week required clerkship in the surgery specialties including Orthopedic Surgery, Orthopaedic Surgery, Otolaryngology, and Urology. The curriculum will consist of lectures, seminars, physical diagnosis, outpatient clinical activities and, to a limited degree, procedure and surgical experience in both ambulatory and operating rooms. OTOLARYNGOL., OPHTHALMO., ORTHOSURG., UROLOGY


Jacobs
Course is designed to trace the biological mechanisms concerned with conception, development of the fertilized ovum through embryonic and fetal life, and postnatally to the mature individual. OB GYN R S

191. Introductory Cell Biology. (3) F. Lecture 6 hours, lab 4 hours, conference 1 hour. 4-week course.

D. Colby, S. Wissig
Course covers the basic principles of cell biology and introduces the biology of eukaryotic cells, nuclear and cell biology, and connective tissue. Intended for beginning graduate students. ANATOMY & BIOCHEM

192. Introductory Molecular Biology. (2) F, Sp. Prerequisite: Interdepartmental Studies 191. Lecture 3 hours, conference 1 hour. 7-week course.

D. Colby, S. Wissig
Course covers the basic principles of molecular biology with emphasis on their application to control of gene expression in humans. ANATOMY & BIOCHEM

193. Organ Systems Histology. (4) F, Sp. Prerequisite: Interdepartmental Studies 191. Lecture 3 hours, lab 4 hours, independent study 4 hours. 7-week course.

S. Wissig
Course covers the light and electron microscopic structure of organs with emphasis on the relationship of structure to function. The histology of endocrine and reproductive systems is presented in a separate course. PHYSIOLOGOL. ANATOMY & BIOCHEM

Laboratory Medicine

140.01. Clinical Pathology. (1.5 per week) Su, F, W, Sp. Prerequisite: One year of medical school and consent of instructor.

Gottfried
Laboratory sessions and seminars on aspects of clinical chemistry, hematology, microbiology, blood banking, and radioisotopes are held in the clinical laboratories at UC and SPGH. LAB MED

140.05. Clinical Pathology—VAMC. (1.5 per week) F, W, Sp. Prerequisite: Medicine 110 and consent of instructor.

M. Fisher, Sohens
Clerkship in laboratory medicine including indications for tests, problems of collection and performance, interpretation of data to assist clinicians in rendering diagnoses and following therapy. Topics include clinical chemistry, hematology, immunology and serology, blood banking, microbiology, mycology, parasitology. LAB MED

140.06. Laboratory Medicine in Fresno. (1.5 per week) Su, W, F. Prerequisite: Medicine 110.

Boland, L. Mans
Utilization of different laboratory settings, organizations, and approaches by pathologists in hospitals throughout the Fresno community. Included is coverage of traditional areas of clinical pathologist in addition to such specialized areas as cytogenetics and therapeutic drug monitoring. LAB MED

140.07. Laboratory Medicine Hematology. (1.5 per week) SS, SU, W, Sp. Third- or fourth-year medical students.

Engman, Corash, Roth, Levin, Gottfried
Active participation in all aspects of a UCSF hematology laboratory including coagulation cases, daily rounds of cardiovascular surgery patients, attendance at hematology conferences, and daily bone marrow signouts. One-on-one teaching of blood and marrow morphology. Experience at Moffitt Long, VAMC, and SPGH. LAB MED

140.08. Laboratory Medicine Microbiology. (1.5 per week) Su, W, F, Sp. Third- or fourth-year medical students.

Hadley, Pflum, Brooks
Course provides practical microbiology laboratory instruction correlated with clinical infectious disease rounds. The student will observe laboratory diagnosis of viral, bacterial, fungal, and parasitic infections. The goal is a better understanding of how to use the laboratory for infectious diseases diagnosis. The practical course may be taken at VAMC, SPGH, or UC (four weeks per site). LAB MED


Pebblec
Basic laboratory course in nuclear medicine. Clinical participation in the diagnosis of patients receiving radionuclides in the outpatient clinic and in the wards. LAB MED


G. Brooks
Course covers biological and clinical aspects of the syndromes and agents of sexually transmitted diseases, including herpes, chlamydia, gonorrhea, syphilis, etc.
Laboratory Medicine/Medicine

vaginitis, AIDS, and others. This is an elective course offered to medical students. LAB MED

160.03. Diagnostic Workup of Clinical Problems. (1) F. Sp. Prerequisite: Second-year standing. Lecture 1 hour.

Nicol, Woll, Tierney

Students learn to make appropriate use of laboratory and radiologic testing in the evaluation of clinical problems. LAB MED

170.01. Clinical Pathology--SGFH. (2) § Su, F. W., Sp. Gottfried

Laboratory sessions and seminars on aspects of clinical chemistry, hematology, microbiology, blood banking, and radiometrics are held in the clinical laboratories of SGFH. LAB MED

452. Cytometry & Cell Analysis. (3) W. Lecture 3 hours.

Mayall, Fulwyler

Course introduces the theory and techniques of image cytometry, flow cytometry, and flow sorting, and surveys the research and clinical applications of these powerful techniques for the analysis of individual cells. LAB MED

Medicine

110. Medicine Core Clerkship--UC-SGFH-VAMC-MZ-VAF/VMMC. (1.5 per week) Su1, Su2, Su3, Su, F. W., Sp. Prerequisite: Medicine 151A-A-B-C and 132A-B-C. Open to UCSF students only. UC Papadakis, SGF Haller, VA Tierney, MZ Woehler, VAF/Freeman

Students are part of the ward team with the housestaff and faculty. Bedside patient care in history-taking, physical examination, diagnosis, selected seminars in general medicine, including the psychiatric aspects of medicine, and presentation of demonstrative cases.

MEDICINE

111. Mechanisms of Disease. (1.5 per week) Sp. Prerequisite: Fourth-year standing in medical school.

Kane

An in-depth study of the mechanisms involved in serious disease processes. Emphasis on acquisition of basic science information by physicians and on the logical development of nosology and planning of intervention based on principles drawn from basic science. MEDICINE

112. Responsibilities of Med Prac. (1.5 per week) Su, Sp. Prerequisite: Medicine 110 and Surgery 110. Restriction: All fourth-year students in School of Medicine for May session; all third-year students in School of Medicine for June session.

Le

Course will discuss the ethical, legal, and policy issues in the clinical practice of medicine. Students are required to attend an active case that presented ethical dilemmas.

MEDICINE


M. Cook

Interdepartmental instruction in interviewing skills and techniques; basic physical examination and interpretation of symptoms relating to locomotor system, eye, ear, upper respiratory tract, and skin; and social responsibilities of medical practice. Lectures, clinical demonstrations, conferences, preceptorship in ambulatory care setting. MEDICINE

132A-B-C. Intro to Clinical Medicine. (7-6-6) F, W, Sp. Prerequisite: Anatomy 100, 203; Biochemistry 100A-B. Interdepartmental Study 100, Medicine 131A-B-C. Microbiology 100A-B (may be taken concurrently); Pathology 101, 102 (may be taken concurrently); Physiology 100, 101; consent of instructor.

M. Cooke

Continuation of interdepartmental course in pathophysiology of disease and techniques of collecting and assessing clinical data, including history-taking, examination of the patient, and use of laboratory tests. Lectures, demonstrations, bedside work, laboratory conferences, and independent study. MEDICINE

140.01. Acting Internship--UC-VAMC-VAF/VMMC-SGFH. (1.5 per week) Su, F. W. Prerequisite: Completion of Medicine 110. UC Papadakis, VA Tierney, MZ Woehler, VAF/Freeman

Students are assigned patients for study on the staff and private wards. They are supervised by attending and resident staff. They present patients on ward rounds, assist with procedures, and attend specialty conferences where their patients are discussed.

MEDICINE

140.02. Off-Campus Clerkship. (1.5 per week) Su, F. W. Prerequisite: Medicine 110 and approval of third- and fourth-year coordinator.

Papadakis

Clinical clerkships in off-campus hospitals approved by the department chairman, third- and fourth-year coordinator and the dean. MEDICINE

140.03. Acting Interns, CRU-UHC. (1.5 per week) Su, F. W. Prerequisite: Medicine 110.

Shuman and Staff

Students function as interns supervised by a fellow and resident on the Clinical Cancer Service working up patients with hematologic and solid tumor malignancies. In addition, students attend conferences, perform daily procedures, and write orders under supervision.

MEDICINE

140.04. Infectious Diseases--VA. (1.5 per week) Su, F. W. Prerequisite: Completion of Medicine 110 and Surgery 110.

Jensen, Tagar

Clinical electve with inpatient and outpatient infectious diseases at VAMC. Commonly encountered general 3D problems of hospitalized patients, and comprehensive patient management of HIV disease are stressed. Introduction to clinical microbiology and hospital epidemiology are included. MEDICINE

140.05. Cardiology--PMC. (2.5 per week) Su, F. W. Prerequisite: Medicine 110 or consent of instructor.

Cohn

Students participate in various clinical cardiological activities and attend related teaching conferences and patient rounds. They are instructed in electrocardiographic interpretation and participate in daily ECG teaching sessions. MEDICINE

140.06. Cardiology--PMC. (2.5 per week) Su, F. W. Prerequisite: Medicine 110.

Davisdor

Students on the Cardiology Ward team comprised of PMC housestaff and cardiology attendings will participate in all activities of the team including CICU rounds and EKG reading sessions. Students may elect to attend actual cardiac catheterizations and angiographic procedures and consultations. MEDICINE

140.07. Oncology--SGFH. (1.5 per week) F, W. Prerequisite: Medicine 110.

Volberding

Students will evaluate patients with malignant diseases under the supervision of oncology fellows and attending physicians. Students will see oncology patients in outpatient clinic and on the inpatient consultation service. In addition to a broad exposure to a wide range of malignant disorders, the student will be allowed to participate in the outpatient evaluation of patients with AIDS and Kaposi’s sarcoma. MEDICINE

140.08. Gastroenterology--UC. (1.5 per week) Su, F. W. Prerequisite: Medicine 110.

Ockner

Students, along with a second-year fellow, two first-year fellows, a medical resident and attending, serve as a member of the gastrointestinal clinical service. Attend all conferences, participate in patient management in both clinic and wards. MEDICINE

140.09. Cardiology--MZ. (1.5 per week) Su, F. W. Prerequisite: Medicine 110 and 140.01 or equivalent senior ward medicine experience. Consent of instructor.

Mallhorn, E. Cohen, Paley

Students work up patients, follow through diagnostic procedures, photoradiocardiograms, echocardiograms, stress electrocardiograms, nuclear cardiology, and angiographic studies. Instruction in diagnosis of heart disease, pathophysiology of heart disease, heart sounds and rhythm. Attendance at departmental conferences. Reading assigned. MEDICINE

140.10. Pulmonary Medicine--MZ. (1.5 per week) Su, F. W. Prerequisite: Medicine 110 and 140.01 or equivalent senior ward medicine experience. Consent of instructor.

Addison

Consultative service including diagnostic pulmonary problems, Intensive Care Unit consultations. Fiberoptic bronchoscopy and physiologic evaluation. Students will work up patients and follow them on a daily basis, discussing all aspects of their care with attending physicians. MEDICINE

140.11. Hematology/Oncology--C. (1.5 per week) Su, F. W. Prerequisite: Medicine 110.

R. Cohen

Students evaluate and manage patients with blood coagulation and its disorders, hemodynamic, and solid tumor malignancies. Learn care of bone marrow aspiration and biopsy, and the morphological interpretation of these specimens. Attend boards, rounds, and conferences. MEDICINE

140.12. Geriatrics--VA. (1.5 per week) Su, F. W. Prerequisite: Medicine 110.

Lenergan

Serving on the Geriatric Evaluation Unit team, students will have supervised patient contact covering biology of aging, changes in organ function and manifestation of disease in the elderly. pharmacokinetics of aged patients, psychosocial and rehabilitative aspects of care of the elderly. MEDICINE

140.13. Care of the Patient with AIDS at SGFH. (1.5 per week) Su, F. W. Prerequisite: Completion of core clinical clerkship. Fourth-year standing. Goosby, Clement, Kaplan

Supervised by the attending physician, students will participate in the management of both inpatients and outpatients with HIV-related disease on the AIDS consult service 1-2 days per week in the AIDS clinic. Participation in educational conferences is encouraged. MEDICINE

140.14. Sexually Transmitted Diseases. (1.5 per week) Su, F. W. Prerequisite: Third-year standing. Lab: 40 hours per week.

Bolan

Third- and fourth-year medical students will be trained in the diagnosis, treatment, and management of sexually transmitted diseases in the clinical setting.

MEDICINE

140.15. Longitudinal Clinical Pilot Program--MZ. (3) Su, F. W. Prerequisite: Medicine 140.01 (or currently enrolled in Medicine 140.01) or SGFH or Mt. Zion, or any senior clerkship that would enable the student to pick up patients to be followed in clinic.

Papadakis

Working in clinic one-half day a week over six to nine months, students will follow patients picked up in senior clerkships such as Medicine 140.01. Approximately 15 positions are available: SGFH, Mt. Zion, and Long-Term Home Care Clinic at SGF. MEDICINE

140.16. Hematology-SGFH. (1.5 per week) Su, F. W. Prerequisite: Medicine 110 or consent of instructor.

Embry

Students work under supervision of fellows and faculty; review relevant clinical laboratory data; interpret bone marrow slides; see hematology patients in the outpatient clinic and the inpatient consultation service.
140.219. Pathophysiology-Therapeutics. (6) W. W. Prerequisite: Medicine 110 and Podiatry 100 for Surgery 110. Minimum class size 15; maximum class size 40.

Sebastian, Benowitz
Emphasis on applied pathophysiology and clinical therapeutics. Case-oriented workshops presenting the principles of therapeutics with application to specific therapy of common cardiovascular, respiratory, gastrointestinal and infectious diseases as well as diabetes. MEDICINE

140.220. Pathophysiology-Endocrine Metabolism. (6) W. W. Prerequisite: Medicine 110, Podiatry 110 or Surgery 110.

Sebastian, Karpf
Over-all emphasis on processes of disease in endocrine and metabolic systems. Lectures present history and etiology of common endocrine and metabolic diseases. Reading list. MEDICINE

140.221. Pathophysiology-Cardiovascular. (8) F. W. Prerequisite: Medicine 110, Podiatry 110 or Surgery 110. Maximum class size 12; maximum class size 20.

Sebastian, Dohrmann
Overall emphasis on processes of disease in cardiovascular systems. Functions of blood and blood vessels. Anaerobic and aerobic metabolism. Lectures cover cardiovascular material and general concepts. Subjects participate in discussions, are assigned topics for presentation, and are encouraged to develop ability to evaluate literature critically. Reading list. MEDICINE

140.222. Pathophysiology-Renal Disease. (6) F. W. Prerequisite: Medicine 110, Podiatry 110 or Surgery 110. Enrollment limited.

Sebastian, Ives
Overall emphasis on processes of disease in renal systems demonstrating fundamental biochemical or physiological defects. Lectures cover background material and general concepts. Subjects participate in discussions, are assigned topics for presentation, and are encouraged to develop ability to evaluate literature critically. Reading list. MEDICINE

100

140.230. Critical Care - MZ. (1.5 per week) Su, F. W. Prerequisite: Medicine 110 and fourth-year standing.

Wooster
Primary emphasis is on the management of critically ill patients in Coroner's Courtyard and Intensive Care Unit. Includes teaching in the care of monitoring equipment, cardiovascular, and related aspects of critical care medicine. MEDICINE

140.270. Cardiopulmonary-C. (1.5 per week) Su, F. W. Prerequisite: Medicine 110. Post

Students will attend rounds in the coronary care unit and receive instruction in cardiology, electrocardiography, and their applications. Students may work in the pulmonary function laboratory and attend all teaching conferences each week. MEDICINE

140.280. Infectious Disease-SFGH. (1.5 per week) Su, F. W. Prerequisite: Medicine 110. J. Miller

Course includes active consultation service averaging three new consults per day. Daily patient rounds; weekly combined infectious disease/pediatrics mini-rounds and infectious diseases interest group rounds. Two half-day infectious diseases clinics per week. Reading and library research. MEDICINE

140.290. Hematology-UC. (1.5 per week) Su, F. W. Prerequisite: Medicine 110. Shuman

Students evaluate patients in the wards and outpatient clinic; review peripherial blood smears; participate in conferences and seminars. Emphasis on patients with blood coagulation and its disorders, hematologic and solid tumor malignancies. MEDICINE

140.300. Endocrine Metabolism-SFGH. (1.5 per week) Su, F. W. Prerequisite: Medicine 110 and fourth-year standing.

Bigler, Schramblan
The Endocrine-Metabolic Service provides daily housestaff and fellow-supervised consultations, four weekly clinics, five teaching rounds, and conferences on current research. Students participate in clinical investigation of patients with endocrine diseases who are hospitalized in the General Clinical Research Center. MEDICINE

140.310. Inpatient Cardiology-VA. (1.5 per week) Su, F. W. Prerequisite: Medicine 110. Fourth-year standing or consent of instructor. Four-week cardiology elective or Medicine 140.01 is recommended. Karlleen

Students work as intern in the Cardiology Service or attend all regular teaching conferences and seminars. MEDICINE

140.330. Coronary Care at Moffitt/Long. (1.5 per week) Su, F. W. Prerequisite: Medicine 110, fourth-year standing or consent of instructor. A four-week cardiology elective or Medicine 140.01 is recommended.

Chaterjee
Students work as interns in the Coronary Care Unit and attend all regular cardiology conferences and seminars. MEDICINE

140.340. Renal Disease-UC. (1.5 per week) Su, F. W. Prerequisite: Medicine 110. Ives

The student will join the renal team and participate under supervision in evaluation and treatment of patients with renal disease or disorders of fluid, acid-base, or electrolyte balance. Emphasis is placed on nephrology, history-taking, physical examination, and treatment. MEDICINE

140.350. Cardiology-SFGH. (1.5 per week) SS1, SS2, Su, F. W. Prerequisite: Medicine 110. Cheitin, Rapaport, N. Goldebrger

Students see patients in consultation on wards and clinics, read electrocardiograms, improve anatomic skills, review cases with cardiac consultant, and attend all seminars and conferences. MEDICINE

140.360. Emergency Medicine-UC. (1.5 per week) Su, F. W. Prerequisite: Medicine 110 and fourth-year standing. Schumaker

Students serve 40 hours per week at externs working and sharing responsibilities with residents and interns. Lectures and emergency medicine conferences are held but emphasis is on bedside instruction. MEDICINE

140.370. Emergency Medicine-II. (1.5 per week) Su, F. W. Prerequisite: Medicine 110 and fourth-year standing. Simon

Students evaluate medical, surgical, gynecologic, and non-critical trauma patients under attending supervision. Attend short teaching conferences held daily, with longer departmental conferences weekly. "Hands-on" training such as suturing, raising and packing, and airway management is provided. MEDICINE

140.390. Pulmonary Disease-UC. (1.5 per week) Su, F. W. Prerequisite: Medicine 110. Stahlberg

Students participate fully on the inpatient Pulmonary Consult Service, interviewing, examining, presenting, and discharging fellow students. Attend weekly conferences, receive some experience with procedures (e.g., bronchoscopy), learn pulmonary function interpretation, and do directed reading relevant to their patients. MEDICINE

140.400. Gastroenterology-UP. (1.5 per week) Su, F. W. Prerequisite: Medicine 110. Allmon, Keflin, Løkke, Grossman

As a member of the GI Consult team, students will work-up patients, observe and participate in diagnostic and therapeutic procedures, and attend all rounds and GI division conferences. MEDICINE

140.410. Gastroenterology-SFGH. (1.5 per week) Su, F. W. Prerequisite: Medicine 110. Limited to fourth-year students.

Celli
Students are responsible for evaluation and presentation of gastrointestinal patients on medical and surgic
140.42. Clinical Toxicology & Pharmacology—SFGH. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and fourth-year standing.
C. Becker, Olshansky
Students evaluate patients in hospital and clinic settings, as well as consultations from San Francisco Poison Control Center. Students participate in patient-oriented rounds with special emphasis on toxicology, occupational medicine, drug overdose, drug abuse, and alcoholism. MEDICINE

140.43. Rheumatology & Immunology—VA. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110. Seward
A four- to twelve-week introduction to rheumatology and immunology, offering both clinical and laboratory experience. The student will participate in inpatient and outpatient care and take part in didactic and practical aspects of the research program. MEDICINE

140.45. Endocrine Metabolism—VA. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and consent of instructor. Enrolment limited. Priority given to UCSF students.

Siperstein, Arnoed
An introduction to the diagnosis and treatment of endocrine-metabolism diseases. Areas covered are those endocrinopathies involving the major endocrine glands, as well as diabetes mellitus and hypopituitarism. Patients will be examined and treated in both the inpatient and outpatient services. MEDICINE

140.46. Pulmonary Medicine—SFGH. (1.5 per week) Su, F, W, Sp. Prerequisite: Fourth-year medical student in good standing.

J. Murray, Hopkins, Shepard
Pulmonary disease, including clinical manifestations, basic pathophysiology, use and limitations of diagnostic studies and treatment. Experience will be gained by seeing patients on wards and through a series of ongoing conferences, ward rounds and review sessions under close faculty supervision. MEDICINE

140.52. Renal Medicine—VA. (1.5 per week) SS1, SS2, Su, F, W, Sp. Prerequisite: Medicine 110.

Pollock
Students evaluate patients with acute and chronic disease, acute and chronic dialysis, and fluid and electrolyte problems. Audiotape lectures, rounds, conferences, renal biopsy review, and weekly renal clinic. MEDICINE

140.53. Infectious Disease—MZ. (1.5 per week) F, W, Sp. Prerequisite: Medicine 110 and fourth-year standing.

L. Drew, Miszt
Clinical and laboratory experience providing integrated approach to infectious disease. Emphasis on learning techniques in diagnostic microbiology (e.g., Gram stain, bacterial and viral cultures), and correlating these findings with clinical diagnosis and patient management. Attend daily rounds; research opportunities available. MEDICINE

140.55. Acting Internship—. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110. Limited to fourth-year students.

Busch
Students, under supervision, will evaluate and share in the care of patients admitted to an acute care hospital. Experience includes history and physical examination, diagnostic and treatment planning, and writing orders and progress notes. Attend daily rounds and conferences. MEDICINE

140.61. Advanced Medicine Clerkship—VAF. (1.5 per week) Su, F, W, Sp. Prerequisite: Fourth-year standing.

R. Freeman
Assists in team with first- and second-year residents, rounds with attending faculty four to five times weekly; attends daily noon conferences; increase skills in history-taking, physical examination, write-ups, and oral presentation. Experience in writing orders countersigned by resident. MEDICINE

140.62. Emergency Medicine—MZ. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and fourth-year standing.

Sawyer
Emergency room experience providing acute care to a mixed inner-city and middle-class population. Students see medical emergencies, minor trauma, and acute problems in a variety of disciplines including gynecology, ophthalmology, ENT, and orthopedics. Attendance at specialty conferences encouraged. MEDICINE

140.63. Advanced Medicine Clerkship—ICP. (1.5 per week) Su, F, W, Sp.

Connolly
Fourth-year elective rotation for one month on medical wards at Kaiser Foundation Hospital in Oakland. Students will be integrated into the residency training program and will be involved in the care of hospital patients in an urban community prepaid health plan hospital. MEDICINE

140.64. Cardiology—UC. (1.5 per week) SS1, SS2, Su, F, W, Sp. Prerequisite: Medicine 110.

D. Perloff, Schmitz
Students receive instruction in reading electrocardiograms, in the use and interpretation of diagnostic procedures such as echocardiography, Holter monitoring, treadmill exercise testing, nuclear medicine, cardiac electrophysiology, and cardiac catheterization. Students attend cardiac and hypertension clinics, CCU rounds, and weekly conferences. MEDICINE

140.66. Internal Medicine—VMC. (1.5 per week) Su, F, W, Sp. Prerequisite: Fourth-year standing.

Holmes
Students assigned to teams with first- and second-year residents, rounds with attending faculty, participation in daily conferences. Emphasis on pathophysiology of disease processes, management of acute medical problems. Reference in history-taking, physical examination, write-ups, presentations, techniques of diagnostic procedures. MEDICINE

140.68. Infectious Disease—VAC & VAF. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110.

Lisa
Management of common and unusual infectious diseases. May include use of anti-microbials in presence of impaired renal or hepatic function, treatment of infections in immunologically compromised host, etc. Participation in patient evaluation, grantee fellow-ship, ward rounds, conferences. Microbiology laboratory can be arranged. MEDICINE

140.69. Cardiology—VMC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 or consent of instructor.

Grayson
Participation with housestaff in patient care on CCU, ICU, medical wards, outpatient clinics. Introduction to invasive and non-invasive diagnostic procedures, techniques of management in care of hospitalized and ambulatory patients. Attend ECG interpretations, CCU rounds, consults, and teaching conferences. MEDICINE

140.70. Hematology, Oncology—VMC & VAF. (1.5 per week) Su, F, W, Sp. Prerequisite: Fourth-year standing and Medicine 110.

Stolberg
Students participate in the work-up of hospitalized patients and follow-up progress of patients in specialty clinics seen in consultation by hematology oncology staff. Clinical experience is augmented by reading program, slide review sessions, noon board meetings and specialty conferences. MEDICINE

140.71. Pulmonary Disease—VCM. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 or consent of instructor.

Lobne, Hiraiwa
Evaluation and management of adult patients with respiratory diseases, supervised by housestaff and faculty. Pulmonary Medicine section. Emphasis on physical examination of chest, interpretation of X-ray, arterial blood gases, pulmonary function studies. Gain familiarity with radiology and other aspects of respiratory care. MEDICINE

140.72. Gastroenterology—VAF. (1.5 per week) Su, F, W, Sp. Prerequisite: Fourth-year standing and Medicine 110.

Gitlin
Participation in evaluation of patients with gastrointestinal problem (gastroscopies, ERCP, colonoscopy, liver biopsies, percutaneous liver biopsy) on wards and in outpatient clinic. Experience includes demonstration of investigations (acid and stool), weekly clinical conference, liver histology, and natural discussion sessions. MEDICINE

140.73. Rheumatology & Immunology—SFGH. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110.

I. Goldstein, H. D. Perez
Students will be assigned to inpatients and outpatients for work-up and management under the supervision of fellows and attending physicians. Students also will participate in clinical rounds, clinical conferences, research seminars and journal clubs. MEDICINE

140.75. Inpatient Medicine—K. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and fourth-year standing.

Feshel
Students based at Kaiser Foundation Hospital serve as clinical clerks. They examine patients, participate in
A preclinical multidisciplinary survey course in lecture format on the biomedical, clinical, and social manifestations of the pandemic caused by the human immunodeficiency virus. The course includes lectures by renowned UCSF virologists and two panels: SF Systems of Care and Persons with AIDS/ARC. MEDICINE

170.04. EKG Fundamentals—VA. (1) Su, F, W, Sp. Prerequisite: Medicine 132A-B. Lecture and/or laboratory 1 hour.
M. Goldman
Instruction in basic electrophysiology; principles and interpretation of electrocardiograms. MEDICINE

170.05. EKG Interpretation. (1) W. Prerequisite: Medicine 131A. Lecture 1 hour.
Rapsaport
Review of physical principles of electrocardiography and clinical application of electrocardiographic interpretation. MEDICINE

Cox, Nestle
Focus on research interests of UCSF faculty. Provides broad introduction to campus research, practice in reading and analyzing research publications. Speaker's talk includes discussion of personal background, present research, background description on research area, and discussion of future research plans. MEDICINE

170.12. Introduction to Geriatric Medicine. (1.5) W. Lecture 1.5 hours.
Goodstein
Course covers the physiology and psychology of normal aging, health care problems of the elderly, including cardiovascular, respiratory, and neurological disease, and medical care of the elderly living in the community. MEDICINE

170.15. Art and Science of Health Services Research. (2) F. Prerequisite: Graduate training in applied health services research, e.g., public health, medical sociology, health economics, preventive medicine.
P. Lee, Luft
Basic economic concepts and tools as applied to problems in the health care system. Topics to be covered include measurement of output, demand for care, insurance, supply of physicians' services, health sector planning, and alternative views of the system. MEDICINE

170.18. Supervised Study. (1-5) Su, F, W, Sp. Prerequisite: Consent of instructor and approval of third- and fourth-year coordinator. Papadakis

Bartof, Papadakis

from clerkships one afternoon per week, and outpatient responsibilities, which will take precedence over inpa-
tient clerkship duties. MEDICINE

180. Industrial Toxicology. (2) F. Prerequisite: Consent of instructor. Lecture 2 hours.
Osterloh
To provide understanding of basic principles of toxicology related to work environment and workers' health. Emphasis is on chemicals including heavy metals and pesticides, methods of surveillance, principles of acute and chronic toxicity testing, includes lectures, student presentations, and discussion. MEDICINE

180.02. Theory of Biomedical Ethics. (1-2) W. Prerequisite: Graduate standing and consent of instructor. Seminar 2 hours. Paper required for 2 units.
Anchley
A brief introduction to Bioethics, followed by a case-oriented approach to the understanding and use of those basic biotechnical principles necessary to understand and resolve frequently encountered biotechnical dilemmas in medical practice. MEDICINE

180.01. Nation's Health. (2) F, W, or Sp. Lecture 2 hours.
P. Lee and Staff
Course will address health policy issues related to the health status of the population, the determinants of health, and health care. Jointly offered with Sociology 160 and Sociology 280. MEDICINE

180.03. Economics of Health. (2) F, W, or Sp. Lecture 1 hour.
P. Lee, Luft
Basic economic concepts and tools as applied to problems in the health care system. Topics to be covered include measurement of output, demand for care, insurance, supply of physicians' services, health sector planning, and alternative views of the system. MEDICINE

199. Laboratory Project. (1-5) Su, F, W, Sp. Prerequisite: Consent of instructor and approval of third- and fourth-year coordinator. Papadakis
A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. MEDICINE

200. Health & Aging. (2-6) W. Prerequisite: Graduate standing. Consent of instructor. Lecture 2-4 hours.
P. L. H. Lipson
Examines the health status of the aged in the U.S. in light of relevant biological, behavioral, socioeconomic and cultural factors. Social, economic and eco-

nomic factors affecting the organization, financing, and delivery of health care to the aging population are examined. MEDICINE

400. Medical Staff Conferences. (2) F, W, Sp. UC R.K. Root, SFGH, Rapaport, VA Steiger
Interns and residents prepare and present case histories of patients at medical staff conferences including ref-
edence to the literature, laboratory work, and special studies. Faculty members and visiting professors dis-
cuss the cases and present new developments to their respective fields. MEDICINE

A series of discussions is conducted in the various subspecialties of internal medicine. Students take an active part in the presentation and discussion of the problems involved, including reference to the litera-
ture, clinical demonstrations, and directed student participation. MEDICINE

402. Medical Literature Seminar. (1.5) F, W, Sp. VA Steiger
Seminar on recent literature in internal medicine, with assigned reading, required reports, and evalu-
ation of presented material by interns, residents, and faculty. MEDICINE

Students are conducted in the fields of gastroenterology, hematology, cardiology, electrocardiology, endocrinology, chest diseases, psychosomatic medicine, arthritis and rheumatic diseases, infectious dis-
cases, and radiology. Library research, occasional formal reports and patient presentations are required. MEDICINE

404. Specialty Seminar. (2) F, W, Sp. SGH H. Williams and Staff
Seminar are conducted in cardiology, hematology, gastroenterology, infectious diseases, metabolic dis-
cases, and pathology, involving discussions, required reading, and reports. MEDICINE

405. Specialty Seminar. (2) F, W, Sp. VA Steiger
Seminar are conducted in cardiology, electrocardiol-
ogy, hematology, gastroenterology, radiology, fluid and electrolyte balance, endocrinology and pathol-
ogy, involving discussions, required reading, and reports. Elective seminars include a chest disease con-
ference, joint medical and surgical conference, tumor board conference, and neuropathology conference. MEDICINE

Research programs are arranged with appropriate faculty members on an individual basis. MEDICINE

407. Clinico-pathological Conference. (1) F, W, Sp. SGH H. Williams, VA Steiger
Microbiology & Immunology

106

Microbiology and Immunology

100A. Medical Immunology, (2) Sp. Prerequisite: Biochemistry 100A-B. Lecture 2 hours. Equivalent to Microbiology 121 and 190A.

W. Levinson
Pathogenesis of infection by bacteria, fungi and viruses. Essentials of diagnosis, treatment, and epidemiology of diseases. Laboratory demonstrations and exercises of essential medical skills. Problem-solving exercises and small group seminars involving clinical cases. MICROBOL.

110. Immunology in Pharmacy, (2) Sp. Prerequisite: Biochemistry 120A-B. Required course for students in the School of Pharmacy. Lecture 2 hours.

Brodsky
Lectures on the fundamentals of immunology, drug hypersensitivity and immunosuppression. MICROBOL.

116. Microbiology and Immunology in Dentistry, (6) W. Lecture 4 hours. Lab 6 hours.

Feltion, DeFranco
Comprehensive presentation of microbiology including bacteria, fungi, viruses; fundamentals of infection and resistance, immunology, disinfection, sterilization, and the oral microflora. Laboratory studies and demonstrations on indigenous oral flora and applications of microbiology to dentistry. MEDICINE.

120. Microbiology in Pharmacy, (3) Sp. Prerequisite: Successful completion of all first-year required coursework. Lecture 3 hours. Lab 6 hours.

Lecore
Fundamentals of microbiology for pharmacy students with emphasis on mechanisms of disease production by bacteria, fungi, and viruses. Morphology, physiology, and immunology techniques used in laboratory diagnosis of selected bacterial diseases. Includes exercises in antibiotic susceptibility, disinfection, and sterility. MICROBOL.

150. Microbiology Research, (1-3) per week. Su, F, W, Sp. Prerequisite: Microbiology 100A and 100B and consent of instructor.

Staff
Research in microbiology, block elective for fourth-year students. MICROBOL.


W. Levinson
Small-group medical problems-solving conference using real clinical cases as a springboard for exploration of underlying issues in basic and clinical sciences. The emphasis is on pathophysiologic reasoning, independent learning, and working in a group. Teaching is Socratic and minimally directive. MEDICINE.

190A. Med Immunology-Grad Students, (2) Sp. Prerequisite: Biochemistry 100A-B. Lecture 2 hours for nine weeks. Equivalent to Microbiology 100A and 121.

W. Levinson
Lectures on the fundamentals of immunology. Small group seminars on patient-related problems in this field. MICROBOL.

190B. Graduate Medical Microbiology, (6) F. Prerequisite: Biochemistry 100A-B. Lecture 4 hours. Lab 3 hours. Conference 1 hour.

W. Levinson
Pathogenesis of infection by bacteria, fungi, and viruses. Essentials of diagnosis, treatment, and epidemiology of disease. Laboratory demonstrations and exercises of essential medical skills. Problem-solving exercises and small group seminars involving clinical cases. MICROBOL.

198. Supervised Study, (1-5) Su, W, Sp. Prerequisite: Consent of instructor.

Staff
Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. MICROBOL.

199. Laboratory Project, (1-5) F, W, Sp. Prerequisite: Consent of instructor.

Staff
Neurological Surgery

Core Clerkship—Neurology (10). Students serve as clinical clerks in the inpatient and outpatient clinics.

140.01. Advanced Neurosurgery Clerkship. (1.5 per week) Su, F, W, Sp.
C.B. Wilson
The student will become a member of the housestaff, attending ward rounds, working up patients, assisting at operations, and taking night call on rotation with a resident. Limited to one student per hospital. NEURO SURG

140.02. Off-Campus Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Neurology 110.
P. Weinstein
Clinical clerkship in approved hospitals by special arrangement, and approval of the dean and chairper- son of the department. NEURO SURG

150.01 Research in Neurology. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor and departmental grade in MB Examination Part 1. 40 hours per week.
Staff Research project under the direction of a member of the faculty. Extensive background reading will be required and discussion of important topics will be held at weekly laboratory and program research conferences. NEURO SURG

198. Supervised Study. (1-5) F, W, Sp. Prerequisite: Consent of instructor.
Staff Library research and directed reading under supervi- sion of a member of the faculty with the approval of the chairperson of the department. NEURO SURG

199. Laboratory Project. (1-5) F, W, Sp. Prerequisite: Consent of instructor.
Pitts

A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. NEURO SURG

C.B. Wilson
Residents, under supervision, prepare and present case histories of ward patients including laboratory work, X-ray studies, special investigations and refer- ence to the literature. Discussion is led by the faculty with participation by visitors. NEURO SURG

R. Davis, C.B. Wilson
Residents discuss clinical pathophysiologic aspects, causes, and correlation with the literature and special studies. Faculty and visitors discuss developments in related fields. Second-year residents originate conferences and participate in clinic reports on patients seen at the Neurosurgical Service. NEURO SURG

Pitts
Recent literature in neurology and neurosurgical sur- gery is presented. Discussion by members of the facul- ty in attendance and by visitors from other schools interested in this and related fields. NEURO SURG

C.B. Wilson
Residents, under supervision, are responsible for patient care in the wards and outpatient clinics in- cluding history-taking, physical examination, laboratory tests, and consultations. In addition, the senior resident has certain administrative, teaching, and clinical responsibilities. NEURO SURG

Pitts
Residents are responsible for the care of patients, under the direction of the attending staff, including history-taking, physical examinations, laboratory tests, and consultations. In addition, the senior resi- dent has certain teaching and administrative responsibilities required by the attending staff. NEURO SURG

P. Weinstein
Residents are responsible for diagnosis and care of patients in wards and clinics and performance of mul- tiple and selected neurosurgical procedures under supervision of the attending staff. They also present patients at conferences and attend seminars and rounds at UCSF. NEURO SURG

Pitts, P. Weinstein
Interns rotate through neurosurgical surgery wards. Under the supervision of the attending staff, they are responsible for the care of patients, including history taking, neurologic examinations, laboratory tests, diagnostic procedures, and consultation. NEURO SURG

Neurology

Second-Year Coordinated Instruction—Medicine 132A-B-C. Lecture-demonstrations and section work devoted to the supervised examination of patients.

Layter
Students are assigned patients for study under supervision of attending and resident staff. They attend ward rounds, attending rounds, grand rounds, conferences and lectures, seminars, emphasizing diagnosis and management of common clinical problems and psychiatric aspects of neurology. NEURO LO GY

140.01. Advanced Clinical Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Neurology 110 and fourth-year standing.
R. Fishman
Students serve as acting interns on the inpatient services or on the consult service. Attendance at departmental clinical rounds, seminars, and conferences is required. NEUROLOGY

140.02. Off-Campus Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Neurology 110.
R. Fishman
Clinical clerkship in approved hospitals by special arrangement and approval of the dean and chairperson of the department. NEUROLOGY

140.03. Outpatient Clinical Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Neurology 110 and consent of instructor.
Engstrom
Students serve as clinical clerks in the outpatient clinics. Attendance at departmental clinical rounds, seminars, and conferences is required. Prior arrange- ments must be made. NEUROLOGY

Berg
Participation in child neurology activities, both inpatient and outpatient, and all regularly scheduled conferences of the Child Neurollogy Division. Study of the developing nervous system and diseases of the nervous system affecting infants, children and ado- lescents. NEUROLOGY

140.05. Advanced Neurology Clerkship—SFCH. (1.5 per week) Su, F, W, Sp. Prerequisite: Neurology 110 and consent of instructor.
R. Simson
Students serve as clinical clerks in the outpatient clinics and on the consultation service. Attendance at departmental clinical rounds, seminars, and conferences is required. Prior arrangements must be made. NEUROLOGY

140.06. Advanced Neurology Clerkship—VA. (1.5 per week) Su, F, W, Sp. Prerequisite: Neurology 110 and consent of instructor.
F. Sharp
Students serve as clinical clerks in the outpatient clinics and on the consultation service. Attendance at departmental clinical rounds, seminars, and conferences is required. Prior arrangements must be made. NEUROLOGY

140.07. Advanced Neurology Clerkship. (1.5 per week) Su, F, W, Sp.
Margolin, Felman
Advanced students will have the opportunity to broaden and enrich their clinical neurology experience and expertise. Opportunity will be given to participate in didactic and case conference presenta- tions. The opportunity exists for subspecialty clinical experience (e.g., behavioral neurology, neuromuscu- lar disease). NEUROLOGY

140.08. Pain Mechanisms and Management. (1.5 per week) Su, F, W, Sp. Prerequisite: Neurology 110 and consent of instructor. Enrollment limited.
Fields, Barbaro, McKay
Diagnosis, medical and surgical management of pa- tients with chronic pain. Students will participate in conferences and rounds of the multidisciplinary pain service at UCSF's Pain Management Unit. Direct patient contact will be under supervision of attending physi- cians (neurologists, neurosurgeons, anesthesiologists, psychiatrists). Students will learn to do sensory examina- tions and simple local anesthetic nerve blocks. They will learn pain management techniques for inpatient and outpatient patients, cancer pain, neuropathic pain, headache, low back pain. They will be expected to identify major psychological aspects of acute and chronic pain. NEUROLOGY

150.01. Neurology Research. (1.5 per week) Su, F, W, Sp. Prerequisite: Anatomy 103. R. Fishman
Opportunities for research in one of the departmental laboratories by arrangement with the chairperson of the department. NEUROLOGY

150.02. Neuropsychology. (1.5 per week) F, W, Sp. Prerequisite: Anatomy 103 and Psychology 102.
R.L. Davis, Buttering
Time pathology of diseases of the nervous system will be explored in greater depth in the postmortem rooms and by gross and microscopic techniques. NEUROLOGY
Clinical and basic research in neurological disease. After consultation, assignments to one of the several departmental laboratories will be possible. NEUROLOGY


VA Faders Specific projects in experimental pathology of the nervous system may be undertaken by direct arrangement. Techniques include histology, histologic detection of antigens, and electron microscopy. NEUROLOGY


R. Fishman Residents are responsible for the care of patients under the direction of the attending staff, and participate in student teaching. They serve on the inpatient, outpatient, and consultation services. NEUROLOGY


Aminoff Residents learn interpretation of electroencephalograms under the supervision of experienced electroencephalographers. They interpret electroencephalograms on patients they have seen clinically, with individual instruction as required. Instruction is accredited by the Board of Qualification of the American Board of Electroencephalography. NEUROLOGY


Aminoff Students learn the application of electromyography in the diagnosis of patients seen in the ward and in the outpatient clinic, with individual instruction as required. NEUROLOGY


Malanmad Residents spend three months or more performing supervised autopsies and pathologic studies of brain, nerve, and muscle. NEUROLOGY


Berg Course offers experience in the diagnosis and management of children with acute and chronic neurological disorders. Outpatient clinics are held weekly for pediatric convulsive disorders and behavioral and learning problems of the schoolchild. NEUROLOGY


W. Hoyt Residents participate in clinical evaluation of patients in preparation for rounds. Clinical teaching in neuro-ophthalmology. NEUROLOGY

170.01. Medical Aspects of Disability. (2) F. Seminar 2 hours.

Berrol, Blyl Diagnosis, medical management, and psychosocial sequelae of the major disabling conditions including spinal cord injury, closed head injury, cerebral palsy, multiple sclerosis, chronic pain, muscular dystrophy, congenital pediatric problems. NEUROLOGY


R. Fishman and Staff Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. NEUROLOGY


R. Fishman and Staff A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. NEUROLOGY


R. Fishman, J. Diamond Seminar covering selected subjects in the basic sciences relevant to neurology including neuroanatomy, neurochemistry, neurophysiology, and neuropathology. NEUROLOGY


R. Fishman Conference includes resident preparation and presentation of patient case histories including reference to the literature, laboratory work, and special studies. Faculty members and visiting professors from other universities discuss new developments in their respective fields. NEUROLOGY


R. L. Davis Course involves the presentation and discussion of clinical histories and pathologic findings in selected cases of neurologic interest and histopathologic study, and discussion of surgical and postmortem specimens from neuropathologic and neurosurgical patients. NEUROLOGY

403. Neuropathology Research. (1-10) Su, F, W, Sp. Pre-requisite: Second- and third-year residents. R. L. Davis Course covers pathologic and clinicopathologic research into various aspects of neuropathology. Specific subjects of research are chosen in consultation with members of the staff. NEUROLOGY


D. Norman Neuroimaging techniques and interpretations are reviewed in detail with particular emphasis on X-rays of the skull and spine, pneumoencephalography, myelography and arteriography. NEUROLOGY


R. Fishman
Nursing

140. Integrated Sciences. (3) F. Lecture 3 hours.
M. Engler, M. Engler
Course introduces basic cell structure and function. Chemical, physical, and biochemical principles of cellular and molecular function are presented. Principles of microbiology are explored as a special case of cellular function. PHYSIO/NURS

141. Anatomy and Physiology. (6) Su. Lecture 5 hours.
M. Engler, M. Engler, C.A. Gilson
This introductory course integrates human anatomy and physiology of the major organ systems and emphasizes the intimate relationship between structure and function. The course provides the foundation needed to understand human response to wellness and illness. PHYSIO/NURS

142. Introduction to Nursing. (11) Su. Lecture 3 hours. Patient contact 24 hours.
C. West
Course explores the concepts of health and illness and role of the professional nurse. Focuses on using the nursing process in care of persons across the adaptation and development continuums. Concurrent laboratory designed to develop skills and knowledge common to the nursing care of adults. PHYSIO/NURS

143. Effective Communication. (3) W. Lecture 3 hours.
H. Willson, B. Furuta
Course reviews selected theories of human interaction and presents principles and techniques of effective communication as they relate to establishing and maintaining a helping relationship. Students use laboratory experiences to develop skills in communication and interaction. MENT HLT COM ADM

144. Nursing Care of Med-Surg Patients. (14.5) F. Prerequisites: N141, N142. Lecture 5 hours. Patient contact 28.5 hours.
P. Halliburton
Course focuses on nursing assessment, diagnosis and care plan for patients with common medical-surgical conditions including problems common to the elderly. Clinical experiences are provided to allow for development of personal knowledge and skill application of content with clients. PHYSIO/NURS

145. Pathophysiology. (2) F. Prerequisites: N141, N142. Lecture 2 hours.
M. Dodd
Course provides understanding of disease and its treatment as the basis for nursing assessment and intervention. Major disease entities will be explored, utilizing a conceptual organization of the content. PHYSIO/NURS

146. Parent-Child Nursing. (7.5) W. Prerequisites: N140, N141, N142, N144, N145. Lecture 4 hours. Patient contact 10.5 hours.
M. Tesler
This clinical course in the nursing care of children and families integrates theoretical concepts related to management of pediatric patients in acute and ambulatory settings. Application of the concepts of growth and development of the child and family is included. FAM HLT

147. Childbearing Families. (7.5) W. Prerequisites: N140, N141, N142, N144, N145. Lecture 4 hours. Patient contact 10.5 hours.
K. Lee
Course focuses on biopsychological concepts forming the basis for normal childbearing events and application to clinical situations. Emphasis is on nursing assessment and management of the woman and fetus during antepartum and intrapartum periods, and newborn mother and infant during the first postpartum month. FAM HLT

148. Socio-Cultural Issues in Health, Illness. (2) W. Prerequisites: N140, N141, N142, N144, N145. Lecture 2 hours.
V. Olsen
Course focuses on significant socio-cultural variations in health and illness, prevention and care that make particular impacts on nursing practice in a variety of settings. Attention will be given to cultural diversity associated with ethnicity and social class. SOC RHE

149. Psych/Mental Health Nursing. (4.5) Sp. Prerequisites: N140, N141, N142, N143, N144, N145, N146, N147, N148. Lecture 2 hours. Patient contact 7.5 hours.
L. Chávez, P. Underwood
Course presents theories of human behavior as they relate to function, alteration, and/or disruption of mental processes; reviews current knowledge related to nursing care, psychiatric treatment, and psychosocial rehabilitation of the identified mentally ill individual and his/her family. MENT HLT COM ADM

150. Community Health Nursing. (9.5) Sp. Prerequisites: N140, N141, N142, N143, N144, N145, N146, N147, N148. Lecture 4 hours. Patient contact 16.5 hours.
D. Oda
Course explores application of nursing, family, and community health theory in community health settings, focusing on assessing, diagnosing, planning, implementing, and evaluating community health nursing care with families, groups, and communities. General principles will be applied to specific vulnerable populations. MENT HLT COM ADM

152. Issues in Nursing. (3) Sp. Prerequisites: N140, N141, N142, N143, N144, N145, N146, N147, N148. Lecture 3 hours.
B. Roberts
Course explores major issues and trends in contemporary nursing and health care: delivery as they relate to nursing practice, education, and research. MENT HLT COM ADM

181. Law and the Practice of Nursing. (2) Sp. Lecture 2 hours.
D. Temmenhouse
Course surveys fundamental and critical current issues in law with respect to the theory and practice of nursing. Emphasis is on legal contingencies encountered in the everyday practice of nursing in both hospital and community settings. PHYSIO/NURS

187. Scientific Writing. (1) F. W. Prerequisite: Consent of instructor. Lecture 1 hour. Enrollment limited.
J. Grooth
Course reviews bibliographic search methodology, the style of scientific writing, American Psychological Association (APA) editorial format, and composition of the introductory paragraph. PHYSIO/NURS

T. Ayres
Theories and concepts of femininity, masculinity, and sexuality throughout the life cycle. Exploration of the wide range of human sexual behavior. Content includes sexual response, common sexual dysfunctions and therapy, masturbation, homosexuality, and sexuality in some health conditions. FAM HLT

197. Group Independent Study. (1-5) SS1, SS2, F. W. Sp. Lab 3-15 hours.
Staff
Students collaborate in clinical investigation and study special problem related to nursing and health sciences under the direction of faculty. Students may select topics for study related to their area of interest.

198. Supervised Study in Nursing. (1-5) SS1, SS2, F. W. Prerequisite: Consent of instructor. Lab 3-15 hours.
Staff
Student conducts library research and does directed reading under supervision of a faculty member with approval of the chairperson of the department.

199. Laboratory Project in Nursing. (1-5) SS1, SS2, F, W Prerequisite: Consent of instructor. Lab 3-15 hours.
Staff
Student conducts a laboratory research project under direction of a faculty member with the approval of the chairperson of the department.

201. Curriculum & Program Development. (3) F. Prerequisite: M.S. standing or consent of instructor. Lecture 1 hour. Seminar 2 hours.
N. Okamoto
Course reviews educational principles, nursing models, and conceptual framework for curriculum and program development to enable students to analyze, critique, and develop curricula and programs for schools of nursing and health delivery systems. PHYSIO/NURS

202A. Theory Development in Nursing. (3-4) F. Prerequisite: Doctoral standing. Lecture 3 hours.
A. Malena
Examines philosophically and analytically the nature of theory and relationship between philosophy, theory, and science. Provides knowledge and experience in all stages of theory development, exploration and critique of epistemological and historical ideas in nursing; scholarly exchange toward independent discovery. MENT HLT COM ADM

202B. Prototype Theories in Nursing. (3-4) W. Lecture 3 hours.
A. Malena
Comparative study and critical analysis of major prototype theories from which conceptions of nursing are derived. Emphasis is placed on systems, symbolic interaction, developmental exchange, and adaptation level theories. MENT HLT COM ADM

202C. Theories & Conceptual Frameworks. (3-4) Sp. Prerequisite: Doctoral standing. Lecture 3 hours.
A. Malena
Comparative study and critical analysis of major conceptual models and theories in nursing. Considers relationship congruency of models to prototype theories, system, interaction, developmental, adaptation level theories. Examines the implication of nursing theories and models for practice and research. MENT HLT COM ADM

201. Consultation Theory & Process. (2-3) W. Sp. Lecture 2 hours. Lab 0-3 hours.
D. Oda
Course provides a study of theories and concepts of consultation as a facilitating process relevant to nurses working in public, secondary, and tertiary prevention services. Emphasis will be on consultation strategies. Optional laboratory for theory testing. MENT HLT COM ADM

204. Issues in Hospice Care. (3) F. W. Prerequisite: Consent of instructor. Lecture 3 hours.
I. Martinson
Course explores history, function, and models of hospice care. Supportive physical/psychosocial nursing intervention to promote symptom control and family coping during end-stage of life are covered with special emphasis on AIDS. Research, legal, ethical issues, and nursing implications are discussed.

FAM HLT

205. 01. Clinical Knowledge Development. (4) F. Prerequisite: N202A. Lab 6 hours. Seminar 2 hours.
J. Larson
Course defines the nature of advanced clinical practice relevant to the area of focus in the deprofessional program. Problems common to selected patients are explored. Phenomena are analyzed to develop knowledge for advanced nursing in clinical and administrative settings. PHYSIO/NURS

205. 02. Clinical Knowledge Development. (4) F. Prerequisite: N202A. Lab 6 hours. Seminar 2 hours.
J. Martinson
Course defines the nature of advanced clinical practice related to the area of focus in the doctoral program. Problems common to selected patients are explored. Phenomena are analyzed to develop knowledge for advanced nursing in clinical and administrative settings. MENT HILTH COM ADMI

205.03. Clinical Knowledge Development. (4) Z W Prerequisite: N202A. Lab 6 hours. Seminar 2 hours. P. Underwood Course defines the nature of advanced clinical practice relevant to the area of focus in the doctoral program. Problems common to selected patients are explored. Phenomena are analyzed to develop knowledge for advanced nursing in clinical and administrative settings. MENT HILTH COM ADMI

206. Nursing Management of Adult Psych Cond. (3) F. Prerequisite: N227 and N319 or equivalent, and consent of instructor. Lab 3 hours. Seminar 2 hours. P. Underwood Seminar is designed for graduate psychiatric nursing students to examine and discuss various theories and practice approaches to the nursing management of psychiatric conditions in adults. MENT HILTH COM ADMI

207. Clin Neg Physiol. (3-5) S, S1, S2, Ssu, F, W. Sp. Prerequisite: Doctoral standing. Lab 3-9 hours. Seminar 2 hours. Staff Course is an advanced study of the theory and research in the care of patients with physiological dysfunction and/or diet. In-depth examination of patient problems, assessment and management in the patient's selected special area. Seminar with clinical laboratory. PHYSIOLOG NURS

208.01A. Concept Delineation in Physiological Nursing. (3) W Prerequisite: N205.01 or N205.02 or N205.03. Seminar 3 hours. V. Carrieri-Kohlmann Seminar describes and analyzes phenomena relevant to nursing from theoretical, clinical, and empirical perspectives. Related concepts of interest to nursing are selected from observations in clinical settings and delineated in relation to the selected phenomena. PHYSIOLOG NURS

208.02A. Concept Delineation in Family Health Care Nursing. (3) W. Prerequisite: N205.01 or N205.02 or N205.03. Seminar 3 hours. Staff Seminar describes and analyzes phenomena relevant to nursing from theoretical, clinical, and empirical perspectives. Related concepts of interest to nursing are selected from observations in clinical settings and delineated in relation to the selected phenomena. FAMIL HILTH

208.03A. Concept Delineation in Mental Health, Community and Administrative Nursing. (3) W. Prerequisite: N205.01 or N205.02 or N205.03. Seminar 3 hours. Staff Seminar describes and analyzes phenomena relevant to nursing from theoretical, clinical, and empirical perspectives. Related concepts of interest to nursing are selected from observations in clinical settings and delineated in relation to the selected phenomena. MENT HILTH COM ADMI

210.16. Survey of Health Status Research. (3-3) F. W. Sp. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours. Enrollment limited. Preference given to community health nursing specialist students. M. White Students will critically examine research on health status at the individual, group and societal levels. Emphasis is on the concept of health status, measurement methods, and implications of research approaches and findings for nursing practice. MENT HILTH COM ADMI

210.01B. Death in Child. Res Critique. (3) W. Prerequisite: N211A or equivalent or consent of instructor. Seminar 3 hours. J. Lipscomb Course is a critical analysis of studies exploring the relationship of the workplace to the health of the worker. Emphasis is on appraisal of relevant scientific literature, identification of research needs, and development of research proposals in occupational health nursing. MENT HILTH COM ADMI

211.07B. Crit of Onc Nusing Studies. (3) W. Prerequisite: Consent of instructor. Seminar 3 hours. M. Dodd, P. Halliburton Course presents the scholarly process of critiquing published research in oncology nursing. Emphasis will be on evaluation of the research processes utilized by investigators, and the implications of empirical findings for oncology nursing practice. PHYSIOLOG NURS

211.08B. Critique of Management Research. (3) W. Sp. Prerequisite: N211A or consent of instructor. Lecture 3 hours. S. Neidlinger The course provides a critical analysis of studies which examine organizational behavior and administrative practice. The emphasis is on attitudes, insights, and abilities crucial to appreciation, appraisal, and utilization of research in the health sciences. FAMIL HILTH

211.09B. Research Critique: Critical Care. (3) W. Prerequisite: N211A. Seminar 3 hours. N. Scotts Course critiques research studies related to the nursing assessment, its plan, and therapy of acutely ill patients with multi-systems failure. Students will learn to appreciate, evaluate, and integrate research findings into their clinical practice. PHYSIOLOG NURS

211.10B. Critique: Studies in Child Health. (3) W. Prerequisite: N221A or equivalent or consent of instructor. Seminar 3 hours. D. Werker Course is a critique of research addressing the health of pediatric client and those experiencing chronic illness. Research considered classic in the field will be reviewed, as will contemporary research. FAMIL HILTH

211.12B. Occup Hlth Res-Critical Review. (3) W. Sp. Prerequisite: N221A or consent of instructor. Lecture 1 hour. Seminar 2 hours. J. Lipscomb Course is a critical analysis of studies exploring the relationship of the workplace to the health of the worker. Emphasis is on appraisal of relevant scientific literature, identification of research needs, and development of research proposals in occupational health nursing. MENT HILTH COM ADMI

211.12B. Nursing Research Critical Review. (3) W. Prerequisite: N211A or consent of instructor. Lecture 3 hours. Staff This course presents the scholarly process of critiquing research in neuroscience nursing. The focus are evaluation of the research process, application of the scientific basis for this specialty, and examination of implications of empirical findings for neuroscience nursing. PHYSIOLOG NURS

211.17B. Crit of Onc Nursing Studies. (3) W. Prerequisite: Consent of instructor. Seminar 3 hours. M. Dodd, P. Halliburton Course presents the scholarly process of critiquing published research in oncology nursing. Emphasis will be on evaluation of the research processes utilized by investigators, and the implications of empirical findings for oncology nursing practice. PHYSIOLOG NURS

211.09B. Critique of Management Research. (3) W. Sp. Prerequisite: N211A or consent of instructor. Lecture 3 hours. S. Neidlinger The course provides a critical analysis of studies which examine organizational behavior and administrative practice. The emphasis is on attitudes, insights, and abilities crucial to appreciation, appraisal, and utilization of research in the health sciences. FAMIL HILTH

211.09B. Research Critique: Critical Care. (3) W. Prerequisite: N211A. Seminar 3 hours. N. Scotts Course critiques research studies related to the nursing assessment, its plan, and therapy of acutely ill patients with multi-systems failure. Students will learn to appreciate, evaluate, and integrate research findings into their clinical practice. PHYSIOLOG NURS

211.10B. Critique: Studies in Child Health. (3) W. Prerequisite: N221A or equivalent or consent of instructor. Seminar 3 hours. D. Werker Course is a critique of research addressing the health of pediatric client and those experiencing chronic illness. Research considered classic in the field will be reviewed, as will contemporary research. FAMIL HILTH

211.12B. Occup Hlth Res-Critical Review. (3) W. Sp. Prerequisite: N221A or consent of instructor. Lecture 1 hour. Seminar 2 hours. J. Lipscomb Course is a critical analysis of studies exploring the relationship of the workplace to the health of the worker. Emphasis is on appraisal of relevant scientific literature, identification of research needs, and development of research proposals in occupational health nursing. MENT HILTH COM ADMI

211.12B. Nursing Research Critical Review. (3) W. Prerequisite: N211A or consent of instructor. Lecture 3 hours. Staff This course presents the scholarly process of critiquing research in neuroscience nursing. The focus are evaluation of the research process, application of the scientific basis for this specialty, and examination of implications of empirical findings for neuroscience nursing. PHYSIOLOG NURS

211.17B. Crit of Onc Nursing Studies. (3) W. Prerequisite: Consent of instructor. Seminar 3 hours. M. Dodd, P. Halliburton Course presents the scholarly process of critiquing published research in oncology nursing. Emphasis will be on evaluation of the research processes utilized by investigators, and the implications of empirical findings for oncology nursing practice. PHYSIOLOG NURS

211.09B. Critique of Management Research. (3) W. Sp. Prerequisite: N211A or consent of instructor. Lecture 3 hours. S. Neidlinger The course provides a critical analysis of studies which examine organizational behavior and administrative practice. The emphasis is on attitudes, insights, and abilities crucial to appreciation, appraisal, and utilization of research in the health sciences. FAMIL HILTH

211.09B. Research Critique: Critical Care. (3) W. Prerequisite: N211A. Seminar 3 hours. N. Scotts Course critiques research studies related to the nursing assessment, its plan, and therapy of acutely ill patients with multi-systems failure. Students will learn to appreciate, evaluate, and integrate research findings into their clinical practice. PHYSIOLOG NURS

211.10B. Critique: Studies in Child Health. (3) W. Prerequisite: N221A or equivalent or consent of instructor. Seminar 3 hours. D. Werker Course is a critique of research addressing the health of pediatric client and those experiencing chronic illness. Research considered classic in the field will be reviewed, as will contemporary research. FAMIL HILTH

211.12B. Occup Hlth Res-Critical Review. (3) W. Sp. Prerequisite: N221A or consent of instructor. Lecture 1 hour. Seminar 2 hours. J. Lipscomb Course is a critical analysis of studies exploring the relationship of the workplace to the health of the worker. Emphasis is on appraisal of relevant scientific literature, identification of research needs, and development of research proposals in occupational health nursing. MENT HILTH COM ADMI

211.12B. Nursing Research Critical Review. (3) W. Prerequisite: N211A or consent of instructor. Lecture 3 hours. Staff This course presents the scholarly process of critiquing research in neuroscience nursing. The focus are evaluation of the research process, application of the
Nursing

211.20B. Critique-Perinatal & Pediatric. (3) S. Prerequisite: N211A or consent of instructor. Seminar 3 hours.

D. Affonso, M. Lynch
Course critiques research reflecting physiological or situational stressors in the high-risk perinatal and pediatric patient. Course will facilitate the appreciation, appraisal, and integration of research findings into clinical practice. FAM HILTH

211.21B. Cardiopulmonary Res Critique. (3) F. Prerequisite: N211A. Seminar 3 hours. Lab 1 hour.

B. Drew
Critical analysis of cardiopulmonary research with the intent to develop research consumerism, with emphasis on attitudes, insights, and abilities crucial to the appreciation, appraisal, and utilization of research in the health sciences. PHYSIOL NURS

211.23B. International/Cross-Cultural Nursing Research. (3) F. W. Prerequisites: N211A or doctoral admission. Seminar 2 hours. Conference 1 hour.

J. Lipos
Seminar focuses on critical analysis of studies in selected areas of international cross-cultural and health nursing. Emphasis is on high risk groups and international stress. MENT HILTH COM ADM

211.24B. Institutional Care of the Aged. (3) W. Prerequisite: N211A. Seminar 2 hours. Field work 3 hours.

J. Kayser-Jones
Seminar focuses on critiquing research studies in the institutional care of the elderly using a theoretical, historical, and cross-critical approach. PHYSIOL NURS

211.25B. Research Critique: Trauma/Emergencies. (3) W. Prerequisite: N211A. Seminar 3 hours.

S. Janson-Bjerklie
Course is a critical analysis of studies that explore assessment and management variables in emergency and trauma nursing. Emphasis is on the critique process related to studies for applicability to clinical practice. PHYSIOL NURS

211.26B. Critique of QA/Staff Dev Res. (3) S. Prerequisite: N211A. Lecture 3 hours.

W. Holzemer
Course examines strategies for the critique of research and applies to quality assurance and staff development research studies. MENT HILTH COM ADM

211.31C. Clinical Research Methodologies. (3) S. Prerequisite: N211A. Lecture 2 hours. Seminar 1 hour.

N. Stotts
Course provides the opportunity for students to apply research methods in the development of a research proposal. Students will conduct research problems significant to their patient population. PHYSIOL NURS

211.32C. Visual Data Study of Human Behav. (3) S. Prerequisite: N211A or consent of instructor. Seminar 3 hours. Lab 2 hours.

Dr. Higley
The use of still photography in the study of human behavior as it relates to health care. Includes the history of photography's impact on social and health policy, and explores issues related to design, sampling, and control analysis. FAM HILTH

211.33C. Illness Management Research. (3) F. W. Prerequisite: N211A, or graduate course in research methods to social science, or consent of instructor. Lecture 2 hours. Lab 3 hours. Course may be repeated for credit.

L. Reif
Method for conducting exploratory studies on social-psychological and organizational factors which affect the management of illness and delivery of health services. Problems identification, collection and analysis of data, and presentation of findings and policy implications of research are included. PHYSIOL NURS

211.34C. Data-Gathering Methods. (3) S. W. Prerequisite: Consent of instructor. Lecture 1 hour.

R. Slaughter
Course will focus on selection and construction of data-gathering tools in nursing research. Validity, reliability and utility are discussed. Computer coding and conducting a pilot study are included. MENT HILTH COM ADM

211.21A. Erol of Psychosomatic Theory. (2) S. Prerequisite: Consent of instructor. Lab 1 hour.

P. Underwood
This advanced seminar, offered to graduate students, focuses on theory as an approach to understanding human behavior rather than as an approach to treatment. Emphasis is on evolution of theory and use of psychosocial concepts in nursing research. MENT HILTH COM ADM

212B. Social Issues in Psych Nursing. (2) W. S. Prerequisite: M.S. students may take this course if they have completed N227. Lecture 1 hour.

L. Chafer
This course will examine historical and current literature, focusing on social factors and mental illness related to the severely ill in urban environments and public psychiatric treatment settings. The emphasis is on implications for nursing research and practice. MENT HILTH COM ADM

213. Advanced Nursing Practice Roles. (2) S. W. Prerequisite: Course is for second-year M.S. students. Consent of instructor is required for all students. Lecture 2 hours.

P. Halliburton
Course focuses on analysis of the context, scope, and issues of advanced nursing practice roles, using the context of role and organizational theory. PHYSIOL NURS

214. Community-Based Long-Term Care. (3) S. W. Prerequisite: Graduate status or permission of instructor. Lecture 2 hours. Lab 3 hours.

L. Reif
Course examines analytical research and theory dealing with noninstitutional approaches to long-term care. Examination of patient characteristics and needs: models of service delivery, factors affecting service utilization, and nurses' roles in provision and management of family based long-term care. PHYSIOL NURS

215A. Health in the Community. (3) F. W. Prerequisite: Consent of instructor. Lecture 3 hours.

M. White
Course provides exploration of theories, concepts, and principles pertaining to the practice of community health nursing with focus on positive health factors and interaction within families, groups, and communities. MENT HILTH COM ADM

215B. Community Health Planning. (3) F. W. S. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours.

C. Sells
Exploration of analytic planning models applicable to community health services. Utilization of the community as a basis for planning and delivery of health care. Emphasis is on the role of the community nurse in health planning. MENT HILTH COM ADM

216. Interventions-Nurs Work Stress. (3) F. Prerequisite: Consent of instructor. Lecture 2 hours.

A. Baldwin
Course will help students to evaluate the recent research and current models of nursing work stress. From this base, students will critically select strategies for assisting and intervening in nursing stress situations. PHYSIOL NURS

217. Psychosocial Care of Children. (3) S. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours.

G. Smith
Staff Course explores theory related to the psychosocial experiences of illness and hospitalization for the child and his family. Focus is directed to minimizing trauma and promoting growth. Concurrent practicum recommended. FAM HILTH

218A. Phenomena Common to the Nursing Care of Ill or Injured. (3-6) S. Prerequisite: N276. Prior or concurrent enrollment in physiology or consent of instructor. Lecture 1 hour. Seminar 2 hours. Lab optional 3 hours for 4 units.

N. Stotts
Knowledge is organized around phenomena common to all ill or injured individuals across the life span. Concepts such as stress, healing, clotting, infection, consciousness, pain and coping will be examined from a theoretical and clinical perspective. PHYSIOL NURS

218C. Current Therapeutics. (1-5) S. Prerequisite: Physiology, N218A and N218B. Seminar 1-5 hours.

C. West
Course investigates the theoretical basis of selected therapies commonly used with the ill or injured. Therapeutic aspects of interventions as well as side effects will be explored. Related research will be used as the basis for discussion. PHYSIOL NURS

218D. Illness or Injury Rehabilitation. (3-5) S. W. Prerequisite: Graduate standing, N218A and N218B. Seminar 2 hours. Lab optional 3 hours.

C. West
Course examines the theoretical basis for rehabilitation of patients following physical illness or injury. Nursing therapies which promote optimal adaptation and development are evaluated utilizing relevant research as a base. Clinical laboratory optional. PHYSIOL NURS

218E. Trauma and Emergency Therapies. (3) S. W. Prerequisite: N221.05 and N275. Seminar 3 hours.

B. Bries, S. Janson-Bjerklie
Course focuses on scientific basis of selected therapeutic interventions used in the care of trauma and emergency patients. Nursing interventions related to therapies will be evaluated and/or proposed. PHYSIOL NURS

218.01B. Concepts in Cardiovascular Nurs. (3) S. W. Prerequisite: Consent of instructor. Cardiac physiology and pathophysiology. Seminar 3 hours.

P. Skov
Course analyzes the needs of cardiovascular surgical patients. Physiologic and pathophysiologic mechanisms and surgical interventions are explored. Issues in clinical management are discussed from the theoretical perspective, and compared and contrasted with clinical practice. PHYSIOL NURS

218.02B. Concepts in Neuroscience Nursing. (3) S. W. Prerequisite: N218A. Lecture 3 hours.

Staff
Course explores phenomena which are commonly experienced by patients with a neurological diagnosis from a theoretical, scientific, and clinical practice perspective. Emphasis is on nursing interventions. PHYSIOL NURS

218.04B. Concepts in Adult Medical Nursing. (3) S. W. Prerequisite: N218A. Seminar 3 hours.

Staff
Course analyzes the needs of the medical patient. Physiologic and pathophysiologic mechanisms and appropriate treatments are explored. Issues in clinical management are discussed from the theoretical perspective, and compared and contrasted with clinical practice. PHYSIOL NURS

218.05B. Concepts in Oncology Nursing. (2) S. W. Prerequisite: N218A. Lab 2 hours, Seminar 1 hour.

C. Maikowski
Course analyzes the needs of the cancer patient. Physiologic and pathophysiologic mechanisms are explored from the theoretical perspective and compared and contrasted with clinical nursing practice. PHYSIOL NURS

116

Nursing
Course explores the theoretical concepts and principles applied to the management of pathophysiological and psychiatric issues complicating the birthing process. Issues of professional practice, adjustment to primary caregiver role, and medical collaboration and consultation are considered. MENT HLTH—UCSD

225. Heart and Aging. (3) MF, W, Sp. Prerequisite: Consent of instructor. Lecture 3 hours.

Course explores the pathophysics of aging and the management of heart disease in older adults. Factors contributing to mental health disorders, adaptive behavior, specific psychopathologies, and the recognition of presenting features of mental and physical illness are explored. PHYSIOL NURS

226. Pediatric Clinical Therapeutics. (4) F, Sp. Prerequisite: Course given in conjunction with N345 (Pediatric Critical Care Assessment). Lecture 4 hours, M, Lynch

Course provides a conceptual approach to examine pathophysiological phenomena identified in the pediatric critical care population. The interrelationships of human response, treatment, processes, stimuli, and interventions will be discussed specifically in relation to the phenomena identified in this population. MENT HLTH

227. Cardiac Rhythm: Theory & Analysis. (3) F. Prerequisite: Consent of instructor. Lecture 3 hours.

B, Drew

Cardioelectrophysiology in normal and pathological states and the scientific base for nursing’s response to cardiac arrhythmias. Content includes: theory and research on the mechanisms, diagnosis, electrocardiographic monitoring, treatment of cardiac arrhythmias, and use of the electrophysiology laboratory for nursing research. PHYSIOL NURS

228A. Chronic Illness & Nursing. (3) F, W, Sp. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours.

J, Hallborg

Course offers a study of problems related to long-term illness. Explores the interrelationships of various cultural, psychosocial, and pathophysiological factors involved in chronic illness. Field experience included. FAM HLTH

228B. Chronic Illness & Nursing. (3) W, Sp. Prerequisite: N202A or consent of instructor. Lecture 2 hours. Lab 3 hours.

J, Hallborg

Course further explores the complexities involved in the illness cares of patients with chronic illness and their families, including the implications for nursing. Course analyzes the interrelationships of various cultural, psychosocial, and pathophysiological factors involved in long-term illness. Field experience included. FAM HLTH

227. Theories of Psych Conditions. (3) F, W, Sp. Prerequisite: Consent of instructor. Lecture 3 hours. Lab 3 hours.

I, Chafetz

Course is an overview of socio-cultural, psychological, and biological theories of major mental illnesses. Seminars emphasizing historical development of these theoretical perspectives and the ways in which they currently contribute to the biopsychosocial model of disorder and to nursing practice. MENT HLTH COM ADM

228. Statistical Analysis Critique. (3) F, W, Sp. Prerequisite: Basic statistics course. Course to doctoral students only, others by permission of instructor. Lecture 3 hours.

Staff

The course emphasizes the critique of the statistical analysis of nursing research. Statistical concepts are evaluated by using the criteria of logical consistency between research questions, design, statistical method, and conclusions, power of the test, and underlying mathematical assumptions. FAM HLTH

229. Comparative Research Methods. (3) W, Sp. Prerequisite: Admission to the doctoral program or consent of instructor. One-quarter of theory (N203 or 290) and research (N 278) desirable. One quarter of theory, N203A, 302B, 202C or 290.1, 290.2, 290.3 and research. N278 recommended. Seminar 2 hours.

S, Gootzer

Underlying assumptions as well as design, measurement, and analytic issues pertinent to nursing research will be compared for biologically related research methods. The advantages and disadvantages of approaches such as historical, descriptive, correlational, epidemiological, experimental, and action research will be examined. FAM HLTH


W, Holzemer, S, Henry, Z, Minsky

Course examines strategies to design, monitor, and evaluate Quality Assurance programs. Current criteria and standards for practice are critically reviewed. Theoretical relationships among QA, staff education, and evaluation, and research evaluation are presented. MENT HLTH COM ADM

230B. Selected Topics in QA. (3) Sp. Prerequisite: Consent of instructor. Lecture 3 hours.

W, Holzemer, S, Henry, Z, Minsky

Course provides an in-depth exploration of selected topics related to QA, including prospective payment, diagnostic related groups, utilization review, case management, and consumerism. MENT HLTH COM ADM

231. Issues in Nurse-Midwifery Practice. (3) Sp. Prerequisite: Enrollment in the midwifery program at UCSC School of Nursing. Seminar 3 hours.

J, Dejosep

Seminar focuses on a critical analysis of current issues in midwifery, including broad social, legal, ethical, health policy, and patient education. FAM HLTH

S. Chaeves
Course introduces the clinical application of pharmacology and therapeutics to the medical management of patients. Focus is on common medications used in primary care. Emphasis is placed on integration of drug therapy as one component of therapeutic management. MENT HLTH COM ADM

233. AIDS: Primary Prevention. (3) § Sy. Lecture 3 hours.
D. Oda
Course focuses on the epidemiology and primary prevention of AIDS. Ethical and legal issues, access to care, and mental health issues are discussed. Emphasis is on teaching strategies for prevention with high-risk populations and those practicing high-risk behaviors. MENT HLTH COM ADM

234.01. Specialty Research Seminar. (3) § Sy. Prerequisite: Doctoral standing or consent of instructor. Seminar 3 hours.
N. Stotts
Course evaluates research in the student's area of specialization. Emphasis is on critique of the design, methodology, and findings. Synthesis of the evaluation of studies results in the identification of major research questions in the field of study. PHYSIOL NURS

234.02. Specialty Research Seminar. (3) § Sy. Prerequisite: Doctoral standing or consent of instructor. Seminar 3 hours.
J. Halliburton
Course evaluates research in the student's area of specialization. Emphasis is on critique of the design, methodology, and findings. Synthesis of the evaluation of studies results in the identification of major research questions in the field of study. FAM HLTH

234.03. Specialty Research Seminar. (3) § Sy. Prerequisite: Doctoral standing or consent of instructor. Seminar 3 hours.
A. Davis
Course evaluates research in the student's area of specialization. Emphasis is on critique of the design, methodology, and findings. Synthesis of the evaluation of studies results in the identification of major research questions in the field of study. MENT HLTH COM ADM

235A. Child Mental Health Counseling I. (3) § F. Lecture 2 hours.
S. Weiss
Course addresses client-centered and psychodynamic theories underlying individual counseling with children. Emphasis will be on therapeutic play and on counseling as a prevention strategy involving collaborative work with the child's psychosocial environment. MENT HLTH COM ADM

235B. Child Mental Health Counseling II. (3) § W. Prerequisite: N235A. Seminar 2 hours.
S. Weiss
Course covers cognitive, behavioral, and gestalt theories of child mental health counseling. Theories of group counseling will also be examined, including methods based on play, activity, and interview. MENT HLTH COM ADM

235C. Child Mental Health Counseling III. (2) § Sy. Prerequisites: N235AB. Seminar 2 hours.
S. Weiss
Course focuses on mental health counseling of children in situational crisis. Particular emphasis is placed upon cases associated with loss, divorce, and physical illness. Terminations of the counseling relationship is also addressed. MENT HLTH COM ADM

236. Expectant Parent Group Education. (2-3) § Sy. Prerequisite: Consent of instructor. Lab 3 hours. Seminar 2 hours.
D. Affonso
Theoretical sessions are related to methodology and techniques of conducting expectant parent education groups. Exploration of content relevant to concerns of expectant parents encompassing childbearing and early child rearing experiences. Concurrent practicum recommended, but not required. FAM HLTH

237. Health Assessment through Life. (3-4) § F. Sy. Prerequisite: Department of Family Health Care Nursing students. Approval by F.O.R. Concurrent practicum required. Lecture 2-3 hours. Lab 3 hours.
L. Elinson
Course presents theoretical principles of health assessment throughout the life cycle. Areas to be covered include methodologies of data gathering and data analysis essential to comprehensive health assessment of all groups. Laboratory experience provides application and integration of theory. FAM HLTH

238A. Infant & Child Development. (3) § F. Prerequisite: Consent of instructor. Lecture 3 hours.
Staff
Course covers major theories and research findings dealing with the physical, intellectual, and emotional development of the child from birth through school age. MENT HLTH

238B. Adolescent Development. (3) § W. Prerequisite: Consent of instructor. Lecture 3 hours.
M. Savadova
Course explores relevant theory, literature, and research findings dealing with normal development during the adolescent period. MENT HLTH

239. Environ Issues in Psych Rehab. (3) § F. Lecture 2 hours. Lab 3 hours.
L. Chafez
Course provides an overview of rehabilitative, residential, and interpersonal environments for the chronically or severely mentally ill. It considers properties of mental health programs, housing, and personal networks which appear to promote rehabilitation goals and overall quality of life. MENT HLTH COM ADM

240A. Family Primary Care I. (3) § Sy. Prerequisite: Enrollment in Family Nurse Practitioner Program and N237. Lecture 5 hours.
S. Carroll
Theories and concepts of child development are considered in the context of family health care. Emphasis will be on primary care of the family unit. FAM HLTH

240B. Family Primary Care II. (4-5) § F. Prerequisite: N240A. Lecture 4-6 hours.
S. Carroll
Course presents theories, concepts, and knowledge for comprehensive assessment and management of a selected episodic, stable chronic illness, and related health conditions throughout the life cycle. Emphasis will be on primary care of the family unit: FAM HLTH

240C. Family Primary Care III. (4-5) § W. Prerequisite: N240B. Lecture 4-6 hours.
B. McLain
Course presents theories, concepts, and knowledge for comprehensive assessment and management of special problems in family primary care. Emphasis will be on care of the family unit. FAM HLTH

241A. Collaborative Role Development. (1) § F. Prerequisite: Consent of instructor and concurrent enrollment in primary care clinical residency. Seminar 1 hour.
F. Dreyfus
Seminar deals with critical analysis of issues and research related to collaboration in primary care. Emphasis is on the history and philosophy of primary care, role change, and models of collaborative practice. FAM HLTH

241B. Role Development in Primary Care. (1) § F. Prerequisite: Consent of instructor and concurrent enrollment in primary care clinical residency. Lecture 2 hours.
J. Saxe
Course offers the student nurse practitioner the opportunity to discover strategies for promoting role development and advancing the nursing profession in the primary health care arena. INTERDEPARTMENTAL

241C. Collaborative Role Development. (1) § W. Prerequisite: Successful completion of N241B (Role Development in Primary Care) and concurrent primary care clinical residency. Lecture 2 hours every other week.
S. Carroll, J. Saxe
Bi-weekly seminars deal with critical analysis of issues and research related to collaboration in primary care. Emphasis is on joint practice frameworks and practice management, marketing the nurse practitioner role, and legal/professional issues. MENT HLTH COM ADM

242A. Long-term Care of Older Adults. (3) § Sy. Prerequisite: N257 (Biological of Aging) or consent of instructor. Seminar 3 hours.
G. Dowling
Course focuses on nursing management strategies geared toward maximizing function and minimizing risk factors in older adults. Emphasis is on the scientific bases for advanced nursing practice in this population including the role of the interdisciplinary team. PHYSIOL NURS

242B. Care of Acutely Ill Older Adults. (2) § F. Prerequisite: N257 (Biological of Aging) or consent of instructor. Seminar 3 hours.
M. Wallagen
Course addresses major phenomena common in the acutely ill older adult and focuses on the scientific basis for nursing management, the role of the multidisciplinary team in care management, and ethical issues that influence decision-making. PHYSIOL NURS

243.01. Family Therapies. (3) § W. Lecture 3 hours.
S. Weiss
Course offers a critical examination of theories guiding therapeutic work to enhance family mental health. Diverse theoretical perspectives for assessment and interventions with troubled families will be analyzed, including structural, strategic, and communication frameworks as well as psychodrama. MENT HLTH COM ADM

243.02. Trends in Group Psychotherapeutic Modalities. (3) W. Sy. Prerequisite: N257 (Biological of Aging) or consent of instructor. Seminar 2 hours.
B. Furuta
Students will examine and discuss theories and practices of various group modalities in current use. MENT HLTH COM ADM

244A. Res Serv: Indiv, Fam, or Comm. (2-4) § F. Prerequisite: Completion of five-year requirements for the Ph.D. program in nursing or consent of instructor. Lecture 2 hours, Independent study 0-6 hours.
D. Weckes
Nursing 244ABC prepares students for original research through consideration of content methods and issues in an area of specialization. Nursing 244A focuses on evaluation of a content area and a presentation of research questions within it. MENT HLTH COM ADM

244B. Res Serv: Indiv, Fam, or Comm. (2-4) § W. Prerequisite: N244A or consent of instructor. Lecture 2 hours, Independent study 0-6 hours.
K. Lee
Nursing 244ABC builds upon prior research content to prepare students to develop and defend a plan for original research. Nursing 244D focuses on identification of research questions and framing of the areas of inquiry. FAM HLTH

245. Pediatric Critical Care Assessment. (2) § F. Prerequisite: Course given in conjunction with N224 (Pediatric Clinical Therapeutics). Lecture 2 hours.
M. Lynch
Nursing

Course focuses on the assessment of manifestations of pathophysiological phenomena in the pediatric critical care population. This assessment provides baseline data for management decisions and nursing care interventions. FAM HLTM

264. Contemporary Parenting. (3) § F, W, Sp. Prerequisite: Consent of instructor. Lab 3 hours. Seminar 2 hours. Staff

Course explores the evolving parent-child relationship. Focus is on adaptive tasks to manage environmental and interpersonal variables influencing the development of the parenting role. Nursing functions that support role acquisition and mastery are discussed. FAM HLTM

267. Pediatric Family Study. (1) § W. Prerequisites: N246, N279A, and enrollment in Pediatric Primary Care Program. Lab 2-3 home visits per quarter. Seminar 2 hours. M. Zewlaeck

Seminar focuses on family development in the first year of life with emphasis on parental concerns, children's growth and development, nutritional issues and family responses to pediatric primary care experience. Examines nursing's role in provision of primary care. FAM HLTM

267B. Pediatric Family Study. (1) § Prerequisites: N246, N247A, and N279A. Lab 2-3 home visits per quarter. Seminar 2 hours. M. Zewlaeck

Seminar focuses on family development in the first year of life with emphasis on parental concerns, childbearing practices, growth and development, nutritional issues, and family responses to pediatric primary care experience. Examines nursing's role in provision of primary care. FAM HLTM

248. Group Independent Study. (1-6) § F, W, Sp. Prerequisite: Consent of instructor. Lecture 1-6 hours. Staff

Students participate in clinical investigations and selected aspects of professional problems in nursing and health sciences under the direction of faculty. Students may select areas related to their long-term interest and future research or clinical program. INTERDEPARTMENTAL

249. Independent Study. (1-5) § F, W, Sp. Prerequisite: Consent of instructor. Lecture 1-5 hours. Staff

Student undertakes an individual study with emphasis on special problems in nursing. Students may select an area of study which is related to their area of interest or future goals. INTERDEPARTMENTAL

250. Research. (1-8) § F, W, Sp. Prerequisite: Admission to doctoral study and consent of instructor. Staff

Course offers students an opportunity to engage in research with selected faculty. INTERDEPARTMENTAL

250.1 Research Rotation. (1-6) § Su, F, W. Prerequisite: Completion of first year of doctoral study and consent of advisor. Lab 3-18 hours. Staff

The student will participate in ongoing faculty research. This experience will contribute to the student's methodological or substantive expertise. INTERDEPARTMENTAL

250.2 Clinical Research Rotation. (1-6) § Su, F, W. Prerequisite: Completion of first year of doctoral study and consent of advisor. Lab 3-18 hours. Staff

The student will participate in ongoing faculty research. This experience will contribute to the student's methodological or substantive expertise. INTERDEPARTMENTAL

251. Advances in Vascular Nursing. (3) § SS1, SS2, Su, F, W. Prerequisite: Consent of instructor. Learning modules 10 hours. M. Engler, M. Engler

Course examines the historical basis of treatment, intervention, rehabilitation, and rehabilitation in peripheral vascular insufficiency utilizing relevant research. Computer simulations facilitate synthesis and application of content. PHYSIOLOGI NURSES

252. Issues in Scientific Inquiry. (2-0) § F. Prerequisite: Consent of instructor. Restricted to: Doctoral level students who have completed the preliminary exam. Seminar 2-4 hours. Staff

Course provides a forum for discussion of issues in the conduct of scientific research. Emphasis is on presenting a current and accurate perspective of the content areas specific to the students' own interests. PHYSIOLOGI NURSES

253. Innovative Subsystems of Nursing Care. (3) § W. Restricted: Doctoral level—suggested D.N.S., Seminar 3 hours. I. Martinson

Course provides students with instruction in the development of a nurse-directed subsystem of care, including the capability to develop a functional, nursing system to plan design for collection and analysis of data needed for evaluation. FAM HLTM

254. Fetal-Newborn Development. (2) § Sp. Prerequisite: Consent of instructor. Lecture 2 hours. D. Affonso

Course is a study of human body systems development during embryonic, fetal, and postnatal growth. Emphasis is on normal anatomical and physiological development, critical periods of development, alterations, and transitions for extra-uterine adaptation. Implications for nursing practice are explored. FAM HLTM

255. Pediatric Health Assessment. (2-3) § Sp. Prerequisite: Consent of instructor. Restriction: For students entered 12U, evidence must be provided of a current supervised physical assessment experience. Lecture 2 hours. Lab 3 hours. M. Truskier, P. Jackson, K. Doderstadt

Course presents theoretical principles and assessment techniques for determining health status of children including history and physical examination. Focus is on collection and interpretation of clinical data. Laboratory or concurrent practicum required. FAM HLTM

255.02. Child Health Maintenance. (2-3) § F. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 0-3 hours. P. Jackson, K. Doderstadt

Course provides exploration of theories, concepts, and knowledge for comprehensive child health maintenance, encompassing prevention and promotion. Emphasis is on parents as participants in assessment, decision-making, and management of common health problems and normal developmental stresses in infancy and childhood. FAM HLTM

255.03A. Common Pediatric Illness Management. (2) § F. Prerequisite: Consent of instructor. Lecture 2 hours. P. Jackson

Course presents theories, concepts, and knowledge for comprehensive assessment and management of common pediatric illnesses. Emphasizes the most common acute conditions managed by a PNP in collaboration with pediatricians. Integrates history taking, physical findings, diagnosis, and management. FAM HLTM

255.03B. Common Pediatric Illness Management. (3) § W. Lecture 3 hours. M. Truskier, K. Doderstadt

Course presents theories, concepts, and knowledge for comprehensive care of children with common pediatric illnesses. Emphasizes common acute conditions managed by a clinical nurse specialist in Pediatric Primary Care in collaboration with a physician. FAM HLTM

256. Transitions & Health. (3) § W. Sp. Lecture 3 hours. Course may be repeated for credit. A. Meleis

Critical and analytical review of theories and research that links health of the individual and families to relocation and transitions. Focuses on responses and coping with situational, developmental, health-related, and sociocultural transitions. Nursing therapeutic theories will also be explored. MENT HLTM COM ADM

257. Biology of Aging. (3) § W. Seminar 3 hours. M. Wallagren

Course focuses on the biology, pathophysiology, and current theories of human aging. Clinical application of theory for nursing practice is provided. PHYSIOLOGI NURSES

258A. Family/Childbearing Theory. (3) § F. Seminar 2 hours. Field work 3 hours. J. DeLouchet

Course introduces students to the theoretical foundations of knowledge about the childbearing family. A selection of nursing theories is used to assist the student to analyze the psychosocial and physiological factors impacting the family during the childbearing process. FAM HLTM

258B. Family/Childbearing Phenomena. (3) § W. Seminar 2 hours. Project 3 hours. D. Affonso

Course studies phenomena identified in national reports for their theoretical, practical, and research implications. Phenomena include prevention of low birth weight infants, contemporary issues for childbearing families, cognitive model to assess cultural diversity in perinatal health care, and related legislation. FAM HLTM

258C. Family/Childbearing Theory. (3) § Prerequisite: N 258A and N258B. Seminar 3 hours. M. Gerbin

Clinical seminar addresses psychosocial and pathophysiologic issues of pregnancy, childbirth, parenting, and family/marital relationships during childbearing; focus on self-care practices for family; emphasis on midwife as facilitator of adaptation. FAM HLTM

259.1. Women's Reproductive Health. (1-5) § F. Lecture 1-5 hours. L. Lounetal

Course explores theories, concepts, and knowledge necessary to maintain and promote women's health. Emphasis is on application of current research, decision-making and management of pregnancy, the interconceptional period, and the climacteric, including collaboration with health team members. FAM HLTM

259.2. Special Problems in Women's Health. (1-5) § W. Prerequisite: Consent of instructor. Lecture 1-5 hours. Seminar optional 1 hour. D. Taylor, L. Lounetal

Emphasis is on theory and management of psycho-social, hormonal, and functional disorders including collaborative management of women manifesting these disorders. FAM HLTM

259.3. Advanced Women's Health Seminar. (2) § Prerequisite: Consent of instructor. Lecture 2 hours. D. Taylor, L. Lounetal

Course explores theoretical and management aspects of selected phenomena in women's health applicable to the nurse practitioner role. FAM HLTM

266A. Cultural Concepts in Hlth Care. (3) § F, W. Seminar 3 hours. J. Lipson

Course introduces basic concepts and ideas in medical anthropology and transcultural nursing. Provides opportunity to critically review research literature and discuss implications for nurses, other health care professionals. MENT HLTM COM ADM
A. Desai
Course explores theoretical and conceptual aspects of international and cross-cultural nursing. Topic areas include culture and ethnicity, social policy and international development; health planning; ethics; and cross-cultural communication. MENT HLTCH COM ADM

A. Davis
Seminar examines selected international nursing issues including primary care, nursing education, and nursing service, women's roles, and patients' rights. MENT HLTCH COM ADM

261. Mental Health Nursing and the Law. (2) § W, Sp. Prerequisite: Enrollment in M.S. program in Psychiatric Nursing or consent of instructor. Lecture 2 hours.
G. Gresham
Course reviews history and development of mental health legislation and decisional law in the U.S. and California. Explores current mental health laws as they relate to and influence the practice of psychiatric nursing in the public and private sector. MENT HLTCH COM ADM

262A. Women's Health Roles/Lives I. (1) § F, W, Sp. Prerequisite: Enrollment in Women's Health Nurse Practitioner Program or consent of instructor. Seminar 2 hours (every other week).
J. DeJoseph, J. Flanagan, D. Taylor
Seminar examines the analysis of issues influencing role transition, role enactment, scope and control of practice, and professional growth of the women's health nurse provider. FAM HLTCH

262B. Women's Health Roles/Lives II. (1) § W, Sp. Prerequisite: N262A. Seminar 1 hour.
J. DeJoseph
FAM HLTCH
Focuses on critical analysis of issues influencing restraint and enhancement of contemporary practice for women's health care providers. Impact of current legal, legislative, and ethical. MENT HLTCH COM ADM

264. Model Specification. (2-3) § F, Sp. Prerequisite: Enrollment in doctoral program and graduate level statistics course. Lab 1-3 hours. Seminar 2 hours.
Staff
Course reviews and analyzes the theoretical and mathematical bases of specifying and testing causal/predictive models in nursing. Analysis of the model includes assessment of model's validity and statistical assumptions and remedial steps to correct for distributional and/or specification violations. FAM HLTCH

264B. Model Testing and Respecification. (3) § W, Sp. Prerequisite: N264A. Seminar 3 hours.
Staff
Advanced methods in exploratory analysis of data set and respecification of models in nursing. Students test their own model using their own or a faculty-provided data base. Course includes an introduction to causal analysis and construction of analytical models. MENT HLTCH COM ADM

J. Conen
Course explores management of occupational hazards in the workplace. Topic areas include identification and control of job problems in occupational health, using medical, nursing, industrial hygiene, and epidemiological principles. MENT HLTCH COM ADM

266. Applied Pathophysiology of AIDS. (2) § F. Prerequisite: Undergraduate biology or consent of instructor. Lecture 2 hours.
A. Lewis, T. Moron, G. Gee
Course covers the recent news of the natural history of AIDS and AIDS-related diseases. Symptomology, diagnostic tools, treatment, and investigational protocols will also be reviewed. MENT HLTCH COM ADM

267. Ethical Dilemmas & Nursing Prac. (1) § F, W, Lecture 2 hours.
Library research 5 hours.
A. Davis
Course explores ethical issues, ethical dilemmas in health care and nursing practice. Focus is on selected cases depicting ethical dilemmas in nursing practice, nurse research, and health policy. MENT HLTCH COM ADM

268. Psychiatric Liaison Nursing. (2) § F, W. Prerequisite: N231A and enrollment in the child or adult psychiatric nursing specialty track, Department of Mental Health, Community, and Administrative Nursing, or consent of instructor. Lecture 2 hours.
L. Calvez
Course explores the emerging literature on psychiatric liaison nursing. Emphasis is on roles of psychiatric nurses in mental settings will be critically analyzed, as well as clinical studies from the archives of general hospital psychiatry. Comparative models of practice are discussed. MENT HLTCH COM ADM

M. Styles
This course is designed to explore major issues and trends in contemporary nursing and health care delivery as they relate to nursing practice, education, and research. MENT HLTCH COM ADM

270. Health Assessment of the Adult. (3) § Sp. Lecture 3 hours.
C. Dietrich
Course presents assessment techniques to determine adults' health status. Focuses on collection and interpretation of clinical data derived from history and physical examination. Emphasis on identification of normal and abnormal physical findings, actual and potential health problems, and appropriate responses. MENT HLTCH COM ADM

271A. Clinical Management in Adult Primary Care. (3-4) § F. Prerequisite: N270 or consent of instructor. Lecture 1-4 hours.
T. Mendelson
Introduces primary health care concepts essential to management of common physical illness in adults. Emphasis is on promotion of optimum client adaptation, selection of clinical interventions congruent with clients' adaptive potential, and incorporation of the nursing process into clinical decision-making. MENT HLTCH COM ADM

271B. Clinical Management in Adult Primary Care. (3-4) § W. Prerequisite: Consent of instructor. Lecture 1-4 hours.
E. Hughes
Introduces primary health care concepts essential to management of common physical illness in adults. Emphasis is on promotion of optimum client adaptation, selection of clinical interventions congruent with clients' adaptive potential, and incorporation of the nursing process into clinical decision-making. MENT HLTCH COM ADM

271C. Clinical Management in Adult Primary Care. (2-4) § Sp. Prerequisite: Consent of instructor. Lecture 2 hours. Independent study project for 3-4 units.
T. Mendelson
Introduces primary health care concepts essential to management of common physical illness in adults. Emphasis is on promotion of optimum client adaptation, selection of clinical interventions congruent with clients' adaptive potential, and incorporation of the nursing process into clinical decision-making. MENT HLTCH COM ADM

272. Chronic Illness: Child & Family. (3) § W. Prerequisite: N238A, Anthropology 235, Psychology 205, or consent of instructor. Lecture 3 hours.
D. Weeks
Course focuses on study of chronic illness in childhood and its effects upon the individual and his/her family. The presentation of content is based upon developmental and interactional models. Clinical content consists of objective assessment and intervention. FAM HLTCH

273A. Current Concepts in Occupational Health. (3) § F. Prerequisite: Consent of instructor. Lecture 3 hours. Seminar 1 hour.
J. Lipcomb
Course covers structure and organization of the occupational health system, regulatory control mechanisms for worker protection, and labor's role in health and safety. Major issues and trends in occupational health are explored. MENT HLTCH COM ADM

273B. Current Concepts in Occupational Health Nursing. (2) § F. Prerequisite: Consent of instructor. Lecture 2 hours.
B. Berkel
Course analyzes the role of the OHN in managing an occupational health service. Emphasis is on planning, development, and evaluation of occupational health programs. MENT HLTCH COM ADM

274. Health and Safety Hazards/Workplace. (3) § W. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours.
B. Nuehols
Course introduces principles of industrial hygiene and safety for identification of chemical, biologic, physical, ergonomic, and safety hazards of work. Students will identify environmental monitoring methods, select health surveillance and safety measures, and discuss methods to control exposures and injuries. MENT HLTCH COM ADM

275A. Physiological Basis for Nursing. (1-3) § F. Lecture 1-3 hours.
M. Engler
Course studies physiological theories applicable to nursing. Focus is on normal cell functions and nervous and endocrine systems functioning that serves as a basis for nursing practice. PHYSIOL NURS

275B. Physiological Basis for Nursing. (1-3) § W. Lecture 1-3 hours.
M. Engler
Course studies physiological theories applicable to nursing. Focus is on normal cell functions of gastrointestinal, cardiovascular, renal and pulmonary systems which serve as a basis for nursing practice. PHYSIOL NURS

275C. Neonatal Pathophysiology. (2) § Sp. Lecture 2 hours.
L. Weaver
Course is a study of the major disease processes encountered in the newborn and their relevance to nursing practice. The course will address etiology, manifestations and treatment during the acute phase of illness. FAM HLTCH

276. Theoretical Perspectives for Nursing Practice. (3) § F. Lecture 3 hours.
P. Benner
Comparative study of selected nursing concepts and theories and their implications for nursing practice, curriculum development, and research. Critique of current social, economic, and political conditions that influence the future of nursing. FAM HLTCH

277. Assessment/Management of Psychiatric Problems. (3) § W. Prerequisite: N270 or consent of instructor. Lecture 3 hours.
J. Fasceur
Course focuses on assessment and management of psychiatric and psychotic conditions. Course is designed to assist students in determining...
patients for management and for referral to and de-
velops psychological and social problem-solving.

MENTHHEH CM ADM

278. Nursing Science History & Philos. (4) F. Prerequisite: Doctoral-level standing or consent of instructor. Lecture 2 hours. Seminar 2 hours.

S. Gottner
course is an analysis of the history and philosophy of
nursing science in the United States and abroad, ad-
dressing the history of nursing science. It discusses
the history of nursing science. It discusses

FAM HILTH

279A. Family Nursing Theory. (3) F. Lecture 2 hours. Seminar 2 hours every other week.

C. Chesla
Course provides an introduction to family theories
about systems, development, and stress. The courses
identify the relationship of stress on family health or
illness and examine ways to apply family theories to
nursing practice. Seminar includes a focus on inter-
vention techniques to assess family health. FAM HILTH

279B. Family Nursing Interventions. (3) W. Prerequisite: N726A or consent of instructor. Lecture 2 hours. Seminar 1 hour.

C. Gilles, C. Cheslak, M. Levitt
Course integrates family theoretical and therapeutic
courses that provide an introduction to family nursing
assessment and intervention strategies for family problems in health and illness.

FAM HILTH

279C. Cultural Issues in Family Health. (3) S. Prerequisite: N279D and consent of instructor. Lecture 1 hour. Seminar 1 hour.

F. Dresser
Course involves analysis of family, cultural, and
behavioral theories and issues leading to clinical inter-
ventions in family nursing. FAM HILTH

279D. Family Self Care. (2-3) S. W. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours (optional).

M. Sasser
Course examines self-care activities of families and
their members from a primary care perspective. Em-
phasis includes reviewing current theories, research,
and practice related to family self-care in health and illness.

FAM HILTH

280. Ind Primary Health Care. (2-5) W. Seminar 2 hours.

J. Lipson
Seminar is a discussion of assigned readings on the
political economy and practical implementation of
community-oriented primary health care programs in the
international realm, including the discussion of the
impact of the development of these programs. MENTHHEH CM ADM

281A. Res Sess: Hth & Its Correlates. (2-5) W. Prerequisite: Enrollment in Ph.D. program in nursing or consent of instructor. Seminar 2 hours.

M. Sardina, J. Broscious
Examination and analysis of theory and research re-
lated to health care of adolescents and their families in
a variety of settings. Emphasis will be on adaptation to
selected stresses including trauma, chronicity, hospital-
ization, terminal illness and disability. FAM HILTH

285. Assessment of Women's Health. (3) S. Prerequisite: Consent of instructor. Restriction: Women's Health Nurse Practitioner students. Lecture 2 hours. Lab 3 hours.

J. Neesen, L. Lommed
Course presents the current theories of health assess-
ment. Course incorporates clinical knowledge and
practical skills in the assessment of health problems. Emphasis will be on the integration and application of
theories. FAM HILTH

286A. Research in Stress & Coping. (3-4) F. Prerequisite: Consent of instructor or doctoral-level theory development. Lecture 3 hours. Contract for 1 hour for proposal development (optional).

P. Benner
Course critically analyzes the relationship of stress and
coping to health and illness. Emphasis is placed on
theoretical and empirical links between coping strategies and therapeu-
tic interventions. Emphasis is on research pro-
grams. PHYS 1060

286B. Stress & Coping in Cancer. (3-4) W. Prerequisite: Consent of instructor. Lecture 3 hours. Contract for 1 hour for research proposal (optional).

P. Benner
Course critically analyzes the relationship of stress and
coping to health and illness. Emphasis is placed on
theoretical and empirical links between coping strategies and therapeu-
tic interventions. Emphasis is on research pro-
grams. PHYS 1060

287A. Organizational Theory & Research. (3) F. Prerequisite: Consent of instructor. Lecture 3 hours.

M. Flood
A critical review and analysis of major organizational
theories and research. Emphasis is on the use of
organizational theories to examine the characteristics of health service
organizations and the role of managers. MENTHHEH CM ADM

287B. Behavior in Organizations. (3) W. Prerequisite: N278A and consent of instructor. Lecture 3 hours.

M. Flood
Course examines the characteristics, causes, and con-
sequences of behavior and experiences of individuals in
their function in organizations. Emphasis is on per-
sonnel management and other managerial functions.
MENTHHEH CM ADM

287C. Processes in Administration. (3) S. Prerequisite: N278A and consent of instructor. Lecture 3 hours.

M. Flood
Course emphasizes the behavior and experiences of
individuals in their function in organizations. Emphasis is on per-
sonnel management and other managerial functions.
MENTHHEH CM ADM

287D. Financial Management for Nurse Adminis-
trators. (4) W. Lecture 3 hours. Lab 3 hours.

V. Cleland
Course offers an introduction to financial accounting
principles as they relate to financial management in health
settings. Emphasis is on the role of nurses in financial management.

FAM HILTH

288A. Executive Nursing Administration. (3) F. W. Prerequisite: Consent of instructor. Seminar 3 hours.

V. Cleland
Seminar offered to doctoral students, analyzing theo-
ries and research related to executive nursing roles in
academic and service settings. Course examines ad-
ministrative concepts pertaining to governance, use of
power, corporate design, and executive scholarship.
MENTHHEH CM ADM

288B. Cost Methodology in Nursing. (3) F. W. Prerequisite: N2111B8 (Critique of Management Research) or equivalent, N287D (Financial Manage-
ment for Nurse Administrators) or equivalent, and doctoral study or consent of instructor. Lecture 2 hours. Field work 3 hours.

V. Cleland, S. N allinger
Course is a critical analysis of accounting and economic principles relating to the cost of nurs-
ing care. Cost methodology is used to determine cost of service, cost averages, marginal costs, cost-effec-
tiveness, and cost-benefit. MENTHHEH CM ADM

288C. Academic Administration Seminar. (3) F. W. Prerequisite: Consent of instructor. Seminar 3 hours.

V. Cleland
Seminar designed for doctoral students in nursing
administration interested in the field of administrative
nursing. Course analyzes and evaluates theories, models, principles, and practices relative to administra-
tive roles in diverse academic settings. MENTHHEH CM ADM

289. Labor Relations. (3) S. W. Prerequisite: Consent of instructor. Lecture 3 hours.

W. Naff
Course critically analyzes organization and exchange
theories relative to managing employer-employee
relations in health care and educational settings. Em-
phasis is on labor movement, labor legislation and
regulation, contract negotiations, and grievance pro-
cedures. MENTHHEH CM ADM

290. Family Health Nursing Theory. (3-4) S. W. Prerequisite: Enrollment in doctoral program. Lab 6-3 hours. Seminar 3 hours.

S. Rankin
Comparative analysis of clinical theories and meth-
ology for delivering a theory-based approach to family health
nursing. Emphasis is on an interpersonal, role-
structural, and functional theories. MENTHHEH CM ADM
Course is an analysis of critical care patient data using the computer. Emphasis is on conceptualizing the set of data needed for decision making and using the computer to aid in clinical decision making.

PHYSiol NURS

295. Quasi-Experimentation in Nsg Res. (3) S, F. Prerequisite: Consent of instructor. Seminar 3 hours.

W. Holzemer Seminar addresses validity issues of quasi-experimentation in nursing research. Design and evaluation of nursing literature include non-equivalent control group designs, interrupted time-series designs, quasi-experimental, and randomized experiments. MENT HLTH COM ADM.

296. Teaching-Learning Processes. (3) S551 or S52, W. Prerequisite: Consent of instructor. Lecture 2 hours. Seminar 2 hours.

N. Okamoto Course analyzes principles, theories, and research in the field of teaching with emphasis on teaching strategies and evaluation methods applicable to clinical and educational settings. A microteaching format is incorporated for application and evaluation of selected teaching interactions.

PHYSiol NURS

297. Human Responses to Pain. (2) F. Lecture 2 hours.

M. Sauders Course explores research related to physiological, psychological, and social responses to human pain and practical implications for pain assessment and management of acute and chronic painful conditions across the life span. MENT HLTH.

298. Thesis or Comprehensive Exam. (9) S, W. Prerequisite: Consent of instructor. Seminar 3 hours.

W. Holzemer For graduate students engaged in writing the thesis for the master's degree or taking a comprehensive examination required for the master's degree.

299. Dissertation. (0) S, W. Prerequisite: Advancement to candidacy and permission of the graduate advisor.

201. Teaching Residency. (4-12) F, W. Prerequisite: Consent of instructor. Lab 12-36 hours.

Staff Opportunity to apply and evaluate theories, concepts, and skills in the work setting under the supervision of a preceptor. MENT HLTH COM ADM.

202. Administration Residency. (2-12) SS1, SS2, F, W. Prerequisite: Completion of N257ABC and N257C. Design a grade of B or higher, and consent of instructor. Lab 6-36 hours.

Staff Opportunity to apply theory in clinical practice to further develop skills and to extend clinical expertise in selected areas of mental health and community nursing. Guided clinical laboratory experience is designed to develop mastery of advanced skills. MENT HLTH COM ADM

405. Health Assessment of the Adult Clinical Practicum. (3) SS2. Prerequisite: Must be taken concurrently with N270. Lab 4 hours. Clinical 5 hours/week.

Staff Applications of health assessment concepts and skills under supervision of clinical preceptors. Performance of systematic health assessment of adults leading to a growing ability to differentiate between normal and abnormal findings to identify threats that arise from physical, social, and development of care, and to formulate an initial problem list that reflects the above. MENT HLTH.

406ABC. Practicum in Family Health Care Nurs. (1-6) F, W. Prerequisite: Consent of instructor. Lab 3-24 hours.

Staff Course provides student opportunity to apply theory in clinical practice to further develop skills and to extend clinical expertise in selected aspects of family health care nursing. Guided clinical laboratory experience is designed to develop mastery of advanced skills. MENT HLTH.

407. Practicum in Physiological Nursing. (1-8) S, F, W. Prerequisite: Consent of instructor. Lab 3-24 hours.

Staff Opportunity to apply theory in clinical practice to further develop skills and to extend clinical expertise in selected aspects of physiological nursing. Guided clinical laboratory experience is designed to develop mastery of advanced skills. PHYSiol NURS

407. Clin Mgmt of Older Adults. (2-5) F, W. Prerequisite: N242B (Care of Acute) or N242A (Concurrent) and N257 (Biological Aging). Lab 6 hours.

M. Wallenbom Course provides opportunities for skill development in comprehensive assessment of acutely ill older adults. It emphasizes problem identification as a basis for planning scientifically based care from a multidisciplinary perspective and within the context of the life continuum.

PHYSiol NURS

410. Teaching Practicum. (1-8) S, F, W. Prerequisite: Consent of instructor. Lab 3-24 hours.

Staff Supervised practice in selected components of the teaching role in nursing.

411A. Introduction to Computers. (2) F, W. Lecture 2 hours.

R. Slaughter Course presents overview of the impact of computer technology upon nursing. Focus is upon hardware and software for nursing in the mainframe to microenvironments. Word processing for scientific writing using IBM PC is integral part of the course.

PHYSiol NURS
Nutrition

Application of current maternal nutrition research to train students in working with other health professionals to offer interdisciplinary maternal nutrition counseling in the prevention of low birth weight. Emphasis will be on cross-cultural factors in assessment and counseling. FAM HLTH

202. Family Nutrition Counseling. (3). F. Pre- requisites: Consent of instructor. Lecture 3 hours. Y. Gutierrez
Theory and practice in the interpretation of current concepts, principles, and research in nutrition for family counseling. Emphasis on cultural dietary patterns. FAM HLTH

208. Childhood Nutrition. (2-3). S. Lecture 2 hours. Lab 1 hour. Y. Gutierrez
Course provides study of nutritional principles, concepts, and knowledge related to infants and children, both healthy and ill. Emphasis is on growth processes, feeding practices, disease- and nutrition-related nutritional deficiencies, common problems, and intervention approaches. Cross-cultural aspects included. FAM HLTH

Obstetrics, Gynecology and Reproductive Sciences

110. Ob/Gyn Core Clerkship. (1.5 per week) SS1, SS2, SSu, F, W, Sp. Prerequisite: Medicine 132A-B-C. R. Glass, Braga
Basic principles and fundamental techniques in obstetrics and gynecology are discussed in a series of seminars, case discussions, and teaching clinics. Students gain practical experience in clinics, wards, delivery room, and operating room under direct supervision. OB GYN R S

140.02. Advanced Clinical Clerkships. (1.5 per week) Su, F, W, Sp. Prerequisite: Satisfactory completion of Obstetrics and Gynecology 110, Pediatrics Core Clerkship and 110, and either Medicine 110 or Surgery 110 Core Clerkships. Braga
Advanced clinical clerkship, obstetrics, and gynecology at other accredited hospitals, as individually arranged, and approved by department. OB GYN R S

140.05. Advanced Ob/Gyn Clerkship—VMC. (1.5 per week) Su, F, W, Sp. Prerequisite: Satisfactory completion of Obstetrics and Gynecology 110, Pediatrics 110, and Medicine 110 or Surgery 110. Open only to 4th-year medical students of schools in U.S.A. and Canada. Rayas, Cooke, Suedio
Practical clinical training in obstetrics and gynecology at Valley Medical Center of Fresno. Time is divided between labor and delivery experience, gynecologic ward, and obstetrics and gynecology outpatient clinic. Students will have the opportunity to see normal, high-risk, and adolescent pregnancies. OB GYN R S

140.06. Advanced Ob/Gyn Clerkship—SFCH. (1.5 per week) Su, F, W, Sp. Prerequisite: Obstetrics and Gynecology 110, Pediatrics 110, and either Medicine 110 or Surgery 110, or consent of instructor. R. Sweet and Staff
The clerk will function as an acting intern on the gynecologic inpatient service. Some gynecologic outpatient and emergency experience will be possible as well as inpatient and surgical gynecology. OB GYN R S

140.07. Advanced Gyn Clerkship—UC. (1.5 per week) Su, F, W, Sp. Prerequisite: Obstetrics and Gynecology 110, Pediatrics 110 and Medicine 110 or Surgery 110, or consent of instructor. Powell
The clerk functions in the role of an acting resident on the gynecologic service. Responsibilities are primarily on the inpatient service and will include both surgical and nonsurgical aspects of gynecologic oncology, endocrinology, infertility, and general gynecology. OB GYN R S

140.08. Ob/Gyn Preceptorship. (1.5 per week) Su, F, W, Sp. Prerequisite: Obstetrics and Gynecology 110 and consent of instructor and chairman of the department. Staff
Clinical experience in a subspecialty area or general obstetrics and gynecology under the direction of a member of the faculty. OB GYN R S

140.09. High-Risk Pregnancy—Advanced Senior Electroive. (1.5 per week) SS1, SS2, Su, F, W, Sp. Prerequisite: Obstetrics and Gynecology 110. Kitzmiller and Staff
Advanced clerkship focusing on outpatient special obstetrical care: clinics and inpatient management of high-risk antepartum patients. Duties will include presentations at conferences and journal clubs. OB GYN R S

150.01. Research in Ob/Gyn & Repro Sci. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor and chairman of the department. Staff
A nonclinical research project under the direction of a member of the faculty. OB GYN R S

An opportunity for first- and second-year students to spend time in clinical faculty offices and be exposed to the field of general Ob/Gyn. OB GYN R S

A survey of the social, cultural, and psychological factors that determine food behavior in the individual. Lectures, discussion and readings will identify barriers to healthy food patterns. Brief written assignments and class discussions will develop practical approaches to the provision of nutritional care. OB GYN R S

198. Supervised Study. (1-5) Su, F, W, Sp. Prerequisite: Consent of instructor. Staff
Library research and directed reading under supervision of a member of the faculty with approval of the chairman of the department. OB GYN R S

199. Laboratory Project. (1-5) Su, F, W, Sp. Pre- requisites: Consent of instructor. Staff
A laboratory research project under direction of a member of the faculty with prior approval of the chairman of the department. OB GYN R S

Seminar presentations in areas of current interest in reproductive endocrinology by guest speakers and members of the Reproductive Endocrinology Center. Students will be required to submit a term paper. Course may be repeated for credit. OB GYN R S

231. Hormone Receptor Binding. (2) F. Prerequisite: Consent of instructor. Lecture 2 hours. J. Roberts
An in-depth assessment of the characterization of hormone receptor interactions by ligand binding methods. Lectures, assigned readings, and problems will focus on theoretical and practical aspects of techniques and data analysis. OB GYN R S

400. Staff Conferences. (1) Su, F, W, Sp. Prerequisite: Practicing physicians only. Jaffe and Staff
Conferences comprised of formal discussions by staff, faculty, and visiting lecturers. OB GYN R S

Seminar includes the presentation of pathologic material from the obstetric and gynecologic services with formal instruction and discussions. OB GYN R S

Seminar includes presentations of special topics, literature reviews, and discussions. Discussions of resident staff functions are also held. OB GYN R S

Residents are responsible for the care of patients in the hospital and outpatient clinic. Formal and individual instruction is conducted. OB GYN R S

Ophthalmology

First-Year Coordinated Instruction—Medicine 131A-B-C. Lecture-demonstration and section work devoted to the supervised examination of patients.

Core Clerkship—Surgery 110 and 111 include lectures and clinical experience in the diagnosis and care of eye diseases.

140.01A. Advanced Ophthalmalogy clerkship. UC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Surgery 110 or consent of instructor. Drake
Students will serve as attendings on the ophthalmology ward. They will work up and present patients, and attend surgery and postoperative clinics. This is an intensive clerkship where students will be on rotation for four hours each week.
Oral Biology/Oral Diagnosis

221. Extracellular Matrices. (2) 5 F. Prerequisite: Consent of graduate advisor and instructor. Seminar 2 hours.

Dansky
Assembly and composition of extracellular matrices, including interactions that occur between cells and matrices. Emphasis on the role of various extracellular matrices during development, function of cell-matrix interactions in the adult, and the perturbations of these relationships that accompanies various disease processes. STOMATOL.

222. Mineralization. (2) W. Prerequisite: Oral Biology 231. Consent of graduate advisor and instructor. Seminar 2 hours.

Kraemer
Recent information on cell biology and physiology of mineralized tissues, and cell biology and development of cell types that produce the extracellular matrices that are subsequently mineralized. Emphasis on process of mineralization and the diverse regulation of mineral deposition and mobilization. STOMATOL.

223. Cell Physiology. (2) 5 1 hour. Lecture 1.5 hours, Conference 0.5 hours.

Rothman, Sherlock, A. Miller, Gruenew
Survey of selected topics in cellular physiology, including a discussion of cell permeability, electrical properties of cells, muscle contraction, secretion, and stimulus-response coupling. STOMATOL.

224. Host Response. (2) W. Prerequisite: Consent of graduate advisor and instructor. Seminar 2 hours.

Perreia
Components of the immune system, survey of the various immunologic mechanisms in host responses, and current working concepts of the immune system. Overview of consequences that failure, exaggeration, or inability to distinguish self from non-self, may have for the host. STOMATOL.

225. Oral Microbiology and Virology. (2) S. Prerequisite: Oral Biology 224 or consent of graduate advisor and instructor. Lecture 2 hours.

Armitage, Newman, Bramanti, Winkler, Johnson, Richards
Current information on pathogenic mechanisms involved in oral diseases, with emphasis on the structure metabolism, genetics and ecological relationships of bacteria and viruses that affect oral tissues. STOMATOL.

226. Advanced Oral Microbiology. (3) Sp. Prerequisite: Oral Biology 224 & 225 or consent of graduate advisor and instructor. Lecture 3 hours.

Armitage, Newman, Bramanti, Winkler, Johnson, Richards
Current information on host defenses in oral microbiology began in Oral Biology 225. In-depth study of the structure, metabolism, genetics, and ecological relationships of bacteria, viruses, and fungi that affect oral tissues. STOMATOL.


Staff
STOMATOL.

Oral Diagnosis


Staff
Students review a small group of related papers and examine intensively the most significant paper. Students will present four such Journal Club talks in their first two years. A written report will be required in the other quarter. STOMATOL.


Reading and conferences under the direction of a member of the staff. STOMATOL.


Prerequisite: Advancement to candidacy and permission of the graduate advisor.

Staff
For graduate students engaged in writing the thesis for the master's degree. STOMATOL.

300A-B-C-D. Teaching Practicum. (1-4, 1-4, 1-4, 1-4) 5 F, W, Sp, SS.

Prerequisite: Consent of instructor.

Staff
Practice in teaching in a course in oral biology under the supervision of the instructor in charge. STOMATOL.


Seminar 1 hour.

Staff
A wide spectrum of selected topics related to oral biology is presented with emphasis on the research and applied research methodology, pertinence of problems, significance of findings, and critical evaluation of data. STOMATOL.

Oral Diagnosis


Danford
Dental clinical problem solving: recognition and resolution. Clinical activities include review of medical and dental histories; examination of oral and paroral structures; radiographic, prescriptive, technical and interpretative; referral for appropriate medical or dental treatment; diagnosis and treatment of acute dental problems; management of the dental patient in pain, or during comprehensive dental treatment. STOMATOL.


Prerequisite: Successful completion of Oral 129, Rest Dent 116BAC, 126A-B-C.

Clinical 6 hours

Danford
Recognition and resolution of dental clinical problems. Emphasis is on management of the patient in pain during clinic hours and off-call after hours. Students will examine oral and paroral structures; review case histories for clinical implications for dental therapy prescriptions, make and interpret dental radiographs; treat or refer to appropriate sources. Senior students will take the place of teaching assistants for their junior colleagues. Seniors will present cases. STOMATOL.


Prerequisite: Oral 129 and senior dental hygiene course. Clinical 3 hours.

Danford, Angin
In the clinical setting, the students review medical and dental histories; examine oral and paroral structures; make intra- and extraoral dental radiographs; chart and present findings; function as a team member to deliver of treatment of dental disease with the dental students and faculty. Emphasis is in the first patient visit for routine or emergency care to the dental school. STOMATOL.


Dunford
Advanced instruction and clinical experience in the diagnosis and treatment of acute dental problems. STOMATOL.

Oral & Maxillofacial Surgery


Prerequisite: Third-year standing. For senior rotation student must have passed Oral & Max Surgery 120, 130.01, 130.02, 130.03, 131.02, and 132 or have consent from the course supervisor. Clinical variable.

R. Smith, Gordon, Pogrel
Students learn to recognize and treat common dental and medical emergencies; perform routine extractions and minor surgical procedures; assist on major procedures in operating room setting; utilize common techniques of pain and anxiety control; assist with admission, ward and discharge of hospital patients. ORAL & MAX SURG.

120. Local Anesthesia. (0.5) 5 Sp. Lecture 1 hour.

R. Smith, Gordon, Perrott
Course covers local anesthetics and techniques as they pertain to the dentition and oral cavity. ORAL & MAX SURG.


Prerequisite: Anatomy 117.01, 117.02, and Microbiology 116. Lecture 1 hour. Laboratory research 1 hour.

Gordon, R. Smith, Perrott
An introduction to the basic principles of exodontia, dentalveolar surgery, postoperative care, hemorrhage control, and management of complications. ORAL & MAX SURG.

130.02. Pain & Anxiety Control. (1) F. Prerequisite: Anatomy 117.01, 117.02, and Microbiology 116. Lecture 1 hour.

Gordon, R. Smith, Perrott
A didactic course outlining the basic principles and techniques of pain and anxiety control in the dental office. Emphasis is on sinus oxygen and cryogen and intravenous sedation. ORAL & MAX SURG.

130.03. Diagnosis & Treatment of Oro-facial Pain. (1) W. Prerequisite: Anatomy 117.01, 117.02, and Microbiology 116. Lecture 1 hour.

R. Smith, Gordon, Kaban
A didactic course covering current advances in the field of pain and a variety of topics such as physical evaluation of the postural pattern, temporomandibular joint dysfunction, myofacial pain and neuralgic pain. ORAL & MAX SURG.


Prerequisite: Oral & Max Surgery 130.01, 130.02 and 130.03 or consent of instructor. Lecture 1 hour.

R. Smith, Kaban, N. Gordon
Procedural skills and academic knowledge: the general dentist should be familiar with: preprosthetic surgery and implantology, treatment of developmental and acquired deformities of the jaws, infections, temporomandibular joint, fractures of the jaws and contiguous structures, oncosurgery. ORAL & MAX SURG.

132. Medical Emergencies & CPR. (1) F. Prerequisite: Third-year dental standing.

R. Smith
This course covers the prevention and management of medical emergencies in the dental office. There is discussion on the management of the medically compromised patient. CPR training is also provided. ORAL & MAX SURG.


Prerequisite: Restriction: This course is offered for first-year dental hygiene students. Lecture 1 hour.

R. Smith, Walsh
This course offers the same lectures about prevention and management of common medical emergencies as are given to third-year dental students (122). However, the prerequisites do not apply, and the academic standards are adjusted to the student's background. CMPEG 152 does not count for the CPR experience. ORAL & MAX SURG.


Prerequisite: Fourth-year standing and approval of department chairperson.

R. Smith, Gordon
Clerkships at UC, affiliated or other institutions. Students participate in oral surgery care of emergency and hospitalized patients and attend seminars and conferences. ORAL & MAX SURG.

199. Laboratory Project. (1-5) F, W. Prerequisite: Approval of laboratory project by department chairperson. Lab 3-15 hours.

Kaban & Staff
A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. ORAL & MAX SURG.

470. Clinical Methods. (2.5) F. Prerequisite: Enrollment in a postgraduate specialty program or consent of instructor. Lecture 2 hours. Patient contact 2 hours.
Oral Medicine

122. **Clinical Oral Medicine.** (4) S. Prerequisite: Oral Pathology 127A and 127B. Lecture 4 hours. Greenspan

Introduction to recognition, diagnosis and treatment of oral manifestations of systemic diseases, and principles of clinical medicine through presentation of the mechanisms, diagnosis and treatment of common organ system diseases. Will present modifications necessary for the dental treatment of patients with these diseases. STOMATOL.

130. **Clinical Oral Medicine.** (2) Su. Prerequisite: Oral Medicine 122; second-year standing. Lecture 2 hours.

Silverman

History-taking, differential diagnosis, and therapy. Signs, symptoms, diagnosis, and treatment of oral mucosal disease with emphasis on oncology. Management problems and solutions. STOMATOL.


Chion, Zier and Staff

Group rotation through a five-week section: clinical diagnosis—patient presentation—examination—history-taking, examination, diagnosis, treatment, and follow-up; and medicine—introduction to internal medicine and physical diagnosis. STOMATOL.

180A-B. **Clinical Oral Medicine Conference.** (1-1-3) F, W. Prerequisite: Fourth-year standing. Conference 1 hour.

Lorenda-Nur, Silverman and Staff

Clinical pathology conference, biology, diagnosis, and treatment of various oral lesions and associated patient problems. Some oral conditions are critically re-evaluated in the light of current research advances. Specific medical knowledge is related to patient care. STOMATOL.

189. **Clinical Oral Medicine.** (1-4) Su, F, W, W. Prerequisite: Third- or fourth-year standing and consent of instructor. Clinic 3-18 hours.

Silverman and Staff

Participation in the Oral Medicine Clinic: apply knowledge of history-taking and differential diagnosis; utilize various diagnostic techniques such as biopsy, cytology, and certain clinical pathology laboratory tests; interpret results, prescribe treatment and follow-up; hospital rounds and weekly seminar. STOMATOL.

199 Laboratory Project. (1-5) F, W, W. Prerequisite: Consent of instructor. Lab 3-15 hours.

Daniels

A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the division. STOMATOL.

208A-B. **Oral Pathology Seminar.** (3-3) F, W. Seminar 3 hours.

Daniels

Lecture seminar on diseases of the jaws, oral mucosa and salivary glands. Disease entities are studied through review of current literature and presentation of these clinical and histopathological features, with emphasis on pathogenesis, diagnosis and management. STOMATOL.

208A-B. **Oral Pathology Seminar.** (3-3) F, W. Seminar 3 hours.

Daniels

Lecture and seminar on diseases of the jaws, oral mucosa and salivary glands. Disease entities are studied through review of current literature and presentation of their clinical and histopathological features, with emphasis on pathogenesis, diagnosis and management. STOMATOL.
Course teaches diagnosis, treatment planning, and treatment. Course title: "Clinical management of malocclusion on a systematic basis. The biologic basis for orthodontic treatment with respect to facial growth and development and the application of differential diagnosis is presented." GR DEVEL.

173A-B.-C. Orthodontic Surgery Conference. (1-1-1) F, W, Sp. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lecture 1 hour.

R. Boyd

Postdoctoral students in orthodontics, prosthodontics, and oral and maxillofacial surgery will participate in the evaluation and planning treatment for patients with facial and occlusal deformities requiring combined dental/orthodontic treatment. Periodic review and presentation of previously treated patients will be included. GR DEVEL.

173.01A-B.-C-D.-E. Orthodontic Seminar. (3-5,3,5,3-5) F, W, Sp, SS1, SS2. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Seminar 3-5 hours.

R. Boyd

Evaluation and treatment planning of various types of malocclusion will be presented. The seminar will include discussions of various basic science, clinical science, and general biological principles, as they apply to the field of orthodontics. GR DEVEL.


R. Boyd

This seminar is designed to integrate the second-year residents' postdoctoral orthodontic education with the private practice of orthodontics. GR DEVEL.

174. Biomechanics & Tooth Movement. (2) F, W, SS1, SS2. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lecture 2 hours.

Yoshikawa

Fundamental concepts of force systems will be presented. Included are equilibrium, force equivalency, and free-body analysis. Concepts will be related to orthodontic tooth movement, appliance design, and biological response to force application. GR DEVEL.

174.01. Periodontics & Orthodontics. (1) Su. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lecture 1-2 hours.

R. Boyd

Course focuses on periodontics and orthodontics and is reviewed and discussed. Case presentations involving treatment between the two specialties are discussed and evaluated by students and faculty. Emphasis is placed on advances in preventive procedures and their impact on orthodontic treatment. GR DEVEL.

174.02. Orthodontic Techniques. (3) SS1, SS2. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lecture 3 hours.

R. Boyd

This course will provide the resident with the basic clinical skills for recognizing, diagnosing, and treating patients with TMJ pain, TMJ dysfunction, and facial pain in a "team environment" (i.e., prosthodontist, orthodontist, oral surgeon, psychiatrist, dentist, ENT, physical therapist, etc.). GR DEVEL.

175A-B.-C. TMJ Pain & Dysfunction Clinic. (0-3) F, W, Sp. Prerequisite: Resident standing in Orthodontics. Clinic 3 hours.

R. Lee

This course will provide the resident with the basic clinical skills for recognizing, diagnosing, and treating patients with TMJ pain, TMJ dysfunction, and facial pain in a "team environment" (i.e., prosthodontist, orthodontist, oral surgeon, psychiatrist, dentist, ENT, physical therapist, etc.). GR DEVEL.

175.01A-B.-C.-D.-E. Clinical Orthodontics I. (0-7) SS1, SS2, F, W, Sp. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lab variable. Clinic 0-21 hours.

R. Boyd

Diagnostic, treatment, and evaluation of clinical postdoctoral orthodontic problems as experienced in modern orthodontic practice. Students will treat patients with a broad spectrum of orthodontic problems. Students will work with other specialists in the management of complex orthodontic problems. GR DEVEL.

175.01A-B.-C.-D.-E. Clinical Orthodontics II. (0-7) SS1, SS2, F, W, Sp. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lab variable. Clinic 0-21 hours.

R. Boyd

Diagnostic, treatment, and evaluation of clinical postdoctoral orthodontic problems as experienced in modern orthodontic practice. Students will treat patients with a broad spectrum of orthodontic problems. Students will work with other specialists in the management of complex orthodontic problems. GR DEVEL.

175.01A-B.-C.-D.-E. Ortho General Interaction. (1-3-1-3) F, W, SS1, SS2, S1, S2. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lecture 1 hour.

R. Boyd
Orthopaedic Surgery

First-Year Coordinated Instruction—Medicine

121A—B,C. Lecture-demonstrations and section work devoted to the supervised examination of patients.

Core Clerkship—Surgery 110 and 111 includes seven to eight orthopaedic lectures, case presentations, and outpatient clinic assignments. Students are given instruction in the examination of patients with musculoskeletal disorders, with emphasis on diagnosis and principles of treatment. 140.01A—B—C,D. Clinic Clerkship—UC-SFGH-SFGH ER-V.A. (1.5 per week) Su, F, W, Sp. Prerequisite: Surgery 110 and 111. Must be a senior. W. Murray, Day, Mauser, Students, assigned to inpatient and outpatient services, receive instruction and experience in examination and treatment of patients. Assistance in surgery, and in the use of treatment modalities is required. Clinical demonstrations, seminars, and conferences form the basic format. ORTHO SURG

140.02. Off-Campus Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Surgery 110 and 111. W. Murray,

Orthopaedic surgery clinical clerkships are offered in off-campus hospitals approved by the chairperson of the department and the dean. ORTHO SURG

140.03. Rehabilitation Medicine—S & VA. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 or Pediatrics 110. Carpentdale

Course will provide knowledge and skills in electrodiagnosis, neuromotor rehabilitation, spinal cord injury, closed head trauma, the rheumatoid patient, orthopaedic rehabilitation, hazards of bed rest, and acute and chronic low back pain. ORTHO SURG

150.01. Research in Orthopaedic Surgery. (1.5 per week) Su, F, W, Sp. Prerequisite: Surgery 110 and 111 and permission of instructor. Skinner

Research project under direction of a member of the faculty. ORTHO SURG


Fracture conference on patients admitted to the emergency room, with emphasis on X-ray findings and treatment modalities. ORTHO SURG

199. Laboratory Project. (1—5) Su, F, W, Sp. Prerequisite: Consent of instructor. Lab 3—15 hours. Skinner

A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. ORTHO SURG

401. Orthopaedic Pathology. (1) W. Prerequisite: Third- and fourth-year residents. UC J. Johnston

A lecture series covering tumors and infections of the musculoskeletal system, illustrated by microscopic slides and photographs of gross specimens. ORTHO SURG

402. Musculoskeletal System Physiology. (1) F, W, Sp. Staff

Seminars cover connective tissue metabolism; muscle, bone, and joint physiology; preoperative and postoperative management of patients; wound infections; microbiology; and surgical principles. ORTHO SURG

403. Gross & Functional Anatomy. (1) Su. Staff

Course includes lectures by students and faculty on gross and functional anatomy, laboratory directions of cadaver material, and demonstrations of surgical approaches. ORTHO SURG

404. Orthopaedic Literature. (1) F, W, Sp. Residents at C, DMC, SFGH, SSF, UC and V.A. Staff

Seminars are student presentations of selected orthopaedic surgery subjects featuring historical review complete with bibliography. They are moderated by an assigned faculty member. ORTHO SURG

406. Orthopaedic Medical Staff Conf. (1) Su, F, W, Sp. UC W. Mauser

Clinical instruction in the care and management of orthopaedic problems in rheumatoid arthritis and allied diseases. Cases are presented by residents to attending staff and rheumatology consultants. ORTHO SURG


Seminars include presentation of problem cases by residents for consideration of diagnosis, treatment, and discussion by the attending staff. ORTHO SURG

408. Orthopaedic Surgical Conference. (1) Su, F, W, Sp. SFGH Staff

Selected problem cases are illustrated by cases treated or under treatment. Cases are presented by the resident staff and discussed by members of the attending staff. ORTHO SURG

409. Orthopaedic Surgical Conference. (1) Su, F, W, Sp. SFASH Ashley

Conference with emphasis on children's problems in which residents make case presentations of inpatients for review and for new patients for consideration of diagnosis and therapeutic plan. ORTHO SURG

410. Orthopaedic Surgical Conference. (1) Su, F, W, Sp. VA Mauser

Conference includes review of admissions and discharge of hospitalized patients by the attending and consulting staff. Cases are presented by the resident staff. ORTHO SURG


Seminars are held in rotation at each of these hospitals with residents from all three hospitals attending. They include literature review and demonstrations related to surgical approaches, anatomical dissections, diagnosis, and treatment. ORTHO SURG


Conference includes presentation of case studies in hand surgery with central subjects for each session. ORTHO SURG

451. Clinical Pediatric Orthopaedics. (1.5 per week) Su, F, W, Sp. C. L. Lamens, CHMC Debenhams, SFASH Ashley

Residents are responsible for patient care in the ward and outpatient clinics including history-taking, physical examinations, laboratory tests, elective surgery, fracture treatment, plaster techniques and consultations. ORTHO SURG


Residents are responsible for patient care in the ward and outpatient clinics including history-taking, physical examinations, laboratory tests, elective surgery, fracture treatment, plaster techniques, and consultations. ORTHO SURG


Clinical instruction in the care and management of orthopaedic problems in athletic injuries. Course consists of clinical practice under supervision as well as didactic lectures every third week. ORTHO SURG

490. Clinical Orthopaedics—SFASH. (1.5 per week) Su, F, W, Sp. Staff

Residents rotate through orthopaedic wards and follow-up clinics. They are responsible for patient care under the direction of the attending staff, including history-taking, physical examinations, X-ray conferences, and consultations. ORTHO SURG

Otolaryngology

First-Year Coordinated Instruction—Medicine

131A—B,C. Lecture-demonstrations and section work devoted to the supervised examination of patients.

Core Clerkship—Surgery 110 and 111 includes lectures and case demonstrations on the examinations and diagnosis of otolaryngological diseases, particularly those related to trauma and infection. Instruction in the examination and diagnosis of ward and clinic patients with otolaryngological surgical diseases.

140.01A. Adv Otolaryngology Clinics. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 131A—B,C and Surgery 110.

Boles

A practical course in general otolaryngology including diagnosis and treatment of common ear, nose, and throat problems; both inpatient and outpatient experiences will be offered. OTOLARYN

140.01B. Adv Otolaryngology Clinics. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 131A—B,C and Surgery 110. Waters

A practical course in general otolaryngology including diagnosis and treatment of common ear, nose, and throat problems; both inpatient and outpatient experiences will be offered. OTOLARYN

140.01D. Adv Otolaryngology Clinics. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 131A—B,C and Surgery 110. W. Wong

A practical course in general otolaryngology including diagnosis and treatment of common ear, nose, and throat problems; both inpatient and outpatient experiences will be offered. OTOLARYN

140.01E. Adv Otolaryngology Clinics—NRMC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 131A—B,C and Surgery 110. Staff
A practical course in general otolaryngology including diagnosis and treatment of common ear, nose, and throat problems; both inpatient and outpatient experiences will be offered. OTOLARYN

140.02. Off-Campus Clerkship. (1.5 per week) Tu, F, W, Sp. Prerequisite: Medicine 131A,B-C and Surgery 110. Boles
Clinical clerkships in off-campus hospitals approved by the chairman of the department and the dean. OTOLARYN

140.03. Otolaryngology and Neurootology. (1.5 per week) Tu, F, W, Sp. Prerequisite: Third or fourth year (fourth year preferred). Jochler, Schindler
A course in basic audiometric and vestibular testing; diagnosis and management of diseases of the ear and skull base; and experience with surgery for hearing restoration, treatment of vertigo, and for removal of ear and skull base neoplasms. OTOLARYN

150.01. Research in Otolaryngology. (1.5 per week) Tu, F, W, Sp. Prerequisite: Must be third- or fourth-year medical student. Must have approval of Chairman, Dean, and research faculty involved. Schindler, Merzenich, and Research Faculty Research project under the direction of a member (or members) of the Department of Otolaryngology. OTOLARYN

198. Supervised Study. (1-5) F, W, Sp. Prerequisite: Consent of instructor. R. Schindler
Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. OTOLARYN

199. Laboratory Project. (1-5) F, W, Sp. Prerequisite: Consent of instructor. Merzenich
A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. OTOLARYN

400. Didactic Lectures. (2) Tu, W, F, Sp. Boles
Lectures cover the anatomical, physiological, and clinical aspects of otolaryngology. OTOLARYN

401. Head & Neck Surgical Anatomy. (1) Tu. Seminar 2 hours. Kaplan
Anatomy of the surgical anatomy of the head and neck. Additional sessions. OTOLARYN

404. Staff Rounds. (2) Tu, F, W, Sp. Boles
Weekly seminars are held with discussion of current problems concerning diagnosis and management of patients with references to current literature, modern theory, and controversial aspects. OTOLARYN

405. Tumor Conference. (1) Tu, F, W, Sp. UC Kaplan
Conference includes presentation of patients, study of histories, and discussion of the treatment of the patient in light of modern progress in the field. OTOLARYN

Basic science and clinical aspects of cosmetic facial surgery and reconstructive surgery of the head and neck are covered in a weekly one-hour seminar. Slide presentations, video presentations, didactic lectures, and review of relevant medical literature constitute the curriculum. OTOLARYN

410. Temporal Bone Anus & Pathology. (0.5-0.5) F, Laboratory 2 hours. Jochler
A laboratory course conducted in the ear, nose, and throat pathology laboratory. All resident staff members are required to familiarize themselves thoroughly with the microscopic anatomy of the temporal bone under formal staff instruction. OTOLARYN

412. Turner Board. (1) Tu, F, W, Sp. VA Kaplan
Tumor cases are presented for diagnosis and recommendations for treatment. OTOLARYN

413. Audiology Conference. (1) Tu, F, W, Sp. VA Kaplan
Combined Audiology and Otolaryngology staff conference; all patients evaluated for hearing problems are presented, and diagnosis and treatment recommendations are made. OTOLARYN

455. Otolaryngology Fundamentals Course. (1) W. Seminar 2 hours. Jochler, Kaplan, Sooy
A review of fundamental principles of otolaryngology head and neck surgery, encompassing both the basic and clinical sciences. This course is intended as a comprehensive review for the yearly "in service" training examination as well as preparation for board certification. OTOLARYN

Residents, under supervision, are responsible for patient care in the wards and outpatient clinics including history-taking, physical examination, laboratory tests, preoperative and postoperative care, minor surgery, audiometry, vestibular testing, and consultation. Senior resident has certain administrative, teaching, and clinical responsibilities. OTOLARYN

490. Clinical Otolaryngology-SFGH. (1.5 per week) Tu, W, F, Sp. Wildes
Interns, under supervision of the attending staff, are responsible for patient care on wards and in the follow-up clinic, including history-taking, examination, and consultation. This rotation is combined with patient-care assignments in the Ophthalmology Service. OTOLARYN

Parasitology

135. Medical Parasitology. (3) W. Lecture 2 hours. Lab demonstration 2 hours. Haynesman and Staff
An introduction to the protozoa, helminths, and arthropods that parasitize man. Parasite ecology and disease epidemiology, clinical and diagnostic aspects of parasite diseases and their treatment are considered in lecture and laboratory. Emphasis in the laboratory is on demonstration. EPID & BIOSTAT

Pathology

101. General & Systemic Pathology. (4) F. Prerequisite: Substantive courses in anatomy, biochemistry, physiology, histology, microbiology, and parasitology. An introduction to immunology. If in doubt as to adequacy of preparation, consult the instructor. Lecture 3 hours. Friend
This course is identical to the lecture portion of Pathology 126. PATHOLOGY

150.01. General Pathology. (5) F. Prerequisite: Enrolled in academic program in Physical Therapy and completion of prerequisite coursework as human physiology and microbiology. Open only to students enrolled in the curriculum or by consent of program director. Lecture 3 hours. Friend
Mechanism and language of disease are discussed, with emphasis on the dynamic nature of fundamental disease processes such as cell injury, immunopathology, inflammation, response to infections agents, repair, regeneration, and neoplasms. Recent advances in the treatment of neoplasms, disturbances of cell growth and neoplasia. PATHOLOGY

150.02. Surgery and Autopsy Pathology. (1.5 per week) Tu, F, W, Sp. Prerequisite: Pathology 101. Consent of instructor. Enrollment limited. Finkbeiner, Montgomery, Howes
This clerkship is designed to acquire students in the available techniques of tissue analysis and their application to diagnosis and patient care. The student is given training and responsibilities in surgical and/or autopsy pathology similar to those of first-year residents. PATHOLOGY

150.02. Off-Campus Pathology Clerkship. (1.5 per week) Tu, F, W, Sp. Prerequisite: Pathology 101 and 102
Bainston
Clinical clerkships in off-campus hospitals approved by the chairman of the department and the dean. PATHOLOGY

150.05. Research. (1.5 per week) Tu, F, W, Sp. McKerraw, Parslow, Yen
The staff of the Pathology Department have various ongoing research interests and have a number of projects for students to work on. Requires approval of the Dean and the Department. Obtain necessary forms from the Office of Curricular Affairs, PA-THOLOGY

156.06. Surgical Pathology-VMMC. (1.5 per week) Tu, F, W, Sp. Prerequisite: Pathology 102 and consent of instructor. H. M. Price, Bezemalinovic
Clerkship is designed to acquaint students with available techniques of tissue analysis, from light microscopic to electron microscopy, and their application in diagnostic and surgical care. Experience includes postmortem examination, review of surgical biopsies and frozen sections, electron microscopy. PATHOLOGY

150.07. Pathology Research/Service. (1.5) Su, F, W, Sp. Prerequisite: Pathology 101, 102, 103 and consent of dean of the department. Third-year standing. Clerkship program starting in the summer quarter. Forrell, Cohens. This one-year course, with stipend (starting in summer quarter) augments student-fellowships with techniques in autopsy and surgical pathology and their application to diagnosis and patient care, as well as research. The training and responsibilities are similar to residents. PATHOLOGY

160. General Pathology. (3) F. Prerequisite: Courses in biochemistry, physiology, histology, microbiology, and an introduction to immunology. Lecture 1 hour for ten weeks.

170. Mechanisms of disease with emphasis on dynamic nature of fundamental disease processes: cell injury, immunopathology, inflammation, responses to infectious agents, repair, regeneration, hemodynamic derangements, disturbances of cell growth, and development of DEN'T PUB.

170.01. Clinical Cytology. (3) Sp. Prerequisite: Anatomy 102, Pathology 101 and 102.
E. King, E. HDR.
Lectures on basic fundamentals of cytology, normal cells, malignant cells, abnormal non-malignant cells, collection, and preparation methods. Microscopic examination of specimens and correlation of cellular and tissue pathology with colposcopic and clinical findings of examination of the patient.


170.05. Cytology. (3) W. Prerequisite: Anatomy 102. Third- or fourth-year standing. Lecture and seminar 2 hours.

170.06. Histopathology. (3) F, W, Sp. Prerequisite: Consent of instructor and chairman of the department. Staff.

Studies in pathology at other institutions with the approval of the chairman of the department. PATHOLOGY

Margareten, Johnson. A weekly case discussion conference at which students will generate a differential diagnosis, examine grown and microscopic pathologic specimens, and discuss the pathophysiology of the case. PATHOLOGY

170.10. Immunological Mechanisms in Human Disease. (1.5) F. Prerequisite: one year basic science courses (graduate, medical, or dental) or consent of instructor. Lecture 1 hour. Seminar 0.5 hour.
Mckever, Initiative. An introductory course in immunopathology and clinical immunology that will review how basic immunological research is applied to diagnosing and understanding human disease. Topics will include transplant immunology, immunosuppression, immunity, deficiency diseases, tolerance, and autoimmune diseases. PATHOLOGY

170.11. Problems of Medical Delivery in White Anthropogenesis. (1) W, Seminar 1 hour.
Stern, Premise. Readings, how language can be a tool of oppression, how power structure of society maintains hegemony by defining "pathology": how women, people of color, and gays are marginalized in this context. Explores how doctor-patient dialogue interferes with medical care.

180.01. General Pathology. (3) F. Prerequisite: Anatomy 118. Lecture 2 hours.
Stern, Preceptor. This course is identical to the lecture portion of Pathology 126. Elective in the dental hygiene curriculum. PATHOLOGY

180.02. Supervised Study. (1-5) F, W, Sp. Prerequisite: Consent of instructor. Staff.

180.03. Research. (1-8) F, W, Sp. Prerequisite: Consent of instructor and chairman of the department. PATHOLOGY

199. Laboratory Project. (1-5) F, W, Sp. Prerequisite: Consent of instructor.

A laboratory research project under direction of a member of the faculty with the approval of the chairman of the department. PATHOLOGY

209. Applied Pathology. (3) W. Prerequisite: Microbiology 126a-B and Pathology 126c or equivalents.

J. Greenman. Weekly seminar is designed to provide students with an understanding of the basic principles of pathologic anatomy. Emphasis is placed on research; students will critically review current literature in the field under faculty supervision. PATHOLOGY

215. Laboratory Rotation. (3) F, W, Sp. Prerequisite: Consent of instructor. Lab 9 hour.
Parslow. A laboratory rotation course, to familiarize students with various approaches to experimental pathology and research in the basic medical sciences, particularly in relationship to human disease processes. Intended primarily for graduate students. PATHOLOGY

R. Stern. Students and faculty review literature and discuss current concepts and experiments in connective tissue research. Included are role of structural proteins, such as collagen and elastin in pathology, cell matrix, interactions in developmental biology and morphogenesis. PATHOLOGY

Parslow. Presentation of current research by graduate students. Topics in pathology and disease mechanisms. Faculty from basic and clinical sciences will discuss current research in a disease process. Advanced reading in that disease will be assigned before class. There will be formation of one-hypotheses and discussion of an experimental design lead by a student leader at each seminar. PATHOLOGY

Beanston, Sakurai, Deters. This course is for students interested in learning current concepts in parasitic diseases (drug design, public health aspects, biochemical parasitology). Invited speakers give seminars on their area of expertise. Students evaluate papers relevant to concepts presented by the speakers.


297. Molecular Biology of Human Disease. (3) F, W, Sp. Prerequisite: Open to graduate students, housestaff, and MIST students. Lecture 1 hour, seminar 2 hours.
Mckever. The course is designed to provide students with an up-to-date survey of our knowledge of atherosclerosis with particular emphasis on applications of techniques of molecular and cell biology to understand both the pathogenesis and genetics of the disease.

298. Thesis. (0) F, W, Sp. Prerequisite: Advancement to candidacy and permission of the graduate advisor.

Staff

For graduate students engaged in writing the thesis for the master's degree. PATHOLOGY

299. Dissertation. (0) F, W, Sp. Prerequisite: Advancement to candidacy and permission of the graduate advisor.

For graduate students engaged in writing the dissertation for the Ph.D. degree. PATHOLOGY

301. Teaching Practicum. (3) F, W, Sp. Prerequisite: Consent of instructor. Lecture 3 hours. Lab 2 hours.

Forrell. Practice in teaching pathology under faculty supervision. Students supervise laboratory work, conduct conferences, and assist in preparing and grading examinations. Responsibilities are assigned according to the individual's stage of development.

400. Pathology & Lab Med Seminar. (1) F, W, Sp. Interns and residents. Prerequisite: Medicine 110 and Surgery 110 or consent of instructor. Seminar 1 hour.

Staff

Recent developments in diagnosis and research in pathology and laboratory medicine are discussed by faculty and guest speakers. PATHOLOGY

401. Special Topics Seminar. (Unint. to be arranged) F, W, Sp. Interns and residents.

Staff

Seminar focusing upon the pathology of specific organ systems are conducted by specialists. Emphasis is on the correlation between clinical manifestations of the disease and pathology: findings. PATHOLOGY


Staff

Students, under supervision, pursue original investigation in pathology and allied subjects. Investigators review the literature, make observations, and correlate physiological with pathological concept.

500. Dermatopathology. (2) F, W, Sp. Prerequisite: Pathology 101 or equivalent by consent of instructor. Lab 2 hours. Seminar 1 hour.

Sagebiel. Survey of inflammatory and neoplastic skin diseases by study of histopathological changes and discussion with emphasis on clinical-pathologic correlations.


Staff

Theory and methodology of pathologic anatomy, integration and correlation of data, and study of literature. PATHOLOGY

545. Electron Microscopy Seminar. (1) W. Prerequisite: Medicine 110 and Surgery 110 and consent.

144

145
of instructor. Lecture 1 hour. Elective for intern and residents.

Staff
Course covers basic electron microscopic techniques, indications for use of electron microscopy in pathologic diagnosis, and the specific ultrastructural features of normal and diseased tissue. Emphasis is placed on renal biopsy and tumor diagnosis. Documented attendance is required. PATHOLOGY


Staff
Theory and methodology of pathologic anatomy, interpretation and correlation of data, and study of literature. PATHOLOGY

Pediatric Dentistry
130B-C. Pediatric Procedures—UC, (1, 2) W. Sp. Prerequisite: Satisfactory completion of Operative Dentistry 125 A-B-C. Lecture W. 1 hour; Sp. 2 hours

Braham
Lecture course presenting dental procedures unique to, or modified to meet, the needs of the child. Examination, diagnosis, treatment planning, pain control and management, restorative procedures, preventive orthodontics, diet analysis, and caries control are stressed. GR. DEVEL

139. Clinical Rotation. (0-1) Su, F, W, Sp. Prerequisite: Third-year standing. Clinical 3 hours per week. Braham and Staff
This clinical rotation will introduce students to examination of the child, patient treatment planning, prevention, treatment, diet analysis and counseling, and performing operative procedures. Proper management of the child patient will be stressed. GR. DEVEL

149. Advanced Clinical Rotation—UC & CHMC. (0-2) Su, F, W, Sp. Prerequisite: Fourth-year standing and satisfactory completion of Operative Dentistry 139. Clinic 6 hours per week. Braham, and Staff
Lecture examination, treatment planning, and treatment of children, including behavioral management. Time will be spent at Pediatric Dental Clinics at UCSC and Children's Hospital Medical Center, Oakland. Course will involve clinic, seminar, and treatment in hospital operating room with general anesthetic. GR. DEVEL

171D-E. Intro to Ped Dent. (2-2) SS1, SS2. Prerequisite: Enrollment in postdoctoral pediatric dentistry program or consent of instructor. Lecture 2 hours.

Rothman and Staff
Course is offered to the incoming postdoctoral student as an introduction to the philosophy and techniques of rendering clinical treatment to patients in pediatric dentistry. GR. DEVEL

171A-B-C-D-E. Advanced Ped Dent Sem. (3-5-5-5-5) F, W, Sp, SS1, SS2. Prerequisite: Enrollment in postdoctoral pediatric dentistry or orthodontic program or consent of instructor. Seminar 5 hours.

M. Morris and Staff
Oral examination, treatment planning, treatment of children including behavioral management. Time is spent in the Pediatric Dentistry Clinic at UCSF. The course involves clinical training, seminars, and treatment in the hospital operating room under general anesthesia. GR. DEVEL

172D-E. Pediatric Physical Diagnosis. (1-1-1) SS1, SS2. Prerequisite: Enrollment in postdoctoral pediatric dentistry program or consent of instructor. Lecture 1 hour.

Rothman
Course is designed to provide knowledge of clinical pediatrics. It will include didactic and clinical experiences in history-taking and physical diagnosis. GR. DEVEL

172. A-B-C. Pediatric Medicine. (1-1-1) F, W, Sp. Prerequisite: Enrollment in postdoctoral pediatric dentistry program or consent of instructor. Seminar 1 hour.

M. Morris
Course will provide information on various topics of health care of children. Emphasis will be placed on the etiology, diagnostic procedures, prognosis, and management of common pediatric conditions. GR. DEVEL

173C. Clinical Uses of Fluorides. (2) Sp. Prerequisite: Enrollment in postdoctoral pediatric dentistry program or consent of instructor. Lecture 1 hour. Seminar 1 hour.

M. Morris
Course gives a comprehensive update on the clinical uses of fluoride in pediatric dentistry. It is a combined lecture and seminar course. A term paper on an assigned topic is also required. GR. DEVEL

173. A-B-C. Dentistry for the Disabled. (1-1-1) W. Sp. Prerequisite: Enrollment in postdoctoral pediatric dentistry program or consent of instructor. M. Morris and Staff
Course provides knowledge of the congenital and acquired disabilities in children and adolescents. There is emphasis on the etiology, diagnosis, medical, and dental management, and prognosis of these conditions. GR. DEVEL

174A-B-C-D-E. Lit Survey in Ped Dent. (1-1-1-1-1) F, W, Sp, SS1, SS2. Prerequisite: Enrollment in postdoctoral pediatric dentistry or orthodontic program or consent of instructor. M. Morris and Staff
Course reviews the latest issues of pediatric dentistry and related journals and critically evaluates the philosophies, clinical treatment, and applications to the practice of dentistry for the child patient. GR. DEVEL

174B-A-B-C-D-E. Practice Teaching. (1.5-1.5-1.5-1.5) F, W, Sp, SS1, SS2. Prerequisite: Enrollment in postdoctoral pediatric dentistry program or consent of instructor. Seminar 1 hour. Clinic 1.5 hours.

M. Morris and Staff
Student teaches junior and senior dental students in the pediatric dentistry clinics. In addition, the student will teach selected topics in a seminar format. GR. DEVEL

177A-B-C-D-E. Hospital Dentistry. (3-3-3-3-3) F, W, Sp, SS1, SS2. Prerequisite: Enrollment in postdoctoral pediatric dentistry program or consent of instructor. Seminar 1 hour. Clinic 6 hours.

M. Morris and Staff
Course is specifically designed to provide the student with working knowledge of dental rehabilitative procedures in a hospital operating room under general anesthesia and the associated hospital protocol. GR. DEVEL

177. A-B-C-D-E. Conscious Sedation. (1.5-1-1-1-1) F, W, Sp, SS1, SS2. Prerequisite: Enrollment in postdoctoral pediatric dentistry program or consent of instructor. Lecture 1 hour. Clinic 1.5 hours.

M. Morris and Staff
A multiplicity of medications, routes of administration, and monitoring techniques will be employed under the direct supervision of a faculty person. The student will administer the medications and monitor the patients before, during, and after the procedure. GR. DEVEL

178A-B-C-D-E. Research Seminar. (2-2-2-2-2) F, W, Sp, SS1, SS2. Prerequisite: Enrollment in postdoctoral pediatric dentistry or orthodontic program or consent of instructor. Lab 3 hours. Seminar 1 hour.

M. Morris and Staff
Course will cover how to critically review research literature and do a term paper on a selected subject. It will discuss research methodologies and the development of a research proposal and completion of a research project. GR. DEVEL

179A-B-C-D-E. Advanced Clinical Ped Dent. (1-1) F, W, Sp, SS1, SS2. Prerequisite: Enrollment in postdoctoral pediatric dentistry program or consent of instructor. Clinic 3-30 hours.

M. Morris and Staff
Course covers the clinical activities of the student and has the broad objective of providing a wide experience in all phases of contemporary pediatric diagnosis and treatment. Students must demonstrate clinical competence in care for the special child. GR. DEVEL

179. L2D-E. General Anesthesia Rotation—CHMC. (4-4) SS1, SS2. Prerequisite: Enrollment in postdoctoral pediatric dentistry or orthodontic program or consent of instructor. Clinic 30 hours.

Rothman and Staff
A practical rotation in the operating room of the Children's Hospital Medical Center of Northern California is provided under the supervision of senior staff anesthesiologist. GR. DEVEL

180.01C. Advanced Ped Dent Seminar. (0.5) Sp. Prerequisite: Completion of third-year pediatric dentistry lecture series. Approval of the Dean. Lecture 9.5 hours.

Braham and Staff
Seminar on advanced pediatric dentistry involving anthropology, oncology and hematology, periodontology, diagnosis, practice management, future ideas, and ethics. Designed for students interested in advance of study and those considering pediatric dentistry as a specialty. Counseling is provided for postdoctoral education. GR. DEVEL

180.02A-B-C-D-E. Pediatric Hospital Dentistry. (0-3) F, W, Sp. Prerequisite: Satisfactory progress in all previous pediatric dental courses. Seminar 3-5 hours per week in Hospital O.R.

Braham
Experience is provided in history-taking, admission procedures, hospital dental protocol, laboratory tests, and chart documentation. Opportunity to work with the instructor in the hospital operating room, providing care for the handicapped and other refractory management cases, using a general anesthetic. GR. DEVEL

Pediatrics
100. Medical Genetics. (2) F. Lecture 2 hours.

Golbus
Basic aspects of human genetics are presented in a context relevant to the diagnosis, treatment, and counseling of genetic disorders and congenital malformations. Emphasis is placed on the application of genetic knowledge to actual counseling problems.

PEDIATRICS
110. Ped Core Clerkship—UC-SFGH-L-C. (1.5 per week) Su, F, W. Prerequisite: Core curriculum in basic sciences.

Dallman
Practical experience in the ward, newborn nursery, and outpatient clinics with emphasis on case assignments. Teaching and supervision by attending and resident staff. Required seminars cover aspects of pediatrics, infectious diseases, and child psychiatry.

PEDIATRICS
140.01A. Ambulatory Pediatrics—UC. (1.5 per week) F, W. Prerequisite: Medicine 110 and Pediatrics 110.

Pastell
Students gain experience in well child care and in dealing with children with acute problems. Emphasis is placed on health maintenance, preventive care, and anticipatory guidance. Focuses on general pediatric times and a review of patient settings in the emergency room.

PEDIATRICS
140.01B. Ambulatory Pediatrics—SFGH. (1.5 per week) Su, F, W. Prerequisite: Medicine 110 and Pediatrics 110.

Brown, Coulter, O'Conner
Students evaluate and treat children with a variety of acute and chronic conditions. Patients have a high degree of acuity. There are morning conferences and ER case reviews. Supervision is provided by senior residents, chief residents, and faculty. PEDIATRICS

140.01D. Outpatient Pediatric Clerkship—CHMC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Consent of instructor. Gerdson

Students are assigned patients. They are supervised by attending and resident staff. They attend conferences when their patients are being discussed. They rotate through a variety of specialty clinics as well as the General Medical Clinic and the Emergency Room. PEDIATRICS

140.01E. Adv Inpt Pediatric Clerkship—CHMC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Gerdson

Students are assigned patients. They are supervised by attending and resident staff. They present patients on wards, assist with procedures, and attend specialty conferences where their patients are being discussed, as well as all daily formal teaching conferences. PEDIATRICS

140.01F. Outpatient Pediatric Clerkship—RP. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Consent of instructor. Appelbaum

Students observe assigned patients under supervision of attending and resident staff. They prepare patients on wards, assist with procedures, and attend specialty conferences for discussion of patients. PEDIATRICS

140.01G. Inpatient Pediatric Clerkship—K. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Eggl

Students are assigned patients under supervision of attending or resident staff. They present patients on wards, assist with procedures, and attend specialty conferences for discussion of patients. PEDIATRICS

140.01H. Ambulatory Pediatrics—NRMC. (1.5 per week) F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. One student per rotation. Van Meter

The course aims to provide an intensive "sub intern" experience in outpatient pediatrics at a teaching hospital with a busy primary care clinic and with active subspecialty clinics. PEDIATRICS

140.01I. Inpatient Pediatric Medicine—NRMC. (1.5 per week) F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. One student per rotation. Van Meter

Students function as pediatric "sub interns" on the inpatient wards. They assume primary responsibility for patient management of 2-3 hospitalized children, under supervision of the senior resident and pediatric attending staff. Course includes general and subspecialty pediatric cases. PEDIATRICS

Ricks
Participation in the activities of allergy-immunology trials.

including basic clinical immunology course, j urinal, and seminars. PEDIATRICS


Lewis
Students participate in the care of infants in the intensive care nursery in close association with the house staff, fellows, and senior staff and in conferences con-
ducted by senior staff. PEDIATRICS


Schoen
Within the county's largest prepaid health care pro-
gram, students will participate in office visits, urgent ambulatory care, health education, and inpatient care. They will work with staff and resident physicians, nurse practitioners and health educators. PEDIAT-
RICS

140.27. Inpatient Pediatrics—KP. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Schoen
Students will perform histories and physical examinations on the pediatric ward under supervision of resi-
dent and attending physicians. They will attend resi-
dent conferences, see urgent clinic cases with resident and participate in outpatient clinic for discharged patients. PEDIATRICS

140.29. Inpatient Pediatrics—VMC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110, Pediatrics 110 and consent of instructor.

Northway
Students are assigned to a clinical team of house offi-
cers, faculty, and practitioners, and participate in the care of acutely ill hospitalized children. Students re-
solve three patient care teams, physical examinations, case


Heyman, Thaler
Students participate with fellows and staff in the diag-
osis and treatment of gastrointestinal and hepatic diseases, and nutritional deficiencies in infants and children. They present patients on wards and in the outpatient clinic, assist with procedures, and attend specialty conferences. PEDIATRICS

140.31. Inpatient Pediatric Clipping—VMC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Nilson
Opportunity to develop and perfect skills in history-
taking, physical examination, case write-ups, prese-
tations, and procedures. Supervised problem-oriented learning/training environment fostering basic diagnost-
ic and management skills. Conferences, case work-
ups and presentations, and call ward assignments, and assigned reading. PEDIATRICS

140.33. Pediatric Immunology/Rheumatology. (1.5 per week) Su, F, W, Sp. Prerequisite: Pediatrics 110 and Medicine 110, and consent of instructor.

War, Cowan
Evaluation and care of children with primary immu-
nedeficiency diseases and rheumatologic disorders. Emphasis on ontology of immune response as it re-
lates to immunodeficiency, immunologic dysfunction involved in pathogenesis of the disorders, laboratory studies required for diagnosis, and care of children with chronic disease. PEDIATRICS

140.34. Medical Genetics. (1.5 per week) Su, F, W, Sp. Prerequisite: 4th-year standing.

Curry, Winter
Experience will be gained in medical genetics, including dysmorphology, biochemical genetics and prenatal diagnosis. Rotation will provide general exposure to all areas and give a basic understanding of methods used to reach specific genetic diagnoses and assist prenatal detection course for future pregnancies. PEDIATRICS

140.35. Infectious Diseases—UC & SFCHG. (1.5 per week) Su, F, W, Sp. Prerequisite: Pediatrics 110.

S. Kohl
Students will learn principles of diagnosis and man-
gement of common infectious conditions, infectious complications in the immunocompromised host, and

140.36. Advanced Elective Adolescent Medicine—NREMC. (1.5 per week) F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. One student per rotation.

Van Meter
The aim of this course is to provide an intensive "sub-
intern" experience in the practice of adolescent medi-
cine. Experience will include exposure to sport-
related injuries, sexually transmitted disease, birth con-
trol, counseling, and emotional adjustment problems. PEDIATRICS

140.37. Clinical Clerkship in Adolescent Medicine. (1.5 per week) Su, W, Sp. Prerequisite: Completion of basic clinical clerkships. Open to fourth-year medical students only.

Irwin, Shader
Clinical rotation on outpatient/inpatient adolescent medical service. Clinical experience will include general adolescent clinic, adolescent gynecology

clinics, and inpatient consultation on adolescent medi-
cal and psychiatric wards. PEDIATRICS


Tanner
Students will be included in all phases of a comprehensive evaluation for a child with school and learning prob-
lems. Physical, neurological, psychological, speech and language and educational assessments as well as child and family interviews provide a truly biopsychosocial perspective. PEDIATRICS


Grumbach and Staff
Student research project under guidance of faculty members. Programs must be approved by instructor. Students may initiate or continue research projects under supervision of faculty members. PEDIATRICS


Rudolph
Students prepare and present cases weekly from the wards on the pediatrics wards. Course correlates patients' problems with work in the required coreburn.

Irwin
A four-semester course covering the physiologic, psychologic, cognitive and social development of adolescence. Also included are social, emotional, sexual, nutrition, family interaction, cultural differences, legal issues, school behavior, substance abuse and psychiatric problems, and common medical prob-
lems. PEDIATRICS

198. Supervised Study. (1-5) F, W, Sp. Prerequisite: Consent of instructor.

Irwin
Supervised study in a variety of fields including:

Irwin
A laboratory research project under direction of a member of the faculty with the approval of the chair-
person of the department. PEDIATRICS

199. Laboratory Project. (1-5) Su, F, W, Sp. Prerequisite: Consent of instructor.

Grumbach
A laboratory research project under direction of a member of the faculty with the approval of the chair-
person of the department. PEDIATRICS

400. Staff Conference. (1.5) Su, F, W, Sp.

Rudolph
Conferences include house staff preparation and presen-
tation of patient case histories with reference to the literature, laboratory work, and special studies. Faculty members and consultation from other depart-
ments as well as other universities discuss recent de-
velopments in their respective fields. PEDIATRICS


UC Gooding
Conferences are held on the pediatrics house staff and


Rudolph
Seminar includes review and discussion of recent liter-
ature and recent reports on special topics. PEDIATRICS

402. Family Interviewing Seminar. (1-5) Su, F, W, Sp. Prerequisite: Graduate-level student in health sciences or health care provider only. Consent of instructor. Seminar 2 hours.

Baum and Staff
Seminar topics include family systems, communica-
tion patterns, family interviewing, presenting a diffi-
cult diagnosis, psychosomatic illness, chronic illness, Parkman
Selected topics in human biochemistry, genet-
ics, immunology, and controlled settings. PEDIATRICS

and common behavioral problems. Teaching methods include group discussion, role play, and video taping. Emphasis is placed on learning through experience.

**PEDIATRICS**


Boyer and Staff

A survey of basic principles in epidemiologic research, with special emphasis on issues relevant to behavioral pediatrics. **PEDIATRICS**

422. Behavioral/Developmental Core Curriculum. (1.5) F, W. Sp. Prerequisite: PEE 450 and/or M 450. Consent of instructor. Seminar 1.5 hours alternate weeks.

Baker and Staff

This course covers classic theoretical and current research-based formulations of child development. Assigned literature readings are essential to seminar participation. Materials covering pregnancy through school age years is presented over two-year cycle. **PEDIATRICS**

424. Neurodevelopmental Assessment and Therapy. (2) W. Prerequisite: By instructor approval; pediatric residents and fellows in behavioral/developmental pediatrics. Lecture 1 hour. Lab 1 hour.

Tanenbaum and Staff

Overview of theories and principles of neuromotor development and treatment modalities available for children with developmental disabilities. Includes assessing normal and abnormal sensorimotor development, neuromotor developmental therapy, sensory integration, pre-speech, and feeding therapy. Lecture, discussion, audiovisual aids, and patient demonstration. **PEDIATRICS**


UC Rudolph

Residents, under supervision, are responsible for patient care in the wards and outpatient clinic including history-taking, physical examination, laboratory tests, diagnosis and treatment. **PEDIATRICS**


Residents, under supervision, are responsible for patient care in the wards and outpatient clinic including history-taking, physical examination, laboratory tests, diagnosis, and treatment. **PEDIATRICS**

**Periodontology**

129. Introduction to Clinical Periodontology. (1) Sp. Prerequisite: Oral Biology 128 A-B. Lecture 2 hours.

Levine

This course is an introduction to clinical periodontal procedures, including examination, diagnosis, and basic periodontal therapy. It will include lecture, laboratory, and clinical practice in treating patients with early periodontal diseases and preventative periodontics. **STOMATOL**

130. Periodontal Therapy. (3) Su. Prerequisite: Perio 129 Lecture 1 hour.

Levine

Introduction to the diagnosis and treatment of periodontal diseases. Emphasis will be placed on examination of the patient, diagnosis and classification of disease, and treatment planning. The rationale and techniques for treatment of gingivitis and early chronic periodontitis will be discussed. **STOMATOL**

131. Periodontal Therapy. (1, 2) Prerequisite: Perio 130 Lecture 1 hour.

Levine

Diagnosis and treatment of periodontal diseases, acute lesions, less common disease of the periodontium, and moderate to advanced periodontitis. Emphasis on diagnosis and treatment planning, considerations for specialty referral when appropriate. Rationale and techniques for treatment of moderate to advanced chronic periodontitis. **STOMATOL**

132. Periodontal Therapy. (2) W. Prerequisite: Perio 131 Lecture 2 hours.

Levine

Surgical periodontics and rationale for periodontal therapy. Emphasis will be placed on the rationale for various surgical modalities of treatment for periodontal diseases. Discussion of controversial treatment programs and medicolegal aspects of periodontal therapy will be included. **STOMATOL**


Levine

Treatment of a variety of periodontal diseases under the direct supervision of Faculty. Small seminar and discussion groups will review diagnosis and treatment modalities. **STOMATOL**


Levine

Treatment of a variety of periodontal diseases in a general practice environment under the direct supervision of Faculty. **STOMATOL**

161. Periodontal Therapy. (1) W. Prerequisite: Perio 150 or B-C. Lecture 1 hour.

Levine

Diagnosis and treatment of periodontal diseases, including acute lesions, less common disease of the periodontium, and moderate to advanced periodontitis. Emphasis will be placed on diagnosis and treatment planning, with consideration for specialty referral when appropriate. The rationale and techniques for treatment of moderate to advanced chronic periodontitis will be featured. **STOMATOL**

162. Periodontal Therapy. (1) W. Prerequisite: Perio 161 Lecture 1 hour.

Levine

Surgical periodontics and rationale for periodontal therapy. Emphasis will be placed on the rationale for various surgical modalities of treatment for periodontal diseases. Discussion of controversial treatment programs and medicolegal aspects of periodontal therapy will be included. **STOMATOL**

170A-B. C. Histopathology of Periodontium. (2-4) F. W. Sp. Lecture 1 hour. Lab 3 hours.

Dietz (F), Ryder (Sp)

Dynamics of inflammation and its role in the periodontal tissues. **STOMATOL**


Rusat

Study in depth with literature review and seminar discussions on surgical techniques used to treat lesions involving the hard and soft tissue of the periodontium. **STOMATOL**

180. Periodontics in General Practice. (1) W. Lecture 1 hour.

Nathan

Implementation of the skills and knowledge of periodontology in the private practice environment. **STOMATOL**

180.01. Advanced Perio Lit. (1) F. Prerequisite: Perio 130 and consent of instructor. Seminar 1 hour.

Abe

Study in depth, with literature review and seminar discussions of areas of periodontology having major clinical significance. **STOMATOL**

180.02. Advanced Perio Lit. (1) W. Prerequisite: Perio 131 and consent of instructor. Seminar 1 hour.

Abe

Study in depth, with literature review and seminar discussions of areas of periodontology having major clinical significance. **STOMATOL**

180.03. Advanced Perio Lit. (1) Sp. Prerequisite: Perio 132 and consent of instructor. Seminar 1 hour.

Abe

Study in depth, with literature review and seminar discussions of areas of periodontology having major clinical significance. **STOMATOL**

181. Perio Surgical Techniques. (1) F. Prerequisite: Perio 130 or 131 or 132 and consent of instructor. Lecture 1 hour.

Shibata

Surgical techniques are presented which may be used to treat lesions occurring in the hard and soft tissues of the periodontium. **STOMATOL**


Taggar

Continuation of clinical experience beyond the level of Periodontology 109. **STOMATOL**


Armitage

A laboratory research project under direction of a member of the faculty with the approval of the chairman of the department. **STOMATOL**


Shibata (F), Chambers (W), Bhatnagar (Sp)
413.04. Treatment Planning & Surgery. (1) S51. Seminar 1 hour.

Shibata Students present and discuss management of their cases that are either planned for treatment or currently under treatment. They are expected to defend their treatment plan and therapeutic procedures based on relevant literature and clinical experience.

Stomatol

416.01. Original Investigation. (1-5) F. Prerequisite: Enrollment in postgraduate specialty program or consent of instructor. Lab 3-5 hours.

416.02. Original Investigation. (1-5) W. Prerequisite: Enrollment in postgraduate specialty program or consent of instructor. Lab 3-5 hours.

416.03. Original Investigation. (1-5) Sp. Prerequisite: Enrollment in postgraduate specialty program or consent of instructor. Lab 3-5 hours.

419.01. Clinical Periodontics. (5) W. Prerequisite: Enrollment in postgraduate specialty program. Clinic 15 hours.

419.02. Clinical Periodontics. (5) W. Prerequisite: Enrollment in postgraduate specialty program. Clinic 15 hours.

419.03. Clinical Periodontics. (5) Sp. Prerequisite: Enrollment in postgraduate specialty program. Clinic 15 hours.

432.01. Adv Treatment Planning & Surgery. (1) F. Seminar 1 hour.

Shibata Students present and discuss management of their cases that are either planned for treatment or currently under treatment. They are expected to defend their treatment plan and therapeutic procedures based on relevant literature and clinical experience.

432.02. Adv Treatment Planning & Surgery. (1) W. Seminar 1 hour.

Shibata Students present and discuss management of their cases that are either planned for treatment or currently under treatment. They will be responsible for defending their treatment plan and therapeutic procedures based on relevant literature and clinical experience.

432.03. Adv Treatment Planning & Surgery. (1) Sp. Seminar 1 hour.

Shibata Students present and discuss management of their cases that are either planned for treatment or currently under treatment. They will be responsible for defending their treatment plan and therapeutic procedures based on relevant literature and clinical experience.


Shibata Students present and discuss management of their cases that are either planned for treatment or currently under treatment. They will be responsible for defending their treatment plan and therapeutic procedures based on relevant literature and clinical experience.

429.01. Periodontal Therapy. (6) W. Prerequisite: Perio 419.01 or 419.02 or 419.03 or 419.04. Clinic 18 hours.

429.02. Periodontal Therapy. (6) F. Prerequisite: Enrollment in postgraduate periodontal therapy. Clinic 18 hours.

429.03. Periodontal Therapy. (6) W. Prerequisite: Perio 429.02. Clinic 18 hours.

Shibata Advanced surgical techniques in management of periodontal lesions. STOMATOL

429.04. Periodontal Therapy. (6) Sp. Prerequisite: Perio 429.03. Clinic 18 hours.

Shibata Advanced surgical techniques in management of periodontal lesions. STOMATOL

Pharmaceutical Chemistry

120. Principles of Pharm Chem. (3) F. Prerequisite: Chemistry 113. Lecture 3 hours.

Ortil de Montelano A study of phenoxybenzoic and biological factors which contribute to drug action; in vivo and in vitro
Pharmaceutical Chemistry


121. Principles of Pharmaceutical Chemistry. (2) W. Prerequisite: Pharmaceutical Chemistry 120 and concurrent enrollment in Pharmacology 121. Lecture 2 hours.

Kahl

A systematic survey of the chemical features of synthetic drugs, including correlations between chemical structure and biological activity. Emphasis on steroid, prostaglandin, peptide hormones, and drugs for metabolic disorders. PHARM CHEM

122. Autonomic & Cardiovascular Drugs. (3) Sp. Prerequisite: Pharmaceutical Chemistry 120. Lecture 3 hours.

C. C. Wang

A systematic survey of the chemical features of synthetic drugs, including correlations between chemical structure and biological activity. Emphasis on drugs affecting the autonomic nervous and cardiovascular systems as well as renal function. PHARM CHEM

132. Drugs Acting on CNS. (3) F. Prerequisite: Pharmaceutical Chemistry 120. Lecture 3 hours.

Cashman

A systematic survey of the chemical features of synthetic drugs, including correlations between chemical structure and biological activity. Emphasis on drugs affecting the central nervous system. PHARM CHEM

134. Chemotherapeutic Drugs. (2) W. Prerequisite: Pharmaceutical Chemistry 120 and concurrent enrollment in Pharmacology 134. Lecture 2 hours.

Oppenheimer

A systematic survey of the chemical features of synthetic drugs, including correlations between chemical structure and biological activity. Emphasis on anti-infective and anti-neoplastic drugs. PHARM CHEM

152. Radioisotopes in Biol/Med/Pharm. (2) F. Prerequisite: Consent of instructor. Lecture 2 hours.

Peng

Discussion on radioisotopes in frequent use in biology and medicine including radioisotopes used in pharmacological, with emphasis on dosage form design, quality control, clinical applications, and other related aspects. PHARM CHEM

157. Bioanalytical Theory & Technique. (3) W. Lecture 2 hours. Lab 3 hours.

Liu

Analytical theory and techniques for determining drugs and metabolites in biological fluids. PHARM CHEM

162. Radioisotope Imaging. (1) § Prerequisite: Pharmaceutical Chemistry 153 or consent of instructor. Lecture 1 hour.

D. Price

This course will treat the theory and methodology in the application of radionuclides to organ imaging in nuclear medicine. PHARM CHEM

The emphasis of the course will be on modern principles covering structural and functional aspects of nucleic acid and proteins; molecular biochemistry studies that focus on topics of pharmaceutical interest; basic theories of molecular biology, plasmids, bacteriophage, nucleic acid and protein characterizations, site-directed mutagenesis, hybridization and automated non-isotopic methods for protein and nucleic acid sequence determination. PHARM CHEM

206. Laboratory Rotation in Pharmaceutical Chemistry. (1-5) § F, W, Sp. Prerequisite: Consent of instructor. Lab 3-15 hours.

Staff

A laboratory rotation course to familiarize new departmental graduate students with various approaches to research in the pharmaceutical sciences. PHARM CHEM


Ohe, Giacomini

A basic study of the concentration-time course of drugs in the body, methods of pharmacokinetic analysis and modeling, and discussion of pharmacokinetics/ physiologic interrelationships. Conference/workshop emphasizes problem-solving in pharmacokinetics. PHARM CHEM


Tozer, Benet

Advanced consideration of pharmacokinetics including multi-compartment models, assessment of intrinsic absorption and disposition parameters, nonlinear kinetics, and correlation of pharmacological response with the concentration-time course of a drug. Conference involves problem-solving exercises. PHARM CHEM

217. Fundamentals of Targeted Drug Delivery. (2) Sp. Prerequisite: One quarter of physical chemistry, kinetics and pharmacology, or consent of instructor.

Hunt

The physical, chemical, biochemical, and other techniques that are proposed to deliver active molecules to specific target sites in vivo are selectively explored in conjunction with toxicological motivations for achieving targeted drug delivery. Feasibility and optimization are discussed. PHARM CHEM


Sanli, Zener

Selected topics on enzyme mechanisms. General survey of enzyme catalysis, general acid-base catalysis, propinquity effects, strain and conformational change. Covalent intermediates in enzymes catalysis. The role of cofactors in enzyme catalysis. Phosphate transfer reactions. PHARM CHEM


Benet

A program involving the presentation of core material in pharmaceutical chemistry in the pharmaceutical pathway. The presentations are made by graduate students and examination is by a series of cumulative examinations. PHARM CHEM

221. Research Conf in Pharm Chem. (1) F, W, Sp. Prerequisite: Graduate standing in the Department of Pharmaceutical Chemistry. Lecture 1 hour.

Kenyon

A series of weekly research conferences in medicinal chemistry given by visiting lecturers, faculty, and advanced graduate students. PHARM CHEM


Kustur & Staff

Topics of current research interest in physical and biophysical chemistry. PHARM CHEM

223A-B. Graduate Research Seminars. (1-3) § F, W, Sp. Prerequisite: Graduate standing in the Department of Pharmaceutical Chemistry. Lecture 1 hour.

Peng

A series of weekly presentations of the research interests of the basic science faculty. The purpose is to acquaint new graduate students with the research in the Department of Pharmaceutical Chemistry and Pharmacy. PHARM CHEM

230A. Spectroscopy. (3) Sp. Prerequisite: Chemistry 162 or equivalent. Lecture 3 hours.

Rollman

The theory and application of magnetic resonance and electron-spin resonance. PHARM CHEM

230C. Spectroscopy. (2) W. Lecture 3 hours. Lab 2 hours.

Bass

Laboratory work in nuclear magnetic resonance. PHARM CHEM

231. Nuclear Magnetic Resonance. (3) F, W. Prerequisite: undergraduate physics or physical chemistry. Chemistry 262 is recommended. Lecture 3 hours.

James

Theory and application of magnetic resonance. Following a basic course in lectures, lecture modules may be selected covering high-resolution two-dimensional NMR, magnetic resonance imaging, and in vivo magnetic resonance spectroscopy. PHARM CHEM

156

157
235. Mass Spectrometry in Life Sci. (2) § F. Prerequisite: Consent of instructor. Lecture 2 hours. Burlingame
Elucidation of molecular structure, characterization of mixtures, and quantitative measurements. Presentation of basic tools, concepts, and strategies in the complementary use of currently available techniques in present biochemical and biomedical research. PHARM CHEM

236. Transport & Reaction Processes. (3) § S. Prerequisite: Chemistry 260. Lecture 3 hours. Guy, Siegel
Basic principles applicable to transport and reaction processes in model membrane and biological systems. PHARM CHEM

237. Membrane Transport and Biophysics. (2-3) § F. Prerequisite: Pharm Chem 236, Chemistry 260. Lecture 3-3 hours. Szoka, Guy
Biophysical consideration of membrane structure, passive and active transport mechanisms, and implications for targeted and controlled drug delivery. PHARM CHEM

238. Chemistry and Physics of Polymeric Systems. (2-3) § W. Prerequisite: Pharm Chem 236, Chemistry 260. Lecture 2-3 hours. Siegel
Chemistry and physics of polymers relevant to the design and function of programmable drug delivery systems. PHARM CHEM

240. Radiochemical Synthesis. (1-2) § F, W. Prerequisite: Consent of instructor. Lab 3-6 hours. Peng
Theory and techniques related to the synthesis of isotopically labeled organic compounds. Course may be repeated for credit. PHARM CHEM

242. Radiotracer Methodology. (1) § W. Prerequisite: Physical Chemistry 152 or 156, or consent of instructor. Lecture 1 hour. Peng
Discussions on the theory and principles in the use of radionuclides as tracers in biological systems. Emphasis is on the design of experiments and data evaluation. PHARM CHEM

250. Research. (1-40) § F, W, Sp. Staff
PHARM CHEM

260. Computer Graphics. (3) § S. Prerequisite: Experience in programming and consent of instructor. Lecture 2 hours. Lab 3 hours. Offered in alternate years. Offered 1990-91. Langridge, Firmia
Applications of interactive three-dimensional computer graphics to modeling complex biological systems, particularly large molecules and their interactions. Elements of hardware and a detailed discussion of software. Demonstration and self-scheduled projects using the computer graphics laboratory. PHARM CHEM

260. Research Planning Conference. (1) § F, W. Sp. Prerequisite: Consent of instructor. Lecture 1 hour. Staff
Discussion and practice in research problem formulation and design selection. Core classes and small group sessions are organized around students' interests by faculty within the area of specialization. PHARM CHEM

298. Thesis. (0) § F, W, Sp. Prerequisite: Advance ment to candidacy and permission of the graduate adviser.
Staff
For graduate students engaged in writing the thesis for the master's degree. PHARM CHEM

299. Dissertation. (0) § F, W, Sp. Prerequisite: Advancement to candidacy and permission of the graduate adviser.
Staff
For graduate students engaged in writing the dissertation for the Ph.D. degree. PHARM CHEM

Pharmacology

160A-B. Medical Pharmacology. (4-6) W. Sp. Prerequisite: Biochemistry 100-A or equivalent; Physiology 120 and 125 or equivalent. Lecture 3 hours. Conference 2 hours. Staff
Katzung
Systematic presentation of pharmacologic agents based on drug group classification. Major emphasis is on mechanisms of action of clinically important agents. PHARMACOL

121. Pharmacology. (1) W. Prerequisite: Concurrent enrollment in Pharmacological Chemistry 121. Lecture 1 hour. Burkhalter
Systematic survey of action and uses of drugs with emphasis on steroids, hormones, and drugs for metabolic disorders. PHARMACOL

122. Pharmacology & Toxicology. (4) § S. Prerequisite: Biochemistry 120A-B and Physiology 120 and 125. Lecture 3 hours. Conference 2 hours. Staff
Burkhalter
Systematic survey of action and uses of drugs acting on autonomic nervous and cardiovascular systems and the kidneys. PHARMACOL

122B-C. Dental Pharmacology. (2-4) W. Prerequisite: Physiology 110. Lecture 2 hours W; 3 hours Sp. Lab 3 hours Sp. Trevoor
Objective of the course is to acquaint dental and dental hygiene students with the fundamentals of pharmacology. Various classes of drugs are examined in regard to actions, absorption, fate, excretion, and toxicity. Agents useful in dentistry are emphasized. PHARMACOL

138. Clinical Toxicology. (2) § F. Prerequisite: Pharmacology 125 and 138. Lecture 2 hours. Burkhalter
The occurrence, mode of action, recognition, and treatment of poisoning by environmental chemical and therapeutic agents. PHARMACOL

134. Pharmacology. (2) W. Prerequisite: Concurrent enrollment in Pharmacological Chemistry 134. Lecture 2 hours. Burkhalter
Systematic survey of action and uses of anti-inflammatory and anti-asthmatic drugs. PHARMACOL

136. Pharmacology & Toxicology. (4) § S. Prerequisite: Pharmacology 125. Lecture 3 hours. Conference 2 hours. Burkhalter
Systematic survey of action and uses of drugs acting on the central nervous system. PHARMACOL

150.01. Pharmacology Research. (1-5 per week) Su, W, W. Sp. Prerequisite: Consent of instructor. Lecture and lab to be arranged. Staff
Student performs individual research in a field of their choice under the guidance and supervision of a member of the faculty. PHARMACOL

170. Group Studies. (1-4) F, W, Sp. Prerequisite: Consent of instructor. Staff
Group studies of selected topics in pharmacology. PHARMACOL

193. Seminar of Departmental Faculty Research. (1-3) § S. Enrollment restricted to Pharmacology graduate students. Seminar 1-3 hours. Trevor and Staff
An overview of Pharmacology faculty research interests presented in a seminar format to introduce first year graduate students to the various areas of ongoing investigation in the Department of Pharmacology. PHARMACOL

198. Supervised Study. (1-5) § F, W, Sp. Staff
Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. PHARMACOL

199. Laboratory Project. (1-5) § F, W, Sp. Staff
A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. PHARMACOL

206A. Mechanisms of Drug Action. (3) § S. Prerequisite: Consent of instructor. Students must register for both Pharmacology 206A and 206B to receive full credit after completion of both quarters. Seminar 3 hours. Bousree and Staff
Lecture/seminar dealing with fundamental aspects of interactions between chemical compounds and components of biological systems. Mechanisms of drug action at molecular, biochemical, and membrane levels are considered. PHARMACOL

206B. Mechanisms of Drug Action. (3) § Sp. Prerequisite: Pharmacology 206A. Seminar 3 hours. Lammman
Second quarter of 2-quarter lecture/seminar dealing with fundamental aspects of interactions between chemical compounds and components of biological systems. Mechanisms of drug action at molecular, biochemical, and membrane levels are considered. PHARMACOL

208. Oxidative Drug Metabolism. (2) § W. Prerequisite: Consent of instructor. Lecture 2 hours. Correia, Ordonez De Mello
The biochemical, regulatory, and chemical aspects of mixed function oxidases with particular emphasis on cytochrome P-450. PHARMACOL

220. Seminar. (0) § F, W, Sp. Correia
Presentations by guests and staff on current research in pharmacology. PHARMACOL

PHARMACOL

298. Thesis. (0) § F, W, Sp. Prerequisite: Advancement to candidacy and permission of the graduate adviser.
Staff
For graduate students engaged in writing the thesis for the master's degree. PHARMACOL

299. Dissertation. (0) § F, W, Sp. Prerequisite: Advancement to candidacy and permission of the graduate adviser.
Staff
For graduate students engaged in writing the dissertation for the Ph.D. degree. PHARMACOL

300A-B-C. Teaching Practicum. (1-3, 1-3, 1-3) § F, W, Sp. Prerequisite: Advancement to candidacy for the Ph.D. degree. Staff
Opportunity is provided to participate in a formalized way to the teaching of pharmacology under the direction of the faculty. PHARMACOL

Pharmacy

111. Non-Prescription Products. (1) W. Conference 2 hours. Yee
Evaluation and comparison of non-prescription medications and appliances. Discussion on their patterns of use in the community is included. Emphasis is on verbal communications. PHARMACY

112. Non-Prescription Products. (1) Sp. Prerequisite: Pharmacy 111. Conference 2 hours. Yee
Continuation of Pharmacy 111. PHARMACY
An intermediate course offering an opportunity to explore, in greater depth, special drug delivery systems and some fundamental relationships involved in their design or action. PHARMACY

154. Percutaneous Absorption. (2) W. Prerequisite: Pharmacy 127. Lecture 2 hours. Wester, Guy Course presents material dealing with the penetration of drugs and other chemicals across the skin. PHARMACY

155. External Drug Products. (5-4) W. Prerequisite: Pharmacy 127. Lecture 2 hours. Lab 3-6 hours. Blake, Hoener Discussion and laboratory exercises on the formulation of products for external use, including drugs and cosmetiques. The course deals with the properties and ingredients of such products. PHARMACY

156. Parenteral Products. (3) F, W, Prerequisite: Pharmacy 127. Lecture 2 hours. Lab 3 hours. Blake Introduction to the formulation and technology of parenteral preparations. Laboratory includes participation in hospital activities in which parenterals are made and administered. PHARMACY

160. Selected Topics in Clinical Pharmacokinetics. (2) W. Prerequisite: Pharmacy 128 and 129. Lecture 2 hours. Tozer Selected topics in clinical pharmacokinetics. Depending on coverage in Pharmacy 128/129, topics may include: pharmacodynamic and pharmacokinetic modeling; distribution kinetics; population pharmacokinetics; turnover concepts; drug interactions, and metabolic kinetics. The course is intended as an elective for third- and fourth-year students. PHARMACY

164. Veterinary Products. (3) Prerequisite: Microbiology 120, 127, Pathology 135, Pharmacology 136, and Pharmacy 116. Lecture 3 hours. Enoa Course is designed to familiarize the student with common ailments of domestic animals and livestock products used for the prevention and treatment of such diseases, the interrelationship of pharmacists, veterinarians, and animal owners, and legal limitations on veterinary product dispensing. PHARMACY

165. Pharmaceutical Technology. (3) F. Prerequisite: Pharmacy 116. Lecture 1 hour. Lab 6 hours. Blake, Gibson Introduction to the technology of liquid and semi-solid pharmaceuticals. Special emphasis is given to the problems encountered and the materials used in pharmaceutical manufacturing. PHARMACY

166. Pharmaceutical Technology. (3) W. Prerequisite: Pharmacy 116. Lecture 1 hour. Lab 6 hours. Blake, Gibson An introduction to the technology of solid dosage forms, especially tablets and capsules. Emphasis is placed on problems encountered in preparation of this type of medication. PHARMACY

167. Pharmaceutical Technology. (3) Prerequisite: Pharmacy 116. Lecture 1 hour. Lab 6 hours. Blake, Gibson An advanced study of the relationship of the art and science of pharmaceutical technology to solid dosage forms. PHARMACY

168. Clinical Pharmacokinetics (UC). (2) F, W. Prerequisite: Fourth-year standing or consent of instructor. Reports and seminars 3 hours. Enrollment limited. Zorer, Winter, Upton, Salazar Discussion and review of the literature in the clinical application of pharmacokinetic principles in drug therapy. PHARMACY

168.2. Clinical Pharmacokinetics-UCI. (2) F, W. Prerequisite: Fourth-year standing or consent of instructor. Reports and seminar 3 hours. Enrollment limited. Shirvansor Discussion and review of the literature in the clinical application of pharmacokinetic principles in drug therapy. PHARMACY

170. Group Studies. (1-6) F, W. Prerequisite: Consent of instructor. Staff Group studies of selected topics in pharmacy. PHARMACY

170.06. Molec & Cell Biology in Drug Devel. (2) Prerequisite: Consent of instructor. Lecture 2 hours. Tozer Introduction to the role of cellular and molecular biology in developing new drugs, hormones, or therapeutic agents. PHARMACY

170.07. Communication Skills. (1-5) Prerequisite: Consent of instructor. Seminar 2 hours. Seminar 1 hour. Enrollment limited. Lem Aspects of communication which focus on skills pertinent to contemporary pharmacy settings. Discussion of principles of communication and practice of specific communication techniques in simulated practice situations. PHARMACY

170.08. Supervised Study. (1-5) F, W. Staff Library research and directed reading under supervision of a member of the faculty with the approval of the chairman of the department. PHARMACY

179. Laboratory Project. (1-5) F, W. Staff A laboratory research project under direction of a member of the faculty with the approval of the chairman of the department. PHARMACY

Lucacini An analysis of the marketing functions that facilitate the flow of pharmaceutical products from production to consumption, and of the decision-making processes of marketing institutions. Emphasis is given to the environmental factors affecting marketing decisions. PHARMACY

154. Community Pharmacy Management. (4) Prerequisite: Basic economics or consent of instructor. Lecture 4 hours. Lucacini Principles of management, specialty directed toward developing familiarity with current problems peculiar to community pharmacy operation. Emphasis is given to elements in locating, organizing, operating, and adapting a pharmacy. PHARMACY

155. Accounting. (3) F. Lecture 1 hour. Discussion 2 hours. Lucacini Consideration of the fundamental concepts of accounting and its applied use in the management of a pharmacy. Emphasis is placed on the accounting requirements of the community pharmacy. Problem cases and demonstrations are presented. PHARMACY

160. Hlth Prof Family & Business Law. (2) Lecture 2 hours. J. R. Nielsen A survey of laws relating to landlord-tenant association, property division, support systems, probate and decedent's estate, with particular emphasis on how pharmacists may expect their practice to be affected by these laws, and some practical preventive legal techniques. PHARMACY

170. Group Studies. (1-6) F, W. Prerequisite: Consent of instructor. Staff Group studies of selected topics in pharmacy administration. PHARMACY

184A-B. Legal Problems in Health Care. (3-2) F, W. Prerequisite: Third-year standing and consent of instructor. PHARMACY
Physical Therapy

105. Physical Med & Rehabilitation. (3) W. Prerequisite: Completion of course work in summer term. Open only to students enrolled in the Curriculum, or by consent of program director. Lecture 3 hours.

106D. Specialty Medical Management of Disease: Internal Medicine. (3) W. Prerequisite: Completion of course work in fall quarter. Open only to students enrolled in the Curriculum, or by consent of program director. Lecture 3 hours.

107. Roost. Course presents the diagnostic and medical concerns that guide the intern in decision making. Outlining the contraindications, precautions, and protocols help guide the physical therapist in designing management programs for patients with primary or secondary internal medical problems. The health care team and team relationships are also presented. PHYS ther.

108. Basic Medical Procedures. (2) 5 S. Prerequisite: Completion of course work in summer term, fall and winter quarters. Lecture 1 hour. Lab 2 hours.

110. Ortho & Rehab Diag/Treatment. (2) S. F. Prerequisite: Completion of PT 201, PT 202 and concurrent enrollment in Pathology 135.01. Open only to students enrolled in the Curriculum, or by consent of program director. Lecture 2 hours.

111. Neurology & Rehab Diag/Treatment. (2) S. F. Prerequisite: Completion of PT 201, Anatomy 103.01, and Pathology 135.01. Open only to students enrolled in the Curriculum, or by consent of program director. Lecture 2 hours.

112. Pediatrics: Diagnosis & Treatment. (1) S. W. Prerequisite: Upper division course work in human development and Pathology 125.01. Open only to students enrolled in the Curriculum, or by consent of program director. Lecture 1 hour.

113. Kaufland. Course presents the diagnostic, developmental, behavioral, and medical principles of clinical management for normal youngsters and those with acute chronic disease. Contraindications, precautions, and programs are discussed as they impact physical therapy management. PHYS ther.

114. Supervised Study. (1-5) Su, F, W. Prerequisite: Enrollment in the Curriculum and approved by instructor. Open only to students enrolled in the Curriculum in Physical Therapy.

115. Laboratory Project. (1-5) Su, F, W. Prerequisite: Enrollment in UCSF/SFSPH Program in Physical Therapy and approval of student faculty advisor and project faculty. Open only to students enrolled in the Curriculum in Physical Therapy, or by consent of program director.

119. Advanced PT Practice & Theory I. (4) F. Prerequisite: PT 701 and PT 702 or their equivalents and concurrent enrollment in the Kaiser Orthopedic Physical Therapy and Clinical Residency Program. Open only to students enrolled as a graduate student at UCSF or SFSPH, or by consent of program director. Lecture 2 hours. Lab 6 hours.

120. Advanced PT Practice & Theory II. (5) W. Prerequisite: PT 203 and concurrent enrollment in the Kaiser Orthopedic Physical Therapy and Clinical Residency Program. Open only to students enrolled as a graduate student at UCSF or SFSPH, or by consent of program director. Lecture 3 hours. Lab 6 hours.

125. Functional Anatomy Review. (1-5) Su. Prerequisite: PT 201 or equivalent. Open only to students enrolled in the graduate program in physical therapy. Lecture 1 hour. Lab 1.5 hours.

201. Kinesiology & PT Assessment. (3) Su. Prerequisite: Completion of prerequisite coursework in kinesiology, exercise physiology, anatomy, and physiology. Open only to students enrolled in the Curriculum, or by consent of program director. Lecture 2 hours. Lab 4 hours.

Richardson. Application of surface anatomy, structural and biomechanical principles to normal musculoskeletal anatomy of the foot and lower extremity problems. PHYS ther.

202. Therapeutic Exer. and Modalities. (2) Su. Prerequisite: Completion of prerequisite coursework in exercise physiology and human physiology. Open only to students enrolled in the Curriculum or by consent of program director. Lecture 1 hour. Lab 3 hours.

Richardson. In lecture and laboratory setting, physiological, theoretical, analytical, and administrative principles are applied to the application of therapeutic modalities and the design and implementation of therapeutic exercise programs to prevent disability, maintain maximal health, and restore function. PHYS ther.

203. Advanced PT Practice & Theory I. (4) F. Prerequisite: PT 701 and PT 702 or their equivalents and concurrent enrollment in the Kaiser Orthopedic Physical Therapy and Clinical Residency Program. Open only to students enrolled as a graduate student at UCSF or SFSPH, or by consent of program director. Lecture 2 hours. Lab 6 hours.

204. Advanced PT Practice & Theory II. (5) W. Prerequisite: PT 203 and concurrent enrollment in the Kaiser Orthopedic Physical Therapy and Clinical Residency Program. Open only to students enrolled as a graduate student at UCSF or SFSPH, or by consent of program director. Lecture 3 hours. Lab 6 hours.

205. Functional Anatomy Review. (1-5) Su. Prerequisite: PT 201 or equivalent. Open only to students enrolled in the graduate program in physical therapy. Lecture 1 hour. Lab 1.5 hours.

201. Kinesiology & PT Assessment. (3) Su. Prerequisite: Completion of prerequisite coursework in kinesiology, exercise physiology, anatomy, and physiology. Open only to students enrolled in the Curriculum, or by consent of program director. Lecture 2 hours. Lab 4 hours.

Richardson. Application of surface anatomy, structural and biomechanical principles to normal musculoskeletal anatomy of the foot and lower extremity problems. PHYS Ther.

202. Therapeutic Exer. and Modalities. (2) Su. Prerequisite: Enrollment in UCSF/SFSPH Physical Therapy Program or by consent of program director. Seminar 2 hours.

205. Research Sem in Physical Therapy. (1-4) F, S, W. Prerequisite: Completion of PT research seminars through PT 203. Enrolled in UCSF/SFSPH Physical Therapy Program or by consent of program director.

251. Research Design and Methodology. (2) Su. Prerequisite: Open only to students enrolled in the Curriculum or by consent of program director. Lecture 2 hours.

Byl. Logic of inquiry, principles of research design, and methodologies appropriate to scholarly activity in physical therapy. Includes review and critical appraisal of research designs used in physical therapy and practical problem solving. Foundations course for developing a research project. PHYS Ther.
252. Research Semi: Critique of PT Lit. (5) S. Prerequisite: Completion of a course in statistics. Opens only to students enrolled in the Curriculum, or by consent of program director. Seminar 3 hours.

Byl
The first seminar of a research series focusing on problems of research in physical therapy, practical statistics, reading abstracts and critiques of research, literature review, including submissions of a literature review on the student’s proposed research topic. PHYS TH/ER.

253. Research Semi: Proposal Critique. (5) Sp. Prerequisite: grade B or better in PT 250. Open only to students enrolled in the Curriculum or by consent of program director. Seminar 3 hours.

Byl
Converting the research question to a research hypothesis, and proposal writing including preparation of a proposal for a research project. PHYS TH/ER.

254. Research Semi: Data Analysis. (1) S. Prerequisite: Completion of PT research seminar 250. 225 and 253. Enrolled in UC/SSF/UCSF Physical Therapy Program or by consent of program director. Seminar 1 hour.

Byl
This is the last seminar in the research series, and includes data analysis, data interpretation, problem solving, manuscript preparation, and presentation of results to class and other professionals. PHYS TH/ER.

410. Clinical Clerkship. (5) W. Prerequisite: Completion of academic coursework with overall B average. Open only to students enrolled in the Curriculum, or by consent of program director. Clinic 1 day/week.

Radka
Student observe and assist the physical therapy clinician in the provision of assessment, evaluation, and physical therapy treatment services in one practice setting, one day a week for 11 weeks. PHYS TH/ER.

411. Clinical Clerkship. (6) S. Prerequisite: Enrolled in Graduate Program in Physical Therapy and satisfactory completion of academic coursework with overall B average to enter the clinical clerkship. Open only to students enrolled in the Curriculum, or by consent of program director. Clinic 1 day/week.

Radka
Students develop their physical therapy assessment skills and integrate the didactic information with patient treatment by working closely with a clinical preceptor in the clinical setting to evaluate patients under supervision and directly observe staff providing physical therapy treatment. PHYS TH/ER.

412. Clinical Clerkship. (5) S. Prerequisite: PT 410 and PT 411. Open only to students enrolled in the Curriculum, or by consent of program director. 40 hours/week, 5 days/week for 6 weeks.

Radka
Students provide assessment, evaluation, and physical therapy treatment under the direct supervision of a physical therapist. Students must demonstrate satisfactory completion of this clerkship before progressing to the next clerkship. PHYS TH/ER.

413. Clinical Clerkship. (5) S. Prerequisite: PT 412. Open only to students enrolled in the Curriculum, or by consent of program director. 40 hours/week, 5 days/week for 6 weeks.

Radka
Students provide patient care under supervision in a clinical facility affiliated with UCSF. Students must satisfactorily complete this clerkship prior to taking PT 414. PHYS TH/ER.

415. Clinical Clerkship. (5) S. Prerequisite: Enrolled in UC/SSF/UCSF Physical Therapy Program and satisfactory completion of PT 412 and 413.

Radka
Students provide physical therapy patient care for 32 hours/week for 11 weeks under the guidance and supervision of a clinical preceptor in one or two clinical facilities that differ from the type of setting in PT 412 and 413. PHYS TH/ER.

418. Advanced Clinical Clerkship. (5) S. Prerequisite: Enrolled in UC/SSF/UCSF Physical Therapy Program.

Radka
This advanced clinical clerkship is specifically arranged to enable the student to develop advanced clinical skills under the supervision of a clinical preceptor in one clinical setting. Setting and emphasis will vary. PHYS TH/ER.

100. Organ System Physiology. (6) S. Prerequisite: Anatomy 100 and equivalent; or permission of program director. 40 hours/week, 5 days/week, for 6 weeks.

Lingappa
Normal function of the cardiovascular, respiratory, and renal systems and the metabolic functions of the body as a whole are studied in lectures, seminars, laboratory exercises, demonstrations, and clinical illustrations. PHYS TH/ER.

101. Endocrinology & Gastroenterology. (5) S. Prerequisite: Anatomy 100A-B, Physiology 100, Physiology 100, or equivalent; or permission of instructor. Lecture 1 hour. Conference 2 hours.

Lingappa
Within the framework of endocrine and gastrointestinal physiology, the course will strive to teach the physiological and anatomical fundamentals of key physiologic principles. PHYS TH/ER.

110. Integrative & Nutritive Systems. (6) S. Prerequisite: College-level biology, physics, and chemistry, or consent of instructor. Lecture 4 hours. Lab 1 hour. Conference 1 hour.

A. Miller
To provide understanding of the mechanisms and processes in various organ systems. Provide necessary background for learning about human disease and its treatment. Enhance understanding of the function of organs and cells. Provide knowledge for realization of treatment functions and disease involve exactly the same processes as other human functions and disease. Help prepare skills necessary to understand and evaluate clinical scenarios. PHYS TH/ER.

120. Mammalian Physiology. (2) 5 S. Prerequisite: Endocrinology & Gastroenterology 120 required for students in School of Pharmacy; may be taken separately by graduate students with consent of instructor only. Lecture 2 hours. Conference 0.5 hour.

Gaong and Staff
Study of the integrative systems of the mammalian organism, particularly the gastrointestinal and endocrine systems. PHYS TH/ER.

120.1. Mammalian Physiology. (2) S. Prerequisite: Endocrinology & Gastroenterology 120.1 required for students in Curriculum in Physical Therapy. Open only to students enrolled in the Curriculum in Physical Therapy, by consent of instructor. Lecture 2 hours. Conference 1 hour.

Gaong
Study of the integrative systems of the mammalian organism, particularly the gastrointestinal and endocrine systems. PHYS TH/ER.

125. Mammalian Physiology. (6) Prerequisite: Consent of instructor. Lecture 4 hours. Lab 4 hours. Conference 2 hours.

Mines
Physiology of the human cardiovascular, respiratory and renal systems is stressed, with special attention to developing problem solving skills using the material. PHYS TH/ER.

125.1. Mammalian Physiology. (5) F. Prerequisite: Completion of academic course work in summer term. Open only to students enrolled in the Curriculum in Physical Therapy; by consent of instructor. Lecture 4 hours. Conference 2 hours.

Mines
Physiology of the human cardiovascular, respiratory and renal systems is stressed, with special attention to developing problem solving skills using the material. PHYS TH/ER.

126. Neuroscience for Pharmacy. (4) W. Prerequisite: Physiology 122 or consent of instructor. Lecture 3 hours. Lab 1.5 hours. Conference 1 hour.

Korenblat and Staff
Course is designed primarily for students in the School of Pharmacy. The course will present an integrated approach to the physiological operations of the nervous system and the morphological or anatomical substrates in which these occur. PHYS TH/ER.

150.1. Research in Physiology. (1.5 per week) S. Prerequisite: Consent of instructor. Lecture and lab to be arranged.

Staff
Individual research in endodontology, respiratory physiology, neurophysiology, cardiovascular physiology, cell physiology, or other areas offered by individual staff members. PHYS TH/ER.

170.1. Medical Scholars Program Workshops. (1) W. Prerequisite: Consent of instructor (this course is offered as part of the UCSF Medical Scholars Program, which endeavors to encourage students to pursue careers in academic medicine).

Dallman
Workshops in organ system physiology, offered concurrently to the first-year course, will give challenging material in the form of problem sets which students will solve in groups. Material geared toward high-achieving students will augment basic coursework with clinical and basic science information. PHYS TH/ER.

198. Supervised Study. (1-5) F. W. Prerequisite: Consent of instructor.

Staff
Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. PHYS TH/ER.

199. Laboratory Project. (1-5) F. W. Prerequisite: Consent of instructor.

Staff
A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. PHYS TH/ER.

201. Advanced Integrative Physiology. (4) Sp. Prerequisite: Physiology 100 or equivalent. Lecture 2 hours.

Reid and Staff
The purpose of this course is to review in depth selected topics in regulatory and integrative physiology. The emphasis will be on cardiovascular, renal, and respiratory physiology, but other systems will also be covered. PHYS TH/ER.


Korenblat, Verkman
Cellular & molecular aspects of membrane transport mechanisms—both active & passive transport of electrolytes & non-electrolytes. Selected transport processes studied in detail for their roles in cell physiology and the molecular identity & properties of the transporter proteins. PHYS TH/ER.

204. Topics in Physiology. (2-3) S. Prerequisite: Minimum of six units of introductory physiology. Seminar 2 hours. Optional term paper for additional unit.

Rothenman
This seminar discusses selected topics in cellular and integrative physiology. Readings are drawn from primary and secondary sources. PHYS TH/ER.

221. Molecular & Cellular Approaches to Cardiovascular Disease. (1-5) S. W. Prerequisite: Physiology 100 or equivalent. Lecture 1 hour. Conference 0.5 hour.
Physiology/Psychology

Coughlin, Williams

Leptin: Comprehensive approaches to understanding mechanisms of disease at the molecular level. Focus will be on vascular biology and pathophysiology, and on new molecular targets for therapeutics. PHYSIOLOGY

223. Physiology Research Seminar. (1) § F, W. Prerequisite: Consent of instructor. Seminar 1 hour.

Hall

Seminar presentations by guest speakers, alternating with discussion by Physiology staff members and members of their current research. Each quarter, a different topic of physiological interest is the subject of guest presentations. Students may enroll for any number of quarters. PHYSIOLOGY


Taylor, Fielding

The structure and regulation of the genes and proteins that control lipid metabolism, including plasma apolipoproteins, receptors, and enzymes. Molecular and cellular biology of mammalian lipid metabolism are examined with respect to regulation of various proteins involved in transport, binding, and utilization of lipids. PHYSIOLOGY

227. The Scientific Method. (2) W. Prerequisite: Graduate or professional education in at least two of the following: biochemistry, microscopic anatomy, cellular physiology or biophysics, systems physiology, microbiology, or equivalent, or by permission of instructor. Maximum of 20 students. Seminar 2 hours.

Rothman

Focus on the evaluation of modern research in the biological sciences, in terms of the correspondence of particular experimental efforts with the historical and philosophical basis of scientific investigation. PHYSIOLOGY


Staff

PHYSIOLOGY

298. Thesis. (0) § Su, F, W, Sp. Prerequisite: Advancement to candidacy and permission of the graduate advisor.

Staff

For graduate students engaged in writing the thesis for the master's degree. PHYSIOLOGY

299. Dissertation. (0) § F, W, Sp. Prerequisite: Advancement to candidacy and permission of the graduate advisor.

Staff

For graduate students engaged in writing the dissertation for the Ph.D. degree. PHYSIOLOGY

300. Teaching Practicum. (0) § F, W. Prerequisite: Previous training in physiology and consent of instructor. Lecture and lab variable.

Staff

Practice in teaching physiology under faculty supervision. Students supervise laboratory work, conduct conferences, deliver lectures, and assist in preparing and grading examinations. Responsibilities are assigned according to the individual student's stage of development. PHYSIOLOGY

301. Scientific Writing. (6) § Su, W. Prerequisite: Consent of instructor. Seminar 6 hours.

Coleridge, Zeiger

A seminar designed to teach postdoctoral fellows and graduate students how to best put into words, tables and figures work done in the laboratory, and how to do so clearly, simply, precisely, concisely, and briefly, so that others may understand. PHYSIOLOGY

302. Teaching Techniques. (6) F, W, Prerequisite: Consent of instructor. Lecture 3 hours. Enroll limited.

Staub

A course in teaching techniques. Students present short lectures, and videotapes of these presentations are analyzed by small- and group-criticism. PHYSIOLOGY

Preventive Dentistry and Community Health

199. Laboratory Project. (1-3) F, W, Sp. Prerequisite: Consent of instructor.

Staff

A laboratory research project under direction of a member of the faculty with the approval of the chairman of the department. DENT PUB HLTH

Psychiatry

First-Year Coordinated Instruction—This course provides a first opportunity to interview medical patients in small group settings, guided by experienced clinicians. Useful medical information is gathered in a comfortable, professional interchange, and one's identity as a physician also begins emerging in the process.

PGY 1 Courses—The Department of Psychiatry is currently developing new courses for PGY 1 residents. Please refer to the quarterly Schedule of Classes for a listing of those courses in the 400 series.

100A. Psychological Basis of Medicine. (2) F, W. Lecture 2 hours. Seminar 1 hour.

Hosowitz

Introduction to the basic psychological principles underlying response to the stress of illness and its treatment, with emphasis on mental mechanisms, development, death and dying, and character. PSYCHIATRY

100B. Psychological & Cultural Basis of Health & Illness Behavior. (2) W. Prerequisite: Psychiatry 100A. Seminar 2 hours.

Leigh, F. Cohen

Introduction to psychological principles influencing health behaviors and the physician-patient relationship. Presentation of the social and cultural factors that affect patients' health and illness behavior when well. Risk factors and preventive interventions are explored. PSYCHIATRY

111A. Psychopharmacology Core Clerkship. (1.5 per week) Su, F, W. Prerequisite: Medicine 131A-A-C. Psychiatry 100A, 100B and 131A-B. Open to UCSF students only.

Kalreider

Six-week assignment to a psychiatric service at UCSF, SFGH, VAMC, MZ, L or VAF. Students, under supervision, are responsible for patient evaluation and participation in treatment planning for inpatients, outpatients, and consultation/liaison. They attend seminars related to clinical work, and make field visits to other types of psychiatric facilities. PSYCHIATRY


Brinzendine, Mamra

Introduction to clinical psychiatry with particular emphasis upon knowledge important in general medical practice. Course format includes lectures, small group teaching, interviewing patients, symbol reading, and the use of clinical videotapes and films. PSYCHIATRY

140.01. Advanced Psychiatry Clerkship. (1.5 per week) Su, F, W. Prerequisite: Psychiatry 110 and consent of instructor.

Kalreider

Participation in psychiatric assessment and treatment, with supervision of attending and resident staff. Options include consultation-liaison service, inpatient adult or child service. Other special focus experiences such as outpatient, AIDS, geriatrics, may be arranged with Dr. Pamela Murtin. PSYCHIATRY

140.02. Advanced Urban Campus Clerkship. (1.3 per week) Su, F, W. Prerequisite: Consent of Department of Psychiatry.

Kalreider

Clinical clerkship in off-campus hospitals, approved by the chairperson of the department and the dean. PSYCHIATRY

140.06. Behavioral Medicine: Biopsychosocial Approach to Patients—VMMC. (1.5 per week) Su, F, W. Prerequisite: Psychiatry 110.

Heyler, Jarmer, Hirschauer

Fresno Dept./Psychiatry offer a 4-6 week elective rotation in Behavioral Med. Care. and the Psychiatric Consultative Svcs. Students given opportunity for comprehensive patient evaluation using the biopsychosocial treatment plan, participation in psychiatric medicine research, work with interdisciplinary team. Housing provided by UCSF. PSYCHIATRY

140.07. Advanced Adult Inpatient Forensic Psychiatry. (1.5 per week) Su, F, W. Prerequisite: Completion of core curriculum in Psychiatry and approval of Dean's Office. Restriction: Must be by prior arrangement only for arrangements with Department of Psychiatry, UCSF Fresno. 415 E. Clinton Avenue, Fresno, CA 93703. Lecture 5 hours. Seminar 2 hour. Library research hour.

Sanders, Kiersch, Slater

In our institution's forensic hospital, students will observe admissions, evaluations, interviews of patients with a wide spectrum of psychopathology. Will participate in treatment planning and forensic seminars. Emphasis on legal aspects of psychiatry. Room and board provided through Atascadero State Hospital.

150.01. Psychiatric Research. (1.5 per week) Su, F, W. Prerequisite: Consent of Department of Psychiatry.

Kalreider, Jonas

Participation according to students' level of experience in experimental work in areas such as neuropharmacology, opiate conditioning, psychophysiology, immunoneurochemistry, and neural communications. All work is under the close supervision of members of the faculty.

170.01. Intro to Study of Suicide. (2) F, W, or Sp. Prerequisite: Consent of Department of Psychiatry. Lecture 2 hours.

Mott

Suicide is surveyed from a multidisciplinary approach in seminars led by persons working in the field.

170.02. Alcoholism. (3) Lecture 1 hour.

P. Stewart

General issues in substance abuse as well as the pharmacologic, medical, and neurologic aspects of alcohol abuse. Treatment issues will be considered with emphasis on Alcoholics Anonymous. Family issues arising from alcohol abuse and special concerns for the health professional. PSYCHIATRY

170.17A. Issues in Psychiatry. (1-3) F, W. Prerequisite: Consent of Department of Psychiatry. Seminar 1-3 hours.

Kalreider

Explores focal psychiatric issues in systemic format. Current elective includes substance abuse, women's psychological health, the development of physician identity, cross-cultural issues. New topics are designated according to faculty/student interest.

PSYCHIATRY

170.17B. Issues in Psychiatry. (1-3) F, W. Prerequisite: Consent of Department of Psychiatry. Seminar 1-3 hours.

Kalreider

Explores focal psychiatric issues in systemic format. Current electives include substance abuse, women's psychological health, the development of physician identity, cross-cultural issues. New topics are designated according to faculty/student interest.

PSYCHIATRY

Kalreider

Explores the social-psychiatric issues in systematic format. Current electives include substance abuse, women's psychological health, the development of physician-identity, cross-cultural issues. New topics are designed according to faculty/student interests. PSYC HATRY

170.18 Psychotherapy Research. (3) Sp. Prerequisite: Course in statistics and consent of Department of Psychiatry. M. Horowitz

Participants in research activities at the Center for the Study of Neuropsychology and individual therapy, and patient observation are included. PSYC HATRY


Lee

Introduction to the values and beliefs of various minority cultures regarding health and illness, with an emphasis on practical clinical skills in working with a diverse patient population, understanding particular psychosocial concerns relevant to minority patients, and an understanding of the historical factors which impact on the health of minority populations. PSYC HATRY

170.20 Topics in the Psychology of Women: Feminist Persp. (1) F, W, Sp. Prerequisite: Open to medical students only. Seminar 1 hour.

Garrell, Johnson

In this seminar, there are small-group discussions based on readings from feminist perspectives on the following topics: women's mental health; dominance/subordination; eating disorders/sexuality; multiple discriminations against women, the elderly, men, and homosexuals. PSYC HATRY

180. Sexual Issues in Medical Practice. (2) W. Seminar 2 hours.

Alperstein, Ballard

Social, behavioral, and clinical aspects of human sexuality are covered in lectures and seminars. Lectures present didactic material and seminars focus on clinical and ethical problems related to sex and medical practice. PSYC HATRY

198. Supervised Study. (1-3) F, W, Sp. Prerequisite: Consent of Department of Psychiatry. N. Kalreider and Staff

Limited research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. PSYC HATRY

214. Practice of Clinical Social Work. (1-3) F, W, Sp. Prerequisite: 1 year of clinical social work. Restricted to intern in clinical social work. Lecture 1.5 hours.

H. Roth

This course aims at integrating developmental and clinical theories with clinical social work practice toward enhancing clinical, conceptual, and consultation knowledge and skills. PSYC HATRY

400. Com Mental Health System. (1) Su, W. Required for first-year residents in Psychiatry. Seminar 1 hour.

Surber

Focus on special treatment issues involved in the care of the chronically disabled patient and of patients of various ethnic and minority backgrounds. PSYC HATRY

401. Intro to Clinical Interviewing. (1) S, W. Prerequisite: Required for first-year residents in Psych., Seminar 1 hour.

Jacobs, Gloudfeld

Course teaches the fundamentals of interviewing psychiatric patients. PSYC HATRY


Course provides a grounding in the field of pharmacology and descriptive diagnostic features of the major psychopharmaceuticals, including the following: the four classes of drugs: antipsychotics, antidepressants, stimulants, and anxiolytics. PSYC HATRY

403. Intro to Psychopharmacology. (1) Su, W. Required for first-year residents in Psych. Seminar 1 hour.

Baumrucker

Course addresses basic issues in prescribing, including patient compliance, the placebo effect, and the dynamic significance of medications. Also includes a review of basic neurochemical processes. PSYC HATRY

404. Intro to Child Development. (1) Su, W. Required for first-year residents in Psych. Seminar 1 hour.

Hanson

An introduction to developmental issues, with emphasis on ages 0-3 years. PSYC HATRY

411. Forensic Psychiatry. (1-2) W. Required for second-year residents in Psych. Seminar 1.5 hours.

Tess

An elective seminar reviewing the major areas of forensic psychiatry relevant to the practice of the clinician. Topics covered include competency, commitment, and criminal responsibility. PSYC HATRY

413. Psychosocial Aspects of Psychiatry. (1) F, W. Prerequisite: Required for second-year residents in Psych. Seminar 1 hour.

Zeitlin

Course provides a didactic introduction to the practice of outpatient group psychotherapy. PSYC HATRY

431. Neurology. (1) W. Prerequisite: Required for fourth-year residents in Psychiatry. Lecture 1 hour.

Palluccio

Review of clinical neurology with emphasis on neurological disorders that have psychiatric implications. PSYC HATRY

450. Psychopharmacology for Psych OP. (1) F, W, Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

Lennon, Stotzer

A seminar where participants read and present current psychopharmacological literature. Topics focus on decision making regarding clinical interventions in which medications would be helpful; objective measures of treatment response; principles of drug management. PSYC HATRY


Ostwald

Members of the Department of Psychiatry and designated guests make clinical center presentations reflecting diverse areas of the field. PSYC HATRY

456. BioPsychotherapy. (2) F, W, Sp. Prerequisite: Graduate clinical license standing at SFCH, or consent of instructor. Lab 3 hours. Seminar 1 hour.

E. Burke, J. Cohen

Review of the literature on psychosocially oriented brief psychotherapy and review of completed cases. PSYC HATRY


Wallerstein, Kalreider, Marmar

Course covers psychotherapy of selected cases with records of the process, supervision during treatment, and group seminars in which the therapy is reviewed in retrospect in order to develop group and macroanalytic levels of abstraction. PSYC HATRY

458. Research on Mental Processes. (1.5) Su, F, W, Sp. Prerequisite: Graduate standing in Psychology, or PGO 2-5 in Psychiatric Residency. Minimum commitment of one year, exception to some medical students for a one-quarter commitment Seminar 1.5 hours.

Horowitz, Marmar, Weiss

Guided research using an apprenticeship model involving recorded information from psychotherapy, research interviews, and experimental procedures using cognitive science methods. Systematic readings in the literature on meaning, context, and the social and clinical processes, including issues of motivation, learning, and social context. PSYC HATRY

459. Evaluation of Psychotherapies. (1.5) F, W, Sp. Prerequisite: Resident in Department of Psychiatry, or consent of instructor Seminar 1.5 hour.

Marmar

Course provides framework for residents who will enable them to take a systematic and rational approach in evaluation of various psychotherapies, including a method of assessing the clinical consistency and validity of a given approach. PSYC HATRY

460. Theories of Personality. (1) F, W. Prerequisite: Resident standing in Department of Psychiatry or consent of instructor. Seminar 1 hour.

E. Burke
Focus is on personality theories other than Freudian, such as Jungian, Skinner, and Rogers. Course includes examination, study, and discussion of contemporary personality theorists, their concepts, systematic application to the behavioral sciences, and research potential. Parallel reading is required. PSYCHIATRY

462. Psychol Aspects Medication Usage. (1) F. W. Prerequisite: Consent of instructor. Seminar 1 hour. Notes: Course explores the psychological implications of prescribing medications. PSYCHIATRY

463. Clinical Case Conference. (1-3) F, W, Sp. Prerequisite: Consent of instructor. Conference 1.5 hours. Notes: The theory of an individual outpatient psychotherapy is presented. The case in treatment is followed on a weekly basis. PSYCHIATRY

464. Adult Continuous Case Conference. (1-3) F, W, Sp. Prerequisite: Consent of instructor. Seminar 1.5 hours. Course given at San Francisco Psychoanalytic Institute. Notes: Seminar reviewing the literature pertinent to psychotherapy of the severely disturbed, predominantly borderline patient. A case will be presented and discussed. PSYCHIATRY

465. Psychobiography & Creativity. (2-3) F, W, Sp. Prerequisite: Consent of instructor. Lecture 2-3 hours. Notes: Course emphasizes the effects of mental illness on the lives of artists, scientists, statesmen, and other public figures. Biographical, autobiographical, and clinical studies of exceptional people will be compared. Students will be encouraged to select individual subjects for research. PSYCHIATRY

466. Behavioral Sciences Research. (1-3) Su, F, W, Sp. Prerequisite: Consent of instructor. Lab 4.5 hours. Notes: Course consists of supervised clinical and basic research in behavioral abnormalities, psychopathology, and experimental psychiatry. Specific subjects for research are chosen in conjunction with members of the staff. PSYCHIATRY

481. Child Care Observation. (1) Su, F, W, Sp. Prerequisite: Required for first-year child psychiatry fellows, or consent of instructor. Field work 1.5 hours. Notes: Participate and observe activities at UCSF Child Care/Study Center. Experiences are discussed with supervisor. Experience to be collaborated to include observations at elementary and junior high school. PSYCHIATRY

482. Growth & Development Seminar. (1) F, W, Sp. Prerequisite: Required for first-year child psychiatry fellows, or consent of instructor. Seminar 1 hour. Notes: Course includes an examination, study, and discussion of contemporary personality theorists, their concepts, systematic application to the behavioral sciences, and research potential. Parallel reading is required. PSYCHIATRY

483. Principles of Therapeutic Meth. (1) F, W, Sp. Prerequisite: Required for first-year child psychiatry fellows, or consent of instructor. Seminar 1 hour. Notes: Discussion of psychotherapy and practice of clinical work with patients. Includes history, principles, and methods of child psychiatry as well as all stages of child development and modalities of treatment. PSYCHIATRY

485. Psychoanalytic Literature Seminar. (1-3) F, W, Sp. Prerequisite: Required for first-year child psychiatry fellows, or consent of instructor for others. Seminar 1 hour. Notes: Extensive review of pertinent readings in child and adolescent psychiatry. PSYCHIATRY

486. Devel Disabilities Seminar. (2) Su. Prerequisite: Required for first-year child psychiatry fellows, or consent of instructor. Seminar 2 hours. Notes: Note lectures on mental retardation, deafness, blindness, and cerebral palsy, with emphasis on the developmental, family, and social aspects. PSYCHIATRY

487. Adolescent Continuous Case Seminar. (1-3) F, W, Sp. Prerequisite: Required for second-year child psychiatry fellows, or consent of instructor for others. Seminar 1.5 hour. Notes: Participation with senior staff members to discuss ongoing dynamics of psychotherapeutic work with adolescents. PSYCHIATRY

488. Child Psychiatry Clinical Conf. (1-5) F, W, Sp. Prerequisite: Required for first-year child psychiatry fellows, or consent of instructor for others. Conference 1.5 hours. Notes: The Child and Adolescent Service has developed a continuing education program of distinguished speakers in the field of child psychiatry and related disciplines. Clinical problems and mini-courses are presented. PSYCHIATRY

489. Social & Legal Issues: Their Impact on Clinical Practice. (1) W. Prerequisite: Required for first-year child psychiatry fellows; others with the consent of the instructor. Seminar 1 hour. Notes: Course covers current and legal issues, policy questions, mental health legislation, and major court decisions which have impact on clinical practice and services. Areas included: divorce and custody/support, domestic violence, day care, juvenile justice, schools, and cross-cultural psychiatry. PSYCHIATRY

490. Psychological & Educational Evaluation. (0.5) S. Prerequisite: Required for second-year child psychiatry fellows or consent of instructor for others. PSYCHIATRY

491. Res Methodology in Child Psych. (1) W, Sp. Prerequisite: Required for second-year child psychiatry fellows, or consent of instructor. Seminar 1 hour. Notes: Review of basic experimental design and methodology such as reliability and validity of measuring techniques, statistical inference, control group designs, and pre- and post-test designs. Clinical research with children provides a focus for discussion of relevant issues. PSYCHIATRY

492. Ped Consultation Orientation. (1.5) Su. Prerequisite: Required for second-year child psychiatry fellows, or consent of instructor. Seminar 1.5 hours. Notes: Discussion of goals, attitudes, and skills required in child psychiatry consultation liaison work. PSYCHIATRY

493. Pediatric Consultation Seminar. (1.5) F. Prerequisite: Required for second-year child psychiatry fellows, or consent of instructor. Seminar 1.5 hour. Notes: Discussion of dental cases encountered by the Pediatric Inpatient Service, Child Study Center, Family Medicine Clinic, etc. PSYCHIATRY

494. Com Consultation Literature Seminar. (1) Su. Prerequisite: Required for second-year child psychiatry fellows, or consent of instructor. Seminar 1 hour. Notes: Review of literature and discussion on community consultation. PSYCHIATRY

495. Child Continuous Case Seminar. (1.5) F, W, Sp. Prerequisite: Required for second-year child psychiatry fellows, or consent of instructor for others. Seminar 1.5 hours. Notes: Participation with senior staff members to discuss ongoing dynamics of psychotherapeutic work with preschool or pre-adolescent child. PSYCHIATRY

496. Teaching & Supervision Seminar. (1) Su, F, W, Sp. Prerequisite: Required for second-year child psychiatry fellows, or consent of instructor. Seminar 1 hour. Notes: Discussion of supervision of general psychiatry residents and medical students. PSYCHIATRY

497. Adolescent Psychiatry. (1) F, W, Sp. Prerequisite: Required for second-year child psychiatry fellows, or consent of instructor. Seminar 1 hour. Notes: Seminar is focused on the most common and prevalently used methods of assessing intelligence, educational achievement, perceptual-motor integration, and personality in children. Actual testing materials as well as supporting research are covered. Participation is required. PSYCHIATRY

498. Biological Basis of Child & Adolescent Psychiatry. (1) S. Prerequisite: Required for first-year child psychiatry fellows. Seminar 1 hour. Notes: Seminar discussing the major aspects of forensic child and adolescent psychiatry relevant to the practice of the clinician. Topics covered include childhood sexual abuse, trauma, court evaluations, and custody issues. Required for Child Psychiatry Fellows. PSYCHIATRY

Psychology

180.01. Seminar in Psychology. (1) W. Seminar 1 hour. Notes: Weekly discussions in which students’ clinical cases are analyzed by dynamic application of behavioral theory. DENT PUB HLTH

180.02. Psychol Aspects of Treatment Plan. (1) Sp. Seminar 1 hour. Notes: This course integrates student’s basic training from the specialty courses in dentistry with knowledge of the psychological considerations necessary to individualize treatment. Appropriate treatment may then be planned to the practitioners’ awareness of the unique needs of patients. DENT PUB HLTH

180.03. Adv Psychol for Dental Hygiene. (1) Sp. Seminar 1 hour. Notes: Seminar discussions on the emotional aspects of interpersonal transactions among office personnel, therapists, and patient. DENT PUB HLTH

180.05. Stress among Hlth Professionals. (2) F. Seminar 2 hours. Notes: Course will focus on a theoretical understanding of the origins of job stress and the nature of burnout, and on practical and programmatic methods of reducing the stress overload incurred by physicians, nurses, and other health care professionals. PSYCHIATRY

180.08. Brain Behavior Research Methods. (3) W. Prerequisite: Survey of physiological psychology.
Psychology

or equivalent. Requires prior consent of instructor. Lecture 2 hours. Seminar 1 hour.

Galin and Staff

An extensive survey of techniques and strategies emphasizing critical appreciation of principles and range of appropriateness rather than how-to-do-it. Topics include classical studies, microscopic anatomy, neuroanatomy, neurochemistry, psychophysiology, scalar electrophysiology, and psychological assessment. PSYCHIATRY

180.09. Neuropsychology of Dissociation. (3) F. § Prerequisite: Prior consent of instructor. Seminar 3 hours.

Galin

Topics in Neurological Disconnection and Psychological Dissociation: an advanced seminar considering cognitive and neuropsychological aspects of integration and fragmentation of the whole person. Topics will vary from year to year. Examples are split-brain syndrome, hypnosis, and multiple personality disorder. PSYCHIATRY

181.02. Cerebral Hemispheric Specialization. (3) F. §§ Prerequisite: Background in neurophysiology, anatomy, cognitive psychology; intended for advanced students. Requires prior consent of instructor. Seminar 2 hours.

Galin

Group discussions of readings in seminar format of neuropsychology of hemispheric specialization and integration; developmental, psychiatric, and educational implications; evaluation of data from study of brain lesions, electrophysiological recordings, and behavioral testing. PSYCHIATRY


Blackwell

Considerations of psychological processes utilized under stress and of alternative constructive methods for coping, with practice in using these techniques. Course is designed to help students handle stress and apply such principles to management of patients. PSYCHIATRY

198. Supervised Study. (1-3) F, W, Sp. Staff

Library research and directed reading under supervision of a member of the faculty with the approval of the chairman of the department. PSYCHIATRY

202A-B. Computer Simulation of Human Interaction. (3-3) 5. § Prerequisite: Psychology 257 or equivalent. Lecture 1 hour. Lab 6 hours.

Starkweather

The development and testing of theoretical models of personality are explored by means of computer programs. Students program the computer for simulation and symbol manipulation. PSYCHIATRY

205. Child Development. (3) §§ Prerequisite: Consent of instructor. Lecture 3 hours.

C. Lewis

Course will focus on major issues, theories, and findings in child development. Topics covered will include attachment; Piagetian and other theories of cognitive development; language development; moral development and pro-social behavior; aggression; and self-esteem and competence. PSYCHIATRY


F. Cohen

Course examines stress and coping theory and research from clinical, field, and laboratory settings; measures of stress; issues in stress research; the nature of coping and coping processes. PSYCHIATRY

222. Practicum in Program Evaluation. (2-4) F, W, Sp. § Prerequisite: Graduate standing and some experience in interviewing. Lab 3 hours. Seminar 6 hours during first 4-6 weeks.

Blackwell

After an intensive seminar introduction to basic concepts of evaluation, students will carry out various evaluations on clinical clerkships in the School of Medicine. The length of the introductory period will depend on previous experience of students. PSYCHIATRY

230. Physiology for Health Psychologists. (4) § Prerequisite: Graduate standing in Health Psychology program or consent of instructor. Lecture 4 hours. Offered in alternate years. Not offered 1991-92.

Nafieh

An overview of major organ systems of the human body stressing psychological impacts on their functioning and psychological consequences of abnormality. Course will prepare students for reading medical literature and interacting effectively with health professionals in planning research. PSYCHIATRY

236A-B. C. Human Neuropsychology. (1-1-1) § F, W, Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

Yingling

A journal club format seminar course which will examine the current literature in human EEG and evoked potentials, with emphasis on identification of cerebral sources. Students will make oral class presentations. PSYCHIATRY

237. Neurophysiological Mech of EEG. (3) § F, W. Prerequisite: At least one course in physiological psychology or neurology, or consent of instructor. Lecture 1 hour. Seminar 2 hours.

Yingling

Course will examine the neuroanatomical and neurophysiological mechanisms underlying the generation and regulation of EEG and brain-related potentials; their measurement and clinical uses. Emphasis on the nature and limitations of inferences concerning brain activity obtained from scalp recordings. PSYCHIATRY


Staff

Independent study under the supervision of a member of the faculty. PSYCHIATRY


PSYCHIATRY


N. Adler

An overview of research strategies and their associated strengths and weaknesses, experimental and quasi-experimental designs, correlational approaches, interview techniques, survey and questionnaire construction, uses of archival data, and observational techniques. PSYCHIATRY


N. Adler

An in-depth study of the research process with emphasis on quasi-experimental designs, ethics of research and grant writing. PSYCHIATRY

256. The Health System. (4) W. Prerequisite: Graduate standing in Health Psychology Program, or consent of instructor. Lecture 2 hours. Seminar 2 hours. Offered in alternate years. Offered 1991-92.

Anksion

Experimental and tasks of the health system with emphasis on the study of health service organizations and health services delivery from the perspective of living systems theory and organizational psychology. PSYCHIATRY

265. Stress & Bodily Disease. (4) § Prerequisite: Consent of instructor. Seminar 4 hours. Offered in alternate years. Offered 1991-92.

F. Cohen

Examination of the psychological and physiological models and empirical research linking stress and other psychological factors to the development of bodily disease. PSYCHIATRY

266. Reproductive Behavior. (3) §§ Prerequisite: Consent of instructor. Seminar 3 hours. Offered in alternate years. Offered 1991-92.

N. Adler

Examination of the role that psychological and social factors can play in a variety of reproductive behaviors: pregnancy, obstetrical complications, postpartum reactions, infertility, contraceptive use and nonuse, spontaneous and induced abortion. PSYCHIATRY

281A-B-C. Clinical Research Seminar. (1.5-1.5-1.5) § F, W, Sp. Prerequisite: Consent of instructor. Seminar 1.5 hours.

Arkinson

Seminar discussion of contemporary research in clinical psychology. Issues covered include major problems in conducting clinical research, skills and methods required in clinical research, and career development for the clinical psychologist. Course is intended primarily for advanced clinical psychology students. PSYCHIATRY

Radiation Oncology

140.01. Radiation Oncology Clerkship-UC. (1.5 per week) Sr, F, W, Sp. Prerequisite: Medicine 313A-B-C.

Larrow

Participation in examination of cancer patients under treatment in radiation oncology. Students participate in rounds, conferences, and clinics, and see demonstrations on the use of newer radiotherapeutic techniques. RADIOLOGY

140.03. Radiation Oncology Clerkship-UCB. (1.5 per week) Sr, F, W, Sp. Prerequisite: Medicine 313A-B-C.

J. Castro

Participation in examination of cancer patients under treatment in radiation oncology. Students participate in rounds, conferences, and clinics, and see demonstrations on the use of newer radiotherapeutic techniques. RADIOLOGY

140.06. Radiation Oncology Clerkship-M. (1.5 per week) Sr, F, W, Sp. Prerequisite: Medicine 313A-B-C.

Margolis, Mayer

Participation in examination of cancer patients under treatment in the Claire Zellerbach Saroii Tumor Institute at MZ. Students participate in rounds, conferences, and clinics, and see demonstrations on the use of newer radiotherapeutic techniques. RADIOLOGY

140.02. Off-Campus Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 131A-B-C
Carlson
Clinical clerkship in approved hospital by special arrangement and approval of the chairman of the department and the dean. RADIOLOGY

140.03. Diagnostic Radiology. (1.5 per week) Su, F, W, Sp. Prerequisite: Third-Year Medicine 131A-B-C. Fourth-Year Medicine 110 and Surgery 110. Carlson, S. Ross, Colangelo
Clerkship in radiology for third- and fourth-year students. Observation of procedures, review of pathology, pathophysiology, diagnosis, and natural history of selected diseases through study of roentgenograms with cases histories. Potential and limitations of radiologic methods included. RADIOLOGY

140.04. Nuclear Medicine. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 131A-B-C. Hattners
Observation of basic nuclear medicine procedures and participation in diagnostic test employing radiotopic tracers. RADIOLOGY

140.09. Diagnostic Radiology-SGFM. (1.5 per week) Su, W, Sp. Prerequisite: Fourth-year standing or consent of instructor. Minagi
Students serve a clerkship in the Diagnostic Section of the Department of Radiology. They observe performance of radiologic procedures and interpretation of films, attend conferences, and learn the basic philosophy of conducting radiologic examinations and the basic rules of interpretation. RADIOLOGY

140.14. Diagnostic Radiology-YAF & VMC. (1.5 per week) Su, W, Sp. Prerequisite: Fourth-year standing, or third-year standing with consent of instructor. M. Anderson, J. L. Williams, and Staff
Acquaint students with available techniques in diagnostic radiology, including nuclear medicine, ultrasound, computed tomographic scanning, angiography, other special procedures, conventional X-ray examination, fluoroscopy, and provide an introduction to "routine" film interpretation. Students have assignments at YAF, VMC, community hospitals. RADIOLOGY

140.16. Basic Nuclear Medicine-STA. (1.5 per week) Su, W, Sp. Prerequisite: Fourth-year standing.
Corbus, Tousya
Imaging techniques including nuclear cardiology, single photon emission tomography, and computerized processing at St. Agnes Medical Center, Fresno. RADIOLOGY

140.17. Clinical Radiology. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor. Wall
Students may be involved in clinical diagnostic procedures such as body and neuroradiography, ultrasound, fluoroscopy, chest, bone, and interventional radiology, with concentration on any one of these areas. Clinical or research projects may be undertaken with permission of the instructor. RADIOLGY

140.01. Research in Radiology. (1-1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and approval of instructor. For students seriously interested in a career in academic medicine. Carlson, S. Ross
A research project under the direction of a member of the faculty. RADIOLOGY

Course demonstrates anatomy in the living through the use of radiographs. Objectives are to show the usefulness of knowing anatomy, to begin acquiring a medical vocabulary, the elements of clinical thinking, and useful habits in learning. RADIOLOGY

A lecture course limited to small groups, with active participation on selected aspects of pathologic anatomy and its usefulness in understanding disease, in origin, development, and clinical manifestations. RADIOLOGY

170.08. Basic Medical Physics & Imaging. (2.2F, W, Sp. Prerequisite: B.A. or M.D. degree. Given concurrently with Radiology 170.09. Lecture 2 hours a week for 6 weeks. Independent study 10 hours. Perez-Mendez
Introduction to the physics of radioactivity, nuclear instrumentation and gamma-ray imaging techniques. RADIOLOGY

170.09. Introduction to Nuclear Medicine. (3.5 F, W, Sp. Prerequisite: Given concurrently with Radiology 170.08. Lecture 5 hours a week for 6 weeks. Independent study 10 hours. D. Price
Introduction to basic nuclear medicine diagnostic procedures, both in vivo and in vitro, and therapy with radiopharmaceuticals. RADIOLOGY

Minagi, Leung
Weekly seminar covering the radiologic studies of surgical cases emphasizing indications, risks, and information derived from procedures. Active participation in X-ray interpretation is included. RADIOLOGY

Minagi
An elective course for fourth-year medical students. Consideration of the role of the radiologist as a consultant in the emergency room. Topics covered include head injuries, fractures, dislocations, chest, abdominal and genito-urinary trauma, and management of contrast reactions. RADIOLOGY

Carlson and Staff
Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. RADIOLOGY

190.01. Laboratory Project. (1-3) F, W, Sp.
Carlson and Staff
A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. RADIOLOGY

220.01. Radiology for Physicians. (3) F, W, Sp. Prerequisite: Bachelor's or higher degree in the physical sciences.
Staff
Seminar provides physicians with an in-depth knowledge of radiologic physics. RADIOLOGY

Thoenni
Faculty of radiology and other departments lecture and discuss various diseases of all systems of the body. Residents prepare case histories stressing roentgen findings and correlative surgical and laboratory work, special studies, library and film research. RADIOLOGY

401.01. Diagnostic Case Rounds. (2) Su, F, W, Sp. Thoenni
Films of interesting cases from the daily work are presented and reviewed. Roentgenograms of surgically and pathologically proved cases are compared with the gross and microscopic pathologic findings. RADIOLOGY

402.01. Diagnostic Specialty Seminar. (3) F, W, Sp. Required for UC residents in diagnostic radiology. Thoenni
Seminars require preparation and presentation of roentgen findings on patients under discussion at medical, surgical, pediatric, obstetric and gynecologic departmental conferences and seminars on congenital heart disease, tumors of the neuraxial tract, and orthopedics. RADIOLOGY

Minagi
Role of radiologist as consultant in the emergency room; head injuries, fractures, dislocations, blunt and penetrating chest trauma, blunt and penetrating abdominal trauma, trauma to genito-urinary systems; management of contrast reactions; indications for, construction of, interpretation of special radiologic procedures. RADIOLOGY

Elective.
Carlson

Rudimentary research projects are conducted in the department and facilities are available for new ones. Residents are encouraged to take advantage of these opportunities. RADIOLOGY


Mintag
Interdepartmental seminars in which the radiological picture of problem cases either of diagnostic or therapeutic nature is presented. This course includes surgical and medical radiological rounds, consultative tumor board, clinicopathological conferences, and other department grand rounds. RADIOLOGY


Akin
Interdepartmental seminars in which the radiological picture of problem cases either of diagnostic or therapeutic nature is presented. These include medical-surgical, clinicopathological, chest, medical X-ray, rheumatology, neurology, and neurological surgery conferences; consultative tumor board, and surgical and orthopedic grand rounds. RADIOLOGY

110. Radiologist Effects on Genes & Chrom. (2) W. Prerequisite: Consent of instructor. Lecture 2 hours.

S. Wolf
Concepts and mathematics of target theory related to damage of genetic apparatus. Biophysical and biochemical studies on induction of intrinsic and interventional mutations that give insight into the structure of chromosomes and interaction of radiation with biochemical material. RADIOLOGY

112. Pathology. (1) Su., F., W., Sp. VA Hinchcliffe
Course includes review of surgical pathology material and attendance at anatomic rounds. RADIOLOGY

114. Physics of Diagnostic Radiology. (2) W., Sp. Lecture 1.5 hours. Lab 2 hours.

R. Gould
Course is designed to acquaint residents with the physical principles of diagnostic radiology. Topics include generation and extraction of radiologic information, image conversion, recording methods, and special-purpose equipment. CT and ultrasound physics are discussed. RADIOLOGY

149. Growth Kinetics-Cells & Tumors. (2) Sp. Prerequisite: Consent of instructor. Lecture 2 hours.

Cleaver, Patt
An analysis of cell population growth in tissue, tumors, and culture. Emphasis is given to radioactive tracers such as thymidine and its biochemistry, and experimental methods for studying cell proliferation in vivo and in vitro. RADIOLOGY


Hattner and Staff
Resident presentation of topics for discussion by residents in nuclear medicine training programs in all affiliated hospitals. Critical reviews of available information in limited areas are used to provide a broad review of nuclear medicine for all trainees. RADIOLOGY

450. Clinical Nuclear Medicine. (1.5 per week) Su., F., W., Sp.

Hattner and Staff
Clinical experience in diagnostic and therapeutic nuclear medicine to satisfy requirements of American Board of Radiology for certification in diagnostic radiology and radiation therapy. RADIOLOGY


Carlson
Residents, under supervision, carry out radiological examination and interpretation of X-rays of patients referred from wards and outpatient clinic. The chief resident has certain administrative duties relative to the resident training program. RADIOLOGY

452. Clinical Diagnostic Radiology. (1.5 per week) Su., F., W., Sp. Prerequisite: Radiology 450.

VA Akin
Residents, under supervision, are responsible for the diagnostic activities of the department including diagnostic consultations and referrals, history-taking, and physical examinations. In addition, the chief resident has certain administrative duties relative to the resident training program. RADIOLOGY

453. Clinical Radiology. (1.5 per week) Su., F., W., Sp. Prerequisite: Radiology 450.

SFGH Mintag
Residents are responsible for the diagnostic activities of the department under the direction of staff radiologists including diagnostic consultations and reports, history-taking, and physical examinations. RADIOLOGY

Removable Prosthodontics


Zlotolow
Course is designed to acquaint residents with multidisciplinary aspects of maxillofacial prosthetics. Lectures will be given on maxillofacial prosthetic techniques, oncology, head and neck surgery, plastic surgery, oral surgery, therapeutic radiology, psychology, and related oral biology. RESTOR DENT

489.01. Clinical MaxilloFacial Prosthodi. (1-6) F., W., Sp. Lab variable.

Zlotolow
Residents and advanced prosthodontic students will observe and perform maxillofacial prosthodontic services for patients in the Maxillofacial Clinic. A detailed case history will be required each quarter. Attendance at related tumor board conferences and field trips to other therapy centers. RESTOR DENT

116. Primary Clinical Care. (2) W. Prerequisite: RD 110B and 115B. Lecture 1 hour. Clinic 3 hours.

S. Lee
Introduction to clinical dentistry: students perform a comprehensive baseline examination of the oral cavity and evaluation of the patient’s health status. RESTOR DENT

120A. Restorative Dentistry Techniques. (5) Pre-F. Prerequisite: RD 110C, 115C, 116. Concurrent enrollment in RD 125A. Lecture 6 hours/week for 4 weeks Pre-F, 3 hours/week for 16 weeks.

Brady and Staff
Instruction in theory and principles of cast dental restoration, including fundamentals of construction; fundamentals of partial denture design and construction. RESTOR DENT

120B. Restorative Dentistry Techniques. (5) W. Prerequisite: RD 120A, 125A, 126A. Concurrent enrollment in RD 125A. Lecture 3 hours.

Brady and Staff
Theory and principles of dental restorations: rationales for use of clinical restorative materials, manipulation and clinical application of restorative systems; introduction to endodontics, including background for clinical practice, continuing discussions of theory and principles in operative dentistry, fixed and removable prosthodontics. RESTOR DENT

120C. Restorative Dentistry Techniques. (5) W. Prerequisite: RD 120B, 125B, 126B. Concurrent enrollment in RD 125C. Lecture 5 hours.

Brady and Staff
This course concludes the preclinical lecture series in restorative dentistry. Theories and principles in the disciplines of biomaterials, endodontics, fixed prosthodontics, operative dentistry, and removable prosthodontics are introduced, and clinical application of principles is stressed. RESTOR DENT

125A. Restorative Dental Techniques. (2 Pre-F, 5 F) Pre-F. Prerequisite: RD 110C, 115C, 116. Concurrent enrollment in RD 120A. Lab 18 hours/week for 4 weeks Pre-F, 15 hours/week for 10 weeks F.

Brady and Staff
Laboratory instruction in the disciplines of fixed prosthodontics, operative dentistry, and removable prosthodontics. Topics include instruction in basic bridge construction, ceramo-metal restorations, cast gold restorations, and partial denture construction. RESTOR DENT

125B. Restorative Dental Techniques. (5) W. Prerequisite: RD 120A and 125A. Concurrent enrollment in RD 120B. Lab 15 hours.

Brady and Staff
Continuation of laboratory instruction in the disciplines of endodontics, fixed and removable prosthodontics. Techniques include lab procedures involved in root canal therapy, installation in ceramo-metal restorations, and the fabrication of immediate dentures. RESTOR DENT
125C. Restorative Dental Techniques. (5) Sp. Prerequisite: R D 120C and 125B. Concurrent enrollment in R D 120C. Lab 15 hours.

Brady and Staff

Continuous laboratory instruction in the discipline of operative dentistry and removable prosthodontics. Techniques include buildup of teeth, bases, liners, and cores; removal; composite/ancient/veners; and the replacement of missing teeth. RESTOR. DENT

126A-B-C. Comprehensive Clinical Care/Primary Care. (4-8) Pre-F, F, W, Sp. Prerequisite: RD 110C, 125C, 126C. Concurrent enrollment in RD 120 lecture series and 125 laboratory series. Clinic 6 hours/week for 3 weeks Pre-F, 3 hours/week F, W. Lecture 2 hours/week for 4 weeks Pre-F.

Maxwell and Staff

Comprehensive care workshop of dental patients. Includes case history, clinical examination, diagnosis, and treatment planning to meet the patient's total dental needs. Experience in the administration of local anesthetic and placement of rubber dams, and the placement of a restoration on a clinical patient. RESTOR. DENT

130.1. Restorative Materials & Techniques: Theory. (2) Su. Prerequisite: RD 120C, 125C, and 126C. Lecture 3 hours/week for 8 weeks.

Maxwell

Lectures to introduce students to the clinic. Emphasis is on clinical application of techniques taught in lab. Topics include: diagnosis, tooth preparation, temporization, and gerdontology. RESTOR. DENT

130.2. Clinic Application of Techniques. (5) F. Prerequisite: RD 130.1. Concurrent enrollment in RD 109. Lecture 5 hours.

Tueller, Lacy, Goods, White, Hutton

Continuation of RD 130.1, with emphasis on clinical application of restorative techniques. Topics include diagnosis and treatment of pulp disease, tooth preparation and impression materials, diagnosis and treatment of dental emergencies, and treatment planning for the edentulous patient. RESTOR. DENT

130.3. Clinic Application of Techniques. (5) F. Prerequisite: RD 130.2. Concurrent enrollment in RD 109. Lecture 5 hours.

Tueller, Lacy, Brady, Finzen

Continuation of RD 130.2, with emphasis on clinical application of restorative techniques. Topics include: secondary restoration and occlusal techniques, rationale of cutting techniques and pulpal response to restorative treatment, and treatment planning for removable partial dentures. RESTOR. DENT

130.4. Clinic Application of Techniques. (4) Sp. Prerequisite: RD 130.3. Concurrent enrollment in RD 139. Lecture 4 hours.

Tueller, Goods, Lacy, Finzen

Concluding lectures on clinical application of restorative techniques. Topics include: understanding why clinical failures occur with selected materials; biolog-
180.05. Prosthodontic Procedures. (1) W. Sp.
Lecture 2 hours.
Braga
An elective course offering instruction in procedures and materials other than those normally used in the clinic. RESTOR DENT

181. Scientific Writing in Dentistry. (2) W. Pre-
Requisite: Registered dental student in good standing. Limited to 25 students. Conference 2 hours.
White
Students will produce student research journal contain-
ing literature reviews and overviews of research done by dental and hygiene students. Topics include writing review articles, word processing tech-
niques, communication skills, and the steps involved in the production of a journal. RESTOR DENT

181.02. Advanced Endodontics Concepts. (1) W.
Lecture 1 hour.
Goodall
Diagnosis, case selection, and management of pain and infection in endodontically-involved teeth, ad-
vanced techniques for treating difficult root canal system anatomy; refinement in obturation of the root canal system. RESTOR DENT

181.03. Fixed Prosth Select Topics. (1) Sp.
Enrollment limited. Seminar 1 hour.
Lum
Individual staff members will offer seminar-type in-
troduction on selected topics related to fixed prosthodontics. RESTOR DENT

181.04. Advanced Operative Therapy. (1) W.
Prerequisite: RD 180.04 (formerly Operative Den-
tistry 180). Lecture 1 hour.
Birrell
Continuation of Restorative Dentistry 180.04. RESTOR DENT

182.03. Senior Restorative Elective. (1) F. Prere-
quisite: Fourth-year standing. Lecture 1 hour.
Meli
Advanced clinical restorative elective. Lectures de-
scribe clinical concepts, as well as operative practice. Topics include office layout, laboratory relations, treatment limita-
tions, financial arrangements, scheduling, and treat-
ing failures. RESTOR DENT

Prerequisite: RD 181.04. Lecture 1 hour.
Birrell
Continuation of Restorative Dentistry 181.04. Or-
ganization of the material is planned in relationship to pro-
gress of students enrolling in the 180 series RESTOR DENT

182.05. Advanced Partial Denture Design. (1) Sp.
Prerequisite: Completion of three removable partial dentures. Consent of instructor. Enrollment limited to 5 students. Seminar 1 hour.
Finzen and Staff
Seminar on current concepts of removable partial denture design. The emphasis will be on de-
signing RPDs for routine situations, but more com-
plex designs will also be presented. Students will be assigned case to design and articles to review.
RESTOR DENT

183.05. Advanced Complete Prosthodontics. (1) F.
Prerequisite: Fourth-year standing. Seminar 1 hour.
Finzen
Seminar to discuss concepts of complete denture fabrica-
tion and maintenance reviewing the rationale for procedures normally used in the clinic, and the selec-
tion of the appropriate alternate procedures where indicated. RESTOR DENT

186. CAD/CAM: Application to Dentistry. (1) Sp.
Prerequisite: Second-, third-, or fourth-year den-
tal student. Limit 20 students. Lecture 2 hours for 4 weeks. Lab 1 hour for 3 weeks.
Fett, Selco
Course will concentrate on adhesive bonded ceramic inlays in posterior teeth. Topics include indica-
tions for bonded restorations, tooth preparation, operation of a CAD/CAM system, bonding procedures, finishing and polishing techniques. A literature review will give the student a perspective of the indications of computer-aided dentistry to date. RESTOR DENT

186.04. Restorative Materials Procedures. (1) F.
W. Sp. Prerequisite: Open to fourth-year students with the approval of the chairperson of the division. Enrollment limited. Clinic 3 hours.
Birrell
Techniques and procedures for Class II, III, and V gold foil restorations using the conservative approach, as well as wedge and matrix. Work will also be done on Class II and V direct gold restorations. Students learn to use various materials such as fiberglass gold, goldcast and electrolyt. RESTOR DENT

Sp. Clinic 0-12 hours.
Brady
Advanced instruction in the field of clinical operative dentistry, utilizing procedures such as quadrants and plastic. RESTOR DENT

188.02. Advanced Clinical Endodontics. (0-4)
Sp. Prerequisite: Fourth-year standing. Clinic vari-
brable.
Barkhorad
Advanced instruction in the field of clinical endodont-
cies. RESTOR DENT

199.01. Biomaterials Laboratory Project. (1-5) F.
W. Sp. Prerequisite: Consent of instructor and app-
roval of the chairperson of the department. Lab 3-15 hours.
G.W. Marshall, S. Marshall, Lacy
A laboratory research project under direction of a num-
er of the faculty with the approval of the chair-
person of the department. RESTOR DENT

199.02. Endodontics Laboratory Project. (1-5)
SSL, F. W. Sp. Prerequisite: Consent of instructor and approval of the chairperson of the department. Lab 3-15 hours.

Goodall, Barkhorad, Steinvassan
A laboratory research project under direction of a mem-
er of the faculty with the approval of the chair-
person of the department. Lab 3-15 hours.

Toeller, Davis
A laboratory research project under the direction of a mem-
er of the faculty with the approval of the chair-
person of the department. RESTOR DENT

199.04. Oper Dent Laboratory Project. (1-5) F.
W. Sp. Prerequisite: Consent of instructor and app-
roval of the chairperson of the department. Lab 3-15 hours.
White, Lacy
A laboratory research project under direction of a mem-
er of the faculty with the approval of the chair-
person of the department. RESTOR DENT

199.05. Remov Prosth Laboratory Project. (1-5) F.
W. Sp. Prerequisite: Consent of instructor and app-
roval of the chairperson of the department. Lab 3-15 hours.
Finzen, Hutton
A laboratory research project under direction of a mem-
er of the faculty with the approval of the chair-
person of the department. RESTOR DENT

Sociology

Staff
Library research and directed reading under supervi-
sion of a member of the faculty with the approval of the chairperson of the department. SOCI BEH SC

200. Social Psychology of Chronic Illness. (2-3) S
Sp. Prerequisite: Consent of instructor. Seminar 2 hours.
Field work 0-3 hours.
G. Becker
Course provides discussion of problems faced by chronically ill persons and their families including crisis management, handling symptoms, managing regimens, social isolation, phases of disease, temporal dif-
iculties, normalization, dying, as well as policy issues confronting health care personnel and the gen-
eral public. SOC BEH SC

205. Health Professions, Occupations, and Work.
(3) S- W. Lecture 2 hours. Lab 3 hours.
C. Harrington
Course examines the nature of occupations and pro-
fessions; their constellation in hospitals and clinics, the medical division of labor, specialties and specializa-
tion, professional and occupational ideologies, the soci-
ology of work relationships, careers. SOC BEH SC

Seminar 2 hours. Lab 3 hours.
C. Estes
Course introduces the student to clinical perspectives in medical sociology and development of a critical perspective in the field to serve as a foundation for independent and advanced study in medical soci-
ology. SOC BEH SC

208. Social Psychol of Hlth & Illness. (3) F.
Sp. Prerequisite: Required for doctoral students in sociol-
ogy. Restriction: Doctoral-level students in nursing or sociology. Lecture 2 hours. Lab 3 hours.
V. Olesen
Course examines the relationship of social class, eth-
nic identification, group membership, family struc-
ture, occupation, and lifestyle to health and illness, and therapeutic interaction of key persons and health professionals. SOC BEH SC

209. Sociology of Power. (2-4) F, W. Sp. Prereq-
quisite: Graduate-level sociological theory course. Re-
strictions. Doctoral students only. Lecture 2-4 hours.
C. Estes
Course surveys the classical and contemporary soci-
ological issues in theoretical and empirical work on power, explores underlying assumptions and para-
digms emerging and reflecting a sociopolitical milieu. The student will analyze literature and debates on power structure research and theory. SOC BEH SC

212A. Sociological Theory. (3) W. Lecture 2 hours.
Field work 3 hours.
Staff
Course examines and evaluates classical and recent contributions to sociological theory. The main objec-
tive is the generation of a critical capacity with respect to received theory in both formal and substantive vari-
eties. SOC BEH SC

212B. Sociological Theory. (3) F. Sp. Lecture 2 hours. Field work 3 hours. Required for graduate students in Sociology. A. Clarke
Course consists of readings and discussions on interactionist theory in sociology, with emphasis on the origins and development of the Chicago School of Sociology, as well as an examination of the link between philosophy of pragmatism and interactionism. SOC BEH SC

212C. Sociological Theory: Contemporary. (4) F.
Sp. Prerequisite: NS12A and N12B or consent of instructor. Lecture 2 hours. Lab 6 hours.
C. Estes
Course examines and evaluates contemporary contribu-
tions to sociological theory. The main objective is the generation of a critical capacity with respect to received theory in both formal and substantive varieties. SOC BEH SC

214A. Field Research. (5) F. Sp. Prerequisite:
Doctoral level. Lecture 2 hours. Field work 9 hours.
L. Schatzman, V. Olesen, A. Clarke
Course offers sociological perspectives on the dimen-
sions and properties of research in natural, social set-
tings. Focus is upon developing skills in segmenting
Sociology

entire, watching, listening, and recording of data. Emphasis is placed on developing conceptual schemes in preparation for analysis. SOC BEHC SC

214B. Qualitative Analysis. (3) F, W. Prerequisite: Doctoral level; Sociology 214A. Lecture 2 hours. Field 3 hours.
L. Schatzman, V. Olsen
Course examines modes of data analysis applicable to qualitative data, emphasizing on dimensions and properties exhibited in student-presented data. SOC BEHC SC

214C. Qualitative Analysis. (3) F, W, Sp. Prerequisite: Doctoral level; Sociology 214A and 214B. Lecture 2 hours. Lab 3 hours.
A. Strauss
Course provides qualitative analysis and the development of substantive and formal sociological theory. Emphasis is on student-generated data and their conceptualization. SOC BEHC SC

R. Lofte
Course will place students in organizations to provide opportunities to conduct research; apply and develop organizational theory; develop applied sociological, practical, and administrative skills and experience for students, and make sociologists attractive and salient to organizations outside academic settings. SOC BEHC SC

216. Comp Orgs: National & Int'l Perspec. (3) F. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours.
A. Benjamin
Course is a comparative review of contributions to the sociology of formal organizations of health care. A variety of organizational forms will be considered, with special emphasis on national and international health care comparisons. SOC BEHC SC

R. Staples
Course explores changing dating, sexual, sex-role, marital, and familial patterns in the United States. Discussion of functionalist models of family life as affected by sociocultural forces. Special emphasis given to changing sex-role behavior in affecting male-female relationships. SOC BEHC SC

218. Adv Topics in the Socio-Analyzing of Aging. (2-4) F. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 6-8 hours.
A. Estes
Course is designed for doctoral students investigating advanced research issues preparatory to qualifying examinations. Topics to be analyzed will vary each year, but will be focused upon a specific area. Laboratory assignments are for research activities on special topics in the area of aging. SOC BEHC SC

219. Social Policy & Aging. (2-4) W. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 0-6 hours.
C. Evans
Course will provide a critical analysis of major social, economic, and political issues of growing old in America. It will examine social policy in the public and private sector including health, income, and social services, and consider prospects for social change and political developments. SOC BEHC SC

220. Sociology Seminar. (2-4) F, W, Sp. Prerequisite: Consent of instructor. Required for graduate students in Sociology. Seminar 2 hours. Lab 0-6 hours.
C. Estes
Doctoral students discuss methods and problems in current research. Course may be repeated for credit. SOC BEHC SC

221A-B-C. Qualifying Examinations. (4-4-4) F, W, Sp. Prerequisite: Consent of instructor. Preparation for qualifying examinations. Open to graduate students in Sociology only.
A. Benjamin
Qualifying examinations for graduate students in sociology are given in three areas: sociological theory, medical sociology, and special interest. The course will provide for preparation in each area. SOC BEHC SC

222. Perspectives on Public Policy. (3) F, W, Sp. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours.
A. Benjamin
Course offers systematic overview of health policy in American government—in scope, dynamics, and conceptual and practical elements. Students will become acquainted with major issues involved in formulating, financing, implementing, and assessing patterns of decision (i.e., policy) established by government. SOC BEHC SC

225. Policy & Hlth Care Institutions. (3) F, W, Sp. Prerequisite: N307A or consent of instructor. Lecture 2 hours. Lab 3 hours.
R. Newcomer
Course discusses theory and approaches to understanding the development of health policy and relationships between health policy and decision making within health care institutions. SOC BEHC SC

R. Staples
Course examines family structures and dynamics among Third World peoples. Families to be discussed include Africans and Afro-Americans, Asians, Native Americans, and Latin Americans. Emphasis is on commonalities in the family life of these groups in their native land and in the United States. SOC BEHC SC

229. Sociology of Stress. (3) F, W, Sp. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 0-3 hours.
L. Pearlman
Course explores current theories and research dealing with sources of stress and coping mechanisms. Course examines the condition and experiences that act as stressors, coping behaviors, the nature and functions of social support systems, and the health consequences of stress. SOC BEHC SC

C. Harrington
Course examines the history and social psychology of AIDS in relation to health, illness, disease, and death. Includes demographic trends, the cost burden, and special problems of minorities, women, and caregivers, along with policy issues. SOC BEHC SC

L. Pearlman
Course examines the socio-psychological aspects of aging and the life cycle changes. Course also examines the socialization of an aged role, norms for older people, and special problems of aging individuals. SOC BEHC SC

V. Olsen
An advanced seminar dealing with theoretical and conceptual problems in various areas of social psychology. Recent developments in theory and concept will be reviewed. SOC BEHC SC

P. Fox
Course reviews theories of aging including a review of theories of aging, current and historical trends in aging, factors related to aging, effects of aging on individuals and families, and formal and informal service systems for an aging population. SOC BEHC SC

G. Beckner
Course examines the health status of the aged in the United States relative to biological, behavioral, social-cultural, and environmental factors. Social, cultural, and economic factors affecting organizations, financing, and delivery of health care to the aging population will be examined. SOC BEHC SC

235. Health Factors in Marriage & Family Behavior. (3) F, W, Sp. Prerequisite: Consent of instructor. Graduate standing. Lecture 2 hours. Lab 3 hours.
R. Staples
Course will explore how marital and family behavior generates mental and physical health problems. Topics are family violence, child abuse, sexually transmitted diseases, suicide, psychological problems, and the relationship of marital status to morbidity and mortality. SOC BEHC SC

236. Race/Class Factors in Hlth Care Delivery. (3) F, W. Prerequisite: Consent of instructor. Graduate standing. Lecture 2 hours. Lab 3 hours.
R. Staples
Course examines racial and class membership impact on access to health care services, variations in the quality of those services, and how professional and subprofessional roles in the health care system are organized along racial and class lines. SOC BEHC SC

A. foil
Graduate introduction to history of sociological thought. Provides perspective and vocabulary for examining major schools of thought which constitute sociological traditions. Discusses conceptual paradigms and their relationship to theory will provide understanding of sociological work. SOC BEHC SC

V. Olsen
Course offers students opportunity to work with both theoretical and research questions on the subject of women's participation in health and healing systems. Critical questions on appropriate method, relationship to theory, and articulation of questions will be considered. SOC BEHC SC

239. Evaluation Research Methods. (3) F, W, Sp. Prerequisite: Sociology 214A and 214B. Non-degree students may enroll upon approval of instructor. Lecture 2 hours. Lab 3 hours.
R. Newcomer, L. Schatzman
Course analyzes field work as evaluation method, as applied to health care settings and programs, contrasting this approach with quantitative methodologies, evaluated on analysis of outcomes. Conduct of such evaluative research, and relationship with audiences, such as policymakers, analyzed. SOC BEHC SC

240. Older Women and Their Health. (2-4) F. Seminar 2 hours. Optional project for additional units.
V. Olsen, J. Zones
Course analyzes postmenopausal women's changing social roles and the interaction of actual and perceived role with health. Topics include generational, economic, life cycle, economic trends, individual social and health status, policy implications for individuals and society. SOC BEHC SC

V. Olsen
How sociocultural systems place women in work roles, the implications for their health, their part in illness prevention and care of the sick. Analyzes "hid-
242. Women's Health. Ref.: (2-4) Sp. Prerequisite: One or more women's health courses and one course survey in social research methods or social epidemiology. Seminar 2 hours. Optional project for additional units.

V. Olson, J. Zones
An advanced survey of qualitative research methods in analysis of women's health issues. Will focus on women's data sources, design techniques, evaluation methods, data analysis, and proposal and report writing. Exploration of current research controversies. SOC BEH SC.

243. Qualitative Research in Women's Health. (2-4) Sp. Prerequisite: One or more women's health courses and one course in qualitative methods. Doctoral students only. Seminar 2 hours. Optional project for additional units.

V. Olson
An advanced survey of qualitative research methods in analysis of women's participation in health and healing systems. Will review epistemological assumptions, analytic strategies, design and modes to assure credibility, plausibility. Will focus on data sources and analysis of data. SOC BEH SC.

245. Gender and Science. (3) Sp. Seminar 3 hours.

A. Clarke
Course is a study of historical and contemporary issues in the social construction of biological and medical sciences, epistemological systems, and feminist perspectives. Focus is on impact of gender on scientific work and includes scientific constructions of gender and sexuality in science. SOC BEH SC.

247. Policy Issues & Political Processes. (3-4) Sp. Prerequisite: SEN 219 or equivalent and/or consent of instructor. Lecture 2 hours. Field work 3 hours.

C. Hartung
Course analyzes issues and trends in legislation and politics of health and examines health professional's role in developing strategies to influence legislative and political processes that affect planning and delivery of care. SOC BEH SC.


Staff
Groups of two or more students select special problems to investigate on a collaborative basis. These studies may be conducted through readings, the collection or analysis of empirical data, or the development of conceptual analysis or of methodologies. SOC BEH SC.


Staff
Students select special problems to investigate on an individual or collaborative basis. These studies may be conducted through readings, the collection or analysis of empirical data, or the development of conceptual analysis or of methodologies. SOC BEH SC.


V. Labrie
Course explores the diversity of social and ethnic variation and examines the health and aging experience of minority elders within the context of families, communities, and the nation. SOC BEH SC.


C. Harrington, C. Estes
Course examines health care policy and politics in terms of historical and contemporary issues related to access, quality, and cost. Organizational, financing, and labor market issues are included, along with strategies for social change. SOC BEH SC.

242. Health Care Economics. (3) F. Lecture 2 hours. Lab 3 hours.

C. Harrington
Course is a critical analysis of economic theories and public and private financing of health care. Focuses on the effects of financing and reimbursement on health care delivery systems, professional practice, and individuals and families. SOC BEH SC.

266. Leadership in Long-Term Care. (3) F, W, Sp. Prerequisite: Consent of instructor. Seminar 2 hours.

C. Harrington
Seminar examines leadership and administration in long-term care settings. Focuses on organization, budgeting, program planning, management, educational programs, and service delivery with emphasis on alternative approaches and testing new models and theories. SOC BEH SC.

270A. Quantitative Methods I. (3) F. Restricted: Doctoral students in Sociology or consent of instructor. Lecture 2 hours. Lab 3 hours.

R. Newcomer
Course examines quantitative research methods used in sociological inquiry. The focus is on scientific models, problem formulation, use of theoretical frameworks, levels of analysis, settings and strategies, specification of construct, and selection of indices. SOC BEH SC.

270B. Quantitative Methods II. (3) W, Sp. Prerequisite: 270A (Quantitative Methods I). Restricted: Doctoral students in Sociology or consent of instructor. Lecture 2 hours. Lab 3 hours.

R. Newcomer
Course examines quantitative research methods including issues of sampling, reliability and validity, data collection, analysis, and inference. The course examines experimental, quasi-experimental, ex-post facto, and correlational research, as well as survey and evaluation methods. SOC BEH SC.

270C. Research Methods Seminar. (3) Sp. Prerequisites: S270A and S270B (Quantitative Methods in Sociological Inquiry I & II). Restricted: Doctoral students in Sociology or consent of instructor. Seminar 3 hours.

Staff
Advanced seminar in research methods. Students will be able to appreciate the complexity of issues and challenge of integrating qualitative and quantitative research traditions through discussion and exercises which formulate alternate research approaches. SOC BEH SC.


Staff
Seminar addresses professional and career issues for sociologists, including teaching, research, writing for publication, and presentation of papers at professional meetings. Focuses on career and educational planning, resume development, workshops, workshops, and job interviews. SOC BEH SC.


Staff
Course addresses logic of research design and execution for students. Clarification of research question, delineation of work plan, and orientation to relevant theoretical literature or empirical data available. SOC BEH SC.


M. LaPlante
Course provides an overview of demographic studies of morbidity, disability, and mortality. Conceptual and methodological issues are explored. Sociodemographic: variations and changes over time in health and mortality profiles of populations and the relationship of morbidity, disability, and mortality trends will be covered. SOC BEH SC.


H. Staples
Course examines contemporary sexual problems from a sociological perspective focusing on issues and their relationship to social contexts. Topics include sexually transmitted diseases, teenage pregnancy, sexual violence, sexual harassment, and incest. SOC BEH SC.


L. Lauter
Course considers current research, policy, and funding issues with regard to the mentally ill aged, within the context of the epidemiology, treatment options, utilization patterns, formal and informal treatment systems, and special issues of the mentally ill elderly. SOC BEH SC.
Sociology/Speech & Hearing Science


G. Becker
Course provides clinical experience in multidisciplinary assessment for sociologists, nurses, physicians, and other clinicians. Course involves application of social, psychological, economic, and other factors in assessment. SOC BEHC 523.

277. Sociology of Disability. (3) W. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours.

M. LaFlanche
Course covers sociological models and theories of disability and handicap. Areas to be covered include definitions, role theory, models of identification and causation, and sociological perspectives on disability policy. SOC BEHC 524.


K. Fillmore
Course examines alcohol and drug use from multiple theoretical perspectives in various historical and cultural contexts. Examines the distribution of alcohol and drug use across and within societies and warning policies and their consequences for the control and management. SOC BEHC 525.


B. Johnson
Course develops social and biological perspectives on nutrition and chronic illness. Examines interactions between lifestyle, nutritional factors, chronic illness, the aging process, alcohol and substance abuse, and other such factors. Emphasizes a critique of empirical research in the area. SOC BEHC 526.


B. Johnson
Course introduces meta-analysis techniques and applications in health research, including research design, sampling and data collection, and analytical techniques and software. Uses examples from drug and alcohol studies, and other health care evaluation studies. SOC BEHC 527.


E. Hartka
Course examines health care, a scarce resource, is divided among members of society, including theories from philosophy, medical ethics, economics, political science, sociology, and psychology. Examines justice and equity issues for different groups and among different health policies. SOC BEHC 528.


A. Clarke
Course examines early functionalist and Marxist theories, Kahn’s work, social constructionism, ethnomethodology, interactionist, neo-functionalism, critical, and neo-Marxist perspectives. Focus on laboratory, counterfactual, technological, and representation studies and organization and funding. Links history and philosophy. SOC BEHC 529.

283. Selected Topics/Health Economics. (2-5) W. Prerequisite: 526G (Health Care Economics). Lab 0.5-3 hour. Seminar 2 hours.

R. Miller
Course examines selected topics in health care economics, with attention to basic economic theory of supply and demand for health care services and health insurance. Includes national health insurance programs and the Canadian health care system. SOC BEHC 530.


A. E. Benjamin, A. Clarke, V. Olesen
Course examines research in evolving and behavioral aspects of AIDS/HIV related illnesses and critiques methodological data collection, and analyses aspects of the research as well as the political bases for the work. SOC BEHC 531.

285. Woman, Health, and Healing. (2-4) F. Lecture 2-3 hours. Field work 0.5-6 hours. V. Olesen, A. Clarke
Course examines women’s participation in formal and informal health and healing systems, with emphasis on health problems, recruitment to health professions, images of women in health and illness, and women as providers. Issues for minority women of color are highlighted. SOC BEHC 532.

289. Dissertation. (0) F, W, Sp. Prerequisite: Advancement to candidacy and permission of the graduate advisor.

Staff
For graduate students engaged in writing the dissertation for the Ph.D. degree. SOC BEHC 535.

Speech and Hearing Science


Staff
Lectures and laboratory demonstrations reviewing surgical and comparative anatomy of the ear; cochlear development and mechanics; hair cell transduction; comparative physiology of hearing, bases of hearing loss, and strategies for objective evaluation of inner ear function in animals and man. OTOLARY 521.


Staff
Lectures and laboratory demonstrations covering such topics as physiology and psychoacoustics of sound and speech coding; cochlear prostheses; central auditory system organization; physiology of tonal hearing in animals and man; evaluation of auditory brainstem function in animals and man. OTOLARYN 522.

203. Forebrain Mechanisms. (4) F. Prerequisite: Consent of instructor. Lecture 3 hours. Lab 1 hour. Offered in alternate years. Offered 1991-92.

Staff
Topics include forebrain representation of complex speech and sound production and speech localization (including echo localization in bats and whales); cognitive development related to hearing; auditory consequences of such pathologies as brain lesions and trauma; and objective assessment of forebrain mechanisms. OTOLARYN 523.

204. Speech Production and Perception. (4) F. Lab 2 hours. Seminar 3 hours.

Turner
This course is part of a two-year core curriculum covering the communicative neurosciences. It is the first course in the sequence which considers speech and language. It will cover basic anatomy, acoustic phonetics, the anatomy and physiology of speech production, and theories of speech perception. OTOLARYN 524.


turner
This is the final course in a two-semester sequence (201, 202, 203, 205). The objective of the core curriculum is to provide students with a fundamental knowledge of the speech and hearing sciences. This course covers basic language science with emphasis on the clinical processing of language. OTOLARYN 525.


Scheiner
Reading and critical discussion of selected original research papers on the anatomy and physiology of the auditory system. Each level of the auditory nervous system from the periphery to the cortex will be considered in turn. OTOLARYN 526.

211. Sound and Sound Analysis. (4) F. Prerequisite: Consent of instructor. Lecture 3 hours. Lab 2 hour. Offered in alternate years. Offered 1991-92.

Staff
Review of the physics of sound as it applies to the study of speech and hearing. Theoretical and practical approaches to the analysis of speech and the fundamentals of system analysis. Practical application of acoustic research equipment. OTOLARYN 527.

215. Laboratory Rotation. (1-4) F, W, Sp. Prerequisite: Consent of instructor. Lab 3-12 hours.

Turner
Directed reading and laboratory work in the auditory process and its disorders. OTOLARYN 528.

249. Independent Study. (1-5) F, W, Sp. Prerequisite: Consent of instructor. Lab 3 hours.

Staff
Directed reading and laboratory work in the auditory process and its disorders. OTOLARYN 529.
Reilly, Lewis
Senior clinical clerks participate in clinic, ward, and operating room with direct involvement in post- and pre-operative care. SURGERY

140.01D. Advanced Clerkship in General Surgery—VAH General/Vascular Service. (1.5 per week) Su, F, W; Sp. Prerequisite: Surgery 110, Medicine 110.

Reilly
Senior clinical clerks participate in clinic, ward, and operating room with direct involvement in post- and pre-operative care. SURGERY

140.01E. General Surgery. (1.5 per week) Su, F, W; Sp. Prerequisite: Surgery 110.

Siperstein, O. Clark, R. Allen
Senior clinical clerks participate in clinic, ward, and operating room with direct involvement in post- and pre-operative care. SURGERY

140.02. Off-Campus Clerkship. (1.5 per week) Su, F, W; Sp. Prerequisite: Core curriculum in basic sciences and Medicine 110 or Surgery 110 and 111.

Dubes
Clinical clerkship in approved hospitals in other universities by special arrangement and approval of the chairman of the department and the dean. SURGERY

140.03. General Surgery—PMC. (1.5 per week) Su, F; Sp. Prerequisite: Surgery 110.

Russell
Students serve as acting interns on general surgical service, participate in preoperative assessment, inoperative management and postoperative care of patients; participate in outpatient clinics as selected physicians' offices; participate in daily ward rounds and teaching conferences. SURGERY

140.04. Vascular Surgery Clerkship. (1.5 per week) Su, F, W; Sp. Prerequisite: Medicine 110, Surgery 110 and 111.

Krupski
Students serve as acting interns on the vascular surgery service, participating in preoperative, intraoperative, and postoperative management of patients, as well as in clinics, round, and conferences. SURGERY

140.05. Operable Heart Disease. (1.5 per week) Su, F, W; Sp. Prerequisite: Core curriculum in basic sciences and Medicine 110 or Surgery 110 and 111.

Turley
Ward rounds and conferences on patients with operable, congenital, or acquired heart disease. Details of selection, differential diagnosis, and results of surgery are discussed. SURGERY

140.06. Emergency Medicine—SFGRH. (1.5 per week) Su, F, W; Sp. Prerequisite: Medicine 110 or Surgery 110 and 111.

Reilly, Mathes
Students act as advanced clerks, taking part in operative procedures as well as postoperative management of the patient. Students will be exposed to patients with general reconstructive problems; trauma to the head and neck, hand surgery, and congenital anomalies. SURGERY

140.07. Shock & Trauma Research. (1.5 per week) Su, F, W; Sp. Prerequisite: Core curriculum in basic sciences and Medicine 110 or Surgery 110 and 111.

F. Lewis
COURSE involves clinical and laboratory investigation and a detailed study of specific patients with trauma and shock. SURGERY

140.08. General Surgery—C. (1.5 per week) Su, F, W; Sp. Prerequisite: Surgery 110 & Medicine 110. V. Richard

Students work as interns on Surgical Service; they evaluate general surgical patients preoperatively; work with patients in operating room; assume graduated, increasing responsibility in postoperative management. Round and conferences enhance clinical experience; interaction with staff in patient care emphasized. SURGERY

140.09. Trauma Surgery—SFGRH. (1.5 per week) Su, F, W; Sp. Prerequisite: Surgery 110 and 111 and consent of instructor.

F. Lewis
Clinical clerkship in the Trauma Service of the Department of Surgery at SFGRH. The student will work at intern-chief level as an integral part of the service. SURGERY

140.10. Cardiothoracic Surgery. (1.5 per week) Su, F, W; Sp. Prerequisite: Surgery 110 & 111.

Verrier
As an integral member of the cardiothoracic team, the student directly and actively shares in preoperative evaluation, operative procedures, and postoperative care. Cardiothoracic conferences and daily ward rounds provide the didactic teaching. SURGERY

140.11. Burn Care—SFGRH. (1.5 per week) Su, F, W; Sp. Prerequisite: Surgery 110. J. Horn

Clinical rotation on a large Burn Center Service. Pathophysiology of thermal injury including pulmonary aspects will be stressed. Students act as integral members of the team and participate directly in patient care. SURGERY

140.12A. Adv Clerkship in Plastic/Reconstructive Surgery—USCF. (1.5 per week) Su, F, W; Sp. Prerequisite: Surgery 110, Medicine 110.

Reilly, Mathes
Students act as advanced clerks, taking part in operative procedures as well as postoperative management of the patient. Students will be exposed to patients with general reconstructive problems; trauma to the head and neck, hand surgery, and congenital anomalies. SURGERY

140.12B. Adv Clerkship in Plastic/Reconstructive Surgery—SFGRH. (1.5 per week) Su, F, W; Sp. Prerequisite: Surgery 110, Medicine 110.

Reilly, Mathes
Students act as advanced clerks, taking part in operative procedures as well as postoperative management of the patient. Students will be exposed to patients with general reconstructive problems; trauma to the head and neck, hand surgery, and congenital anomalies. SURGERY

140.13. General Surgery—VAF. (1.5 per week) Su, F, W; Sp. Prerequisite: Surgery 110 and 111.

O'Hara
Students receive broad clinical experience in general surgery at VAF and will participate in ongoing research in select community settings in the central San Joaquin Valley. Balance between VAF and community assignments is individually arranged according to students' interests. SURGERY

140.14. Surgical Intensive Care Clerkship—VMC. (1.5 per week) Su, F, W; Sp. Prerequisite: Surgery 110 and 111. Fourth-year students only.

Parks
Clerkship offers an "organ systems" approach to critical surgical illness with experience in invasive and noninvasive monitoring and appropriate therapeutic interventions. Clerkship is aimed at providing patient management experience and familiarity with basic science concepts and literature upon which surgical intensive care is based. SURGERY

140.15. Burn Center Clerkship—VMC. (1.5 per week) Su, F, W; Sp. Prerequisite: Surgery 110 and 111. Fourth-year students only.

Parks
Presentes a clinical spectrum in critical-care medicine: burn wound infection control, resuscitative management, hemodynamic monitoring, with emphasis on appropriate nutritional and metabolic support. Also stressed are psychological and emotional needs of patients. Students participate as full members of the Burn Team. SURGERY

140.16. Nutritional Support Service—SFGRH. (1.5 per week) Su, F, W; Sp. Prerequisite: Surgery 110.

Hickey, Weaver
Students will be instructed in the formulation and administration of parenteral and enteral feedings, the insertion of subcutaneous catheters; the management of metabolic/nutritional problems. Students will perform nutritional assessment and activity, and participate in daily rounds at San Francisco General Hospital. SURGERY

140.17. Pediatric Surgery. (1.5 per week) Su, F, W; Sp. Prerequisite: Surgery 110 and 111. Clinic 46.

delLorme, Harrison
The pediatric clerkship is a 9-week pediatric surgical service assisting in pre- and postoperative management and in the operation. An interesting, wide variety of problems is encountered. SURGERY

140.18. Liver Transplantation. (1.5 per week) Su, F, W; Sp. Prerequisite: Medicine 110, Surgery 110. Anscher and Staff

Students will participate in evaluation of potential liver recipients (including HLA-typing, crossmatch,
immune monitoring, observe the liver transplant procedure, participate in postoperative care (including immunosuppressive management and mechanisms of graft rejection). Students will attend pertinent conferences, clinics, and daily rounds.

Parks, Gladwin
Senior clerkship responsibilities include participation as members ofony patient care teams, with emphasis on pre- and postoperative care, supervised clinic and operating room assignments, and participation in departmental conferences. This team is to provide exposure to a spectrum of elective and emergency surgical problems.

150.01. Research in Surgery. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor.

Hunt
Opportunities for research in one of the departmental laboratories by arrangement with the instructor. SURGERY

160.05. Advanced Surgery Reading. (F) F, Sp. F. Lewis
A weekly seminar where previously assigned papers are discussed and critiqued. Papers representing the classical and current concepts in general surgery are covered.


Hickey
Course emphasizes nutritional and metabolic requirements of injured, ill, and malnourished patients. Clinical rotation involves methods of preparation, administration, and assessment of patients receiving calorie, protein or amino acid support as part of specific therapy.

189. Supervised Study. (1-5) F, W. Sp. Prerequisite: Consent of instructor.

Debas and Staff
Library research and directed reading under supervision of a member of the faculty with the approval of the chairman of the department. SURGERY

199. Laboratory Project. (1-5) F, W. Sp. Prerequisite: Consent of instructor.

Debas and Staff
A laboratory research project under direction of a member of the faculty with the approval of the chairman of the department. SURGERY

400. General Surgery Staff Conf. (1.5) F, W, Sp. UC Debas, SFHG Lewis, VA L. Way
Conferences include presentation of case studies with reference to the literature, case records, laboratory tests, and special studies. Faculty and occasional guest lecturers discuss surgical problems. Death and complications are reviewed weekly. SURGERY


McKitterrow
Seminar includes case reports and demonstrations of the currently available gross and microscopic surgical pathological material from the operating room and pathology laboratories. SURGERY


DMC Heer, SFHG Lewis, UC Debas, VA L. Way
Seminar is held in the surgical ward with discussion of current problems concerning the diagnosis and management of general surgical patients. SURGERY

450. Surgical Laboratory. (1.5 per week) Su, F, W, Sp. UC Debas, SFHG Lewis, VA L. Way, DMC Heer, C. V. Richards, PMC Russell
Residents, under supervision, are responsible for the preparation of case records, laboratory work, preoperative patient preparation, assistance at operations, postoperative care, and attendance at follow-up clinic. Resident surgeons have certain additional administrative, teaching, and clinical responsibilities.

452. Experimental Surgery Laboratory. (1.5 per week) Su, F, W. Sp. Restriction: Surgery 450 and 452 may not be taken concurrently.

Debas and Staff
Course includes experimental investigations of general surgical problems and the development of technical and laboratory methods to be applied in general surgery. SURGERY


Debas
Assistant residents in off-campus hospitals approved by the chairman of the department and the dean. Course includes clinical and experimental investigations of general surgical problems and the development of technical and laboratory methods to be applied in surgery. SURGERY


Lewis
Interns rotate through the general surgical service, including the intensive care unit. Under the direction of the attending staff, experience is provided in vascular, chest, hand and plastic surgery, and surgery of maxillofacial injuries. SURGERY


Debas
Interns, under supervision, are responsible for the preparation of case records, laboratory work, preoperative patient preparation, assistance at operations, postoperative care, and attendance at follow-up clinic.

Teaching Methodology


Staff
Course provides resource information in the form of a systematic overview of educational technology. This information is introduced in conjunction with the development by the individual student of an actual microcourse, teaching a single skill.


Staff
Practical teaching experience in selected courses under the supervision of the members of the staff.

186. O.A.-B.-C. Practice Teaching. (0.3-0.3, 0.3-0.3) F, W, Sp. Lab 3 hours.

SURGERY

Practical teaching experience in selected courses under the supervision of senior members of the staff.

Toxicology

200.01. Introduction to Biochemical Toxicology. (4) F. Sp. Prerequisite: PC 263 or co-requisite. Lecture 4 hours.

Mechan
The metabolism and bioactivation of drugs, carcinogens, and other toxicants will be presented, and these examples will serve to illustrate how toxic substances alter and disrupt normal cellular processes at the molecular level.

Urology

Core Clerkship—Surgery 110 includes clinical clerkships in the outpatient clinics and hospitals, assistance at operations, and participation in residents' seminars.

140.01. Advanced Urology Clerkship—UC. (1.5 per week) Su, F, W. Sp. Prerequisite: Surgery 110.

Tanagho
Students work as interns on the Urology Service at UC. They also attend rounds and scheduled seminars with residents and visiting staff.

140.02. Off-Campus Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Surgery 110.

Tanagho
Clinical clerkship in off-campus hospitals approved by the chairman of the department and the dean.

140.03. Advanced Urology Clerkship—VA. (1.5 per week) Su, F, W, Sp. Prerequisite: Surgery 110.

R. D. Williams
Students work as interns on the Urology Service at VA. They also attend rounds and scheduled seminars with residents and visiting staff.

140.04. Advanced Urology Clerkship—SFHG. (1.5 per week) Su, F, W, Sp. Prerequisite: Surgery 110.

McAninch
Students work as interns on the Urology Service at SFHG. They also attend rounds and scheduled seminars with residents and visiting staff.

Teaching Methodology/Toxicology/Urology

150.01. Research in Urology. (1.5 per week) F, W. Sp. Prerequisite: Must be third- or fourth-year medical student. Must have approval of chair, dean, and involved research faculty. Lab 35 hours. Conference 4 hours, Library research 1 hour, for 4-12 weeks.

Carroll
Research project under the direction of a member of the Department of Urology.

170.01. Fundamentals of Urology. (2) F, W. Sp. Prerequisite: Consent of instructor.

Tanagho and Staff
Seminar and library research.

199. Laboratory Project. (1.5) F, W. Sp. Prerequisite: Consent of instructor.

Tanagho and Staff
A laboratory research project under direction of a member of the faculty with the approval of the chairman of the department.


Tanagho
Seminar includes study of the basic sciences and urologic reengineering with members of the attending staff.

401. Experimental Laboratory. (2) Su, W, Sp.

Tanagho
Course includes experimental investigation in urologic problems.


Tanagho
Seminar includes discussion of diagnosis and treatment of patients in the urology wards with the attending staff.


Tanagho
Conference includes presentation and discussion of urologic problems by the house staff and faculty.

450. Clinical Urology. (1.5 per week) Su, W, Sp. UC Tanagho, SFHG McAninch, V.A.D. Williams
First-year residents care for patients in the wards and outpatient clinics. Second- and third-year residents, under supervision, perform instrumental examinations on clinic patients. Senior residents, under supervision, perform instrumental and surgical procedures and have administrative, clinical, and teaching responsibilities.


McAninch
Interns rotate through urological wards. Under the direction of the attending staff they are responsible for the care of patients, including history-taking, physical examination, laboratory tests, and consultation.

UROLOGY