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 third (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 Anesthesiology, 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 HLTH
Division 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

OPHTHALMO
Department of Ophthalmology, School of Medicine

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

ORTHO SURG
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

PHYSIOL 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-Herrick Hospital, Berkeley

AS
Atascadero State Hospital, Atascadero

BDC
Buchanan Dental Clinic

C
California Pacific Medical Center-California campus, San Francisco (formerly Children's Hospital)

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

CHS
Community Hospital, 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, San Francisco

FCH
Fresno Community Hospital and Medical Center, Fresno

FR
Kaiser Foundation Hospital-French campus, San Francisco

GS
Good Samaritan Hospital of Santa Clara Valley, San Jose

H
Highland General Hospital, Oakland

K
Kaiser Foundation Hospital, San Francisco

KH
Kaiser Foundation Hospital, Honolulu

KID
Kaiser Permanente Delta District Hospital, Vineland

KP
Kaiser Foundation Hospital, Oakland

KSS
Kaiser Foundation Hospital, South San Francisco

KWC
Kaiser Foundation Hospital, Walnut Creek

KS
Kaiser Foundation Hospital, Sacramento

L
Letterman Army Medical Center, San Francisco

LBL
Lawrence Berkeley Laboratory, Berkeley

LH
Laguna Honda Hospital and Rehabilitation Center, San Francisco

LPPH
Langley Porter Psychiatric Hospitals and Clinics, San Francisco

MC
Maricopa Medical Center, Phoenix

MG
Marin General Hospital, Greenbrae

MILB
Memorial Medical Center, Long Beach

MZ
Mount Zion Medical Center of UCSF, San Francisco

NAT
Natividad Medical Center, Salinas

NRMC
Naval Hospital, Oakland

NS
Napa State Hospital, Napa

OC
O'Connor Hospital, San Jose

PH
Mill-Peninsula Hospitals, Burlingame

PAC
California Pacific Medical Center-Peninsula campus, San Francisco

Q
Queen's Medical Center, Honolulu

RLA
LAC-Rancho Los Amigos Hospital, Downey

S
Stanford University Hospital, Stanford

SFC
Santa Clara Valley Medical Center, San Jose

SDH
Selma District Hospital, Selma

SFGH
San Francisco General Hospital Medical Center, San Francisco

SGH
Scenic General Hospital, Modesto
182.01. Neuroneuroanatomy. (2) Su. Prerequisite: Completion of course prerequisite for admission to the University and the Curriculum in Physical Therapy. Open only to students enrolled in the Curriculum, or by consent of program director. Lecture 1 hour. Lab 3 hours.

Gerontology
The structural organization and function of the central nervous system are presented through lecture and laboratory study of models, wet and dry demonstrations. Special emphasis accorded to clinical functional correlations. ANATOMY

115. Histology. (3) W. Lecture 2 hours. Lab 3 hours. Martin and Staff
A study of the microscopic structures of the tissues and organs of the human body by means of lectures, demonstrations, and microscopic slides. Functional aspects of the structures are stressed. Intended for students in the School of Pharmacy. ANATOMY

116. Gross Anatomy. (3) §P. Lecture 2 hours. Lab 3 hours. Sutherland
A study of the macroscopic structure of the human body by means of lectures and dissections. Functional aspects of the structures are stressed. Intended for students in the School of Pharmacy. ANATOMY

117.01. Gross Anatomy & Embryology. (4) §P. Prerequisite: First-year dental standing. Lecture 5 hours. Lab 15 hours.

F. Fisher
The gross structure and developmental anatomy of the thoracic and abdominal regions are studied by means of dissection, laboratory exercises, and demonstrations. The functional significance of the structures is emphasized. STOMATOLOGY

117.02. Head & Neck Anatomy. (4) §P. Prerequisite: First-year Dental standing. Lecture 2 hours. Lab 9 hours.

S. Fisher
The gross anatomy of the head and neck is studied by lectures and dissections. Clinical applications and functional aspects of the structures are emphasized. STOMATOLOGY

156.02. Head & Neck Anatomy. (3) §P. 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 hygiene 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 program 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) W, S. Sp. Prerequisite: Consent of instructor. Seminar 1 hour. Lab 1 hour.

Sutherland, Rakson
Workshops in anatomy and neuroanatomy, offered concurrent to the first-year class, 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. Restricted: Open only to students enrolled in the Physical Therapy program. Lecture 2 hours. Offered in summer or spring of even-numbered years.

McKeanie
This course is designed to provide physical therapists with information on the more common human congenital defects. Environmental and genetic factors that produce malformations are considered and possible mechanisms discussed. ANATOMY

190. Supervised Study. (1-5) §S, F, W, Sp. Staff
Library research and directed reading under supervision of a member of the faculty with approval of the chairman of the department. ANATOMY

199. Laboratory Project. (1-5) §S, F, W. 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 Genum & Chromosomes. (2) W. Sp. Prerequisite: Consent of instructor. Lecture 2 hours.

S. Wolff
Concepts and mathematics of target theory relating to damage of genetic apparatus. Biophysical and biochemical studies on induction of inter-
Anatomy


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

235. Developmental Neurobiology (1-3) S W. Prerequisite: Consent of instructor. Lecture 1-3 hours. Offered every three years. Not offered 1992-93.

J. LaVall, M. LeVall, L. Reichardt Principles involved in the structural and functional development of the nervous system as well as detailed consideration of the development of specific regions of the mammalian central nervous system. Lectures, student presentations, and discussions of classical and current literature. ANATOMY

250. Research (1-8) F, W. Pr. Staff ANATOMY

273. Biolog Scanning Electron Microscopy (1) F. Prerequisite: Consent of instructor. Lecture 1 hour. Lab 2 hours for those students enrolled. Enrolment limited.

J. Long & Staff Principles of scanning electron microscopy including tissue preparative techniques and application. Laboratory sections include participation in preparing and viewing biological specimens. ANATOMY

298. Thesis (0) F, W. Pr. Prerequisite: Advanced in candidacy and permission of the graduate adviser.

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

299. Dissertation (0) F, W. Pr. Prerequisite: Advanced candidacy and permission of the graduate adviser.

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

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

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

400. Clin Anat through Cross-Section. (2) Su. Prerequisite: Open to housestaff members of UC hospitals. Lecture 1 hour. Lab 3 hours. Adling, Ross Clinically oriented survey of human anatomy through analysis of representative cross-sections of the body.

Course provides an anatomical background for understanding computed tomograms. Student will prepare and keep an anatomy atlas usable in radiologic tomography. ANATOMY

Anesthesia

110. Anesthesia Core Clerkship. (3) F, W. Prerequisite: Care and Pain Medicine 120, 131A-B-C. Physiology 100, Pharmacology 100A-B, and Psychiatry 120. Caulfield Introduction and experience in operating room anesthesia including preoperative and postoperative evaluation and care. Cardiovascular resuscitation and care of the unconscious patient are stressed. The course is given at SGHC, UC, VA, C, FR, and AB hospitals. ANESTHESIA

111. Advanced Cardiac Life Support (1) F. Prerequisite: Basic Cardiac Life Support (BLS) or CPR and Anesthesia 110. Restricted to 4th year medical students. UCSF. Lecture 8 hours. Workshop 12 hours. Carlyle, Canoress, and Staff American Heart Association certified training in advanced cardiac life support. Includes recertification in BLS if needed, airway management, invasive monitoring and therapeutic techniques, arrhythmia detection and management, cardiovascular pharmacology, acid-base balance, neonatal and pediatric resuscitation, and defibrillation. ANESTHESIA

140.01. Advanced Anesthesia Clerkship. (1.5) per week F, W. Prerequisite: Anesthesia 110. Caulfield Clerkship in operating room anesthesia, care of the unconscious patient, and management of pain in the recovery room. Not scheduled through elective lottery. Consent Department of Anesthesia, extension 63234, to schedule. ANESTHESIA

140.02. Off-Campus Clerkship. (1.5) per week F, W. Prerequisite: Anesthesia 110. Caulfield Clerkship in operating room anesthesia, care of the unconscious patient, and management of pain in the recovery room. Not scheduled through elective lottery. Consent Department of Anesthesia, extension 63234, to schedule. ANESTHESIA

140.06. Pain Management. (1.5) per week F, W. Prerequisite: Anesthesia 110. Davies The student will learn diagnosis and treatment of acute and chronic pain. Rotation includes the Postoperative Pain Service (Specializing in epidural infusions and PDA) and the Multidisciplinary Pain Center. (Managing all aspects of chronic pain, including diagnostic and therapeutic nerve blocks). ANESTHESIA

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

160. Basic CPR (0-5) F, W. Lecture 1 hour. Lab 2 hours. Cohen, Cahalan, Strong Two-week CPR class for training students in basic life support skills: cardiac compressions and ventilation, management of airway obstruction, and assessments of need to initiate or terminate CPR.
Animal Science

Animal Science: (2-3) § F. W. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours. This course will consist of lectures and laboratories on the proper use of laboratory animals in a research environment. Topics will include the ethical/human use of laboratory animals, selection of biomedical models, cosmetic disease, general principles of anesthesia, analgesia, septic surgery, and humane methods of euthanasia. PHARMACY

Anthropology

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

206. Off-Campus Study. (3) § F. W. Prerequisite: Approval of the graduate adviser. Open only to students enrolled in the graduate program in Medical Anthropology.

Staff

Full-time graduate student in the Medical Anthropology program through the interchange or consortium program. EPID & BIOSTAT

205A-B. Intro to Sociocultural Aspects. (3-4, 3-4) § F. W. Prerequisite: Either 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 for and open only to first-year students in the UCSP Ph.D. Program in Medical Anthropology.

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 & BIOSTAT

206A-B. Intro to Biomedical Anthropology. (3-4, 3-4) § F. W. Prerequisite: Consent of instructor. Lecture 3 hours, plus 3 hours independent study for 4 units. Open only to first-year students in the Interdepartment Program in Medical Anthropology. Required for students in the UCSP Ph.D. Program in Medical Anthropology.

F. Dunn, Staff

Survey of the biological areas of medical anthropology; anthropological research in relationship to biomedicine and human biology. EPID & BIOSTAT

211A-B-C. Research Training Seminar. (4-6, 6-8) § F. W. Prerequisite: Consent of instructor. Required for and open only to second-year students in the Interdepartment Ph.D. Program in Medical Anthropology. Lecture 1 hour, Seminar 1 hour F, 2 hours W. Field work 5-7 hours F, 12-18 hours W. Staff:

Abnon, Mitteness

Fundamentals of anthropological research design, methods, and analysis through lectures, readings, and field assignments. EPID & BIOSTAT

212A-B-C. Research Apprenticeship. (2-3, 2-3, 2-3) § F. W. Prerequisite: Consent of instructor. Lab 6-15 hours.

Staff

Students work with individual faculty members in ongoing research projects. Each student will work on supervised data collection and analytical tasks, and a broader range of research activities, such as problem formulation, grant preparation, sampling, and research design and execution. EPID & BIOSTAT


Abnon

Review of theoretical and methodological literature on anthropological life histories and the use of life history materials. Classic life histories and newer works will be read and examined for the methodologies and analyses utilized. EPID & BIOSTAT

216. Research Design. (3) § F. W. Lecture 2 hours. Lab 3 hours.

Nydegger

Workshop format, utilizing student research interests. Topics include model building; problem formulation; design of research strategies; evaluation of sampling methods; operationalization of concepts; special problems for qualitative data. Course is preparatory for anthropological statistics. EPID & BIOSTAT

217. Statistics. (2) § F. W. Lecture 2 hours. Lab 3 hours.

Mitteness

Introduction to statistical methods for the scientific scientist: measurement, selected data characteristics, probability theory, statistical models, descriptive statistics, the general linear model, analysis of qualitative data. Emphasis is on understanding fundamental assumptions and procedures of statistical methods relevant to anthropology. EPID & BIOSTAT

218. Computer Methods. (3-4) § F. W. Lecture 3 hours. Lab 3-4 hours.

Staff

An introduction to data processing methods most commonly used by medical anthropologists. Topics covered include computer programming and laboratory computer administration. Includes: how a computer works, data format design, keypunching, use of SPSS and IIMD program packages and the interpretation of computer output. EPID & BIOSTAT

220. Departmental Seminar. (0) § F. W. Prerequisite: Consent of instructor. Lecture 1 hour.

Staff

Students, staff, or guest lecturers present selected topics based on their current work. EPID & BIOSTAT

212A-B. History & Theory of Anthropology. (3-3) § F. W. Prerequisite: Consent of instructor. Generally limited to students in anthropology. Lecture 3 hours.

Staff

A review of the history and development of anthropology and its major theoretical approaches. Lectures, discussion, and readings focus on major issues, trends, personalities, and present concerns in the field. EPID & BIOSTAT

235. Contemporary Issues. (2-4) § F. W. Prerequisite: Consent of instructor. Lecture 2 hours, plus 3 or 4 hours independent study for 3 or 4 units.

Staff

Introduction to related controversies and current issues in medical anthropology, including sociology; sociocultural impact of high technology medicine; abortion, euthanasia and the right to life; status of research on the etiology of mental disorders; advocacy and the social sciences. EPID & BIOSTAT


Abnon

Examination of social attributes of stigma to such conditions as schizophrenia, alcoholism, neurosis, dysphoria, mental and physical disabilities. Self-help groups organized around such conditions will be examined. Great concern in helping those conditions will contribute to the course. EPID & BIOSTAT


Abbon

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 & BIOSTAT

230. Culture & Personality. (3-3) § F. W. Prerequisite: Consent of instructor. Lecture 2 hours, plus 3 hours independent study for 3 units.

Kiefer

Exploration of the relationship between cultural 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 & BIOSTAT

231. Ethnosociology. (2-3) § 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 disorders including folk healing, cross-cultural comparisons, research methods, and implications for community psychiatry. Students study local examples of Folk healers or Folk healing institutions of the world. EPID & BIOSTAT

233. Anthropology of Aging. (2-3) § F. W. Prerequisite: Consent of instructor. Lecture 2 hours, plus research project for 3 units.

Kiefer

Cross-cultural approaches to roles, status, and problems of aged populations. Cultural factors influencing the condition and adaptation of the aged in American society. Topics include: cultural attitudes and values; social relationships; and health problens. EPID & BIOSTAT

234. Culture & Symbolic Systems. (2-3) § F. W. Prerequisite: Anthropology 230A or equivalent, or consent of instructor. Lecture 2 hours, plus 3 hours independent study for 3 units.

Staff

Symbolic expressive behavior is considered from psychosocial life-cycle and psychoanalytic perspectives. Various projective systems are analyzed: psychological tests, dreams, folklore, myths, religious rituals, altered states of consciousness, and healing procedures. EPID & BIOSTAT

235. Cross-Cultural Aspects of Childhood. (3) § F. Prerequisite: Consent of instructor. Open to stu-
231. Social Gerontology. (3–4) F, W, or Sp. Prerequisite: 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 this country. Special emphasis on health-related problems and the delivery of services to the elderly. EPIED & BIOSTAT
Justice
Combining the perspectives of anthropology and health policy, the course will examine the effect 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. EPIED & BIOSTAT
233. Late Life Family. (3) F, W, Sp. Prerequisite: Consent of instructor. Seminar 3 hours.
C. Johnson, L. Troll
A review of research on the late-life family with a critical analysis of the conceptual and methodological issues guiding research. Interpretations of the caregiving and social support literature will be associated with social, cultural, and psychological theories on the family. EPIED & BIOSTAT
254. The Aged Patient & Disability. (3-3) F, W. Prerequisite: Consent of instructor. Lecture 2 hours, seminar 3 hours. 
Mintzner, Mosesky, Kramer, Finlay, DiMinno
Participate in Alzheimer’s Center Multidisciplinary Assessment Clinic. Focus on assessment of the elderly, specialized dementia assessment, depression assessment, differential diagnosis, home visit assessment of environmental needs and caregiver competence, pharmacological management, family and cultural issues in care of elderly patients. EPIED & BIOSTAT
260. Epidemiology & Med Anthro. (2–4) Sp. Prerequisite: Training in epidemiology and consent of instructor. Lecture 2 hours plus 3 or 6 hours independent study for 3 or 4 units.
F. Dunn
Individual or small group directed reading and discussion of epidemiological and medical ecological prospective, methods, and findings relevant to the field of medical anthropology. EPIED & BIOSTAT
297. Special Study. (1–5) F, W, Sp. Prerequisite: Consent of instructor. Staff
Independent study. EPIED & BIOSTAT
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. EPIED & BIOSTAT
200. Selected Topics: (0) F, W, Sp. Lecture 1 hour. Albers
Lectures and discussion on topics of current interest in biochemistry and biophysics. BIOCHEM

221. Selected Topics: (0-4) F, W, Sp. Lecture 1 hour
Staff
Presentation of selected topics in biochemistry by graduate students in the Department of Biochemistry.

242. Protein Crystallography. (3) W. Prerequisite:
Consent of instructor. Lecture 2 hours. Lab 3 hours. Offered in alternate years. Offered 1992-93.
Snedecor
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.
Kleinman, G. Martin
Modern aspects of cell biology and development with emphasis on structure-function relationships and multicellular organization. BIOCHEM

Staff
BIOCHEM

Staff
Reading and conferences for properly qualified students under the direction of a member of the staff. BIOCHEM

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

Biomedical Engineering

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

Langford
Full-time study in biomedical engineering at another location through the UCSF/UCB Graduate Group in Bioengineering.

210. Radioactivity Applications. (3) S. Pr.
Lecture 3 hours.
Peres-Mendez
Basic physics of radioactivity and alpha, beta, gamma, and fission processes. Interactions of radiation with matter, basic radiation detectors for counting and determining energy of charged particles, neutron, and gamma. Counting statistics and radiation protection. Applications in biology, chemistry, engineering.

220. Bioengineering Seminar. (1) F. Seminar 2 hours.
Baumrind, Bhatnagar
Presentation and discussion of student and faculty research in progress.

221. Orthopedic Mechanics & Materials. (2) W. Lecture 2 hours.
Skinner
This course is intended to introduce the student to the mechanics of several joints in the human body, to acquaint the student with common biomaterials (and their properties) used in orthopedics, and to discuss these 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 with matter, detectors and detector electronics, radiation quantity and quality, contrast, spatial resolution, noise, and image perception; radiation protection.

210B. Physics of Medical Nuclear Imaging. (3) S. 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, mammography, digital subtraction angiography, photostimulable phosphor technology, dual-energy imaging techniques, bone-muscle-dentin tomography, and quantization of vascular flow.

210C. 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.
Hylen, Carlson, Crooks, Oostembah, 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) F, W, Sp. Prerequisite: Graduate standing. Staff

Biology

180. Algebra & Calculus for Biomed. (3) S. Prerequisite: Consent of instructor. Staff

200. Biological Modeling through DiffEqn. (3) F. Prerequisite: Biomechanics 180 or equivalent. Lecture 2 hours. Lab 3 hours.
Staff
Development of intuitive notions regarding differential equations. Quantitative and qualitative aspects of differential equations are explored by analog, digital, and analytic techniques. Applications to selected problems in compartmental analysis, enzyme and drug kinetics, and metabolic and biological control dynamics.

210. Endocell Dynamics. (3) W. Prerequisite: Biomechanics 193A-B or equivalent, or consent of instructor. Staff

210C. Review of relevant parts of compartmental and tracer analysis and control theory. Analysis of dynamics of secretion 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) 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 interdepartmental exchange or consortium program.

210. Cellular Biophysics. (3) F. Prerequisite: Biochemistry 200A. Lecture 3 hours.
Cooke, Papahadjopoulos, Rodnitzky
Topics covered: membrane structure and dynamics; transport and permeability; cellular motion and muscle contraction; cell energetics; DNA replication and information transfer; cell cycles.

235. Neuronal Human Genes. (2) S. Prerequisite: Consent of instructor. Lecture 2 hours. Cleaver

236. Introduction to Eukaryotic 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.

235. Mammalian Genomic Rearrangements. (1.5) S. Lecture 1.5 hours.
Morgens, Marue
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.
Biotostatistics

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

171. Intro Linear Algebra. (3) W. Prerequisite: One year of college-level mathematics. Lecture 3 hours. Offered in alternate years: Next offered 1992-93.

Real

210. Advanced Topics in Radiation Biology. (3) W. Prerequisite: Biophysics 210 or consent of instructor. Lecture 3 hours. Deen

Current topics in radiation physics, radiation chemistry, and radiation biology. Lecture will be entirely based on the work of the Radiation Biology Group. Lectures will assume student familiarity with the fundamentals of radiation physics.

215. Laboratory Rotation. (3) F, S, W. Prerequisite: Consent of instructor. Lab 3 hours. Deen

A laboratory rotation course to acquaint students with current research programs in the Department of Biophysics. Students will rotate through 3-4 labs.


Guest lecturers and reports of research by faculty and students of the Graduate Group in Biophysics.


297. Special Study. (1-3) F, W, W. Conference 1-3 hours. Staff

Reading and conferences for properly qualified students under the direction of a member of the staff.

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

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

See also: Biochemistry 200A, Chemistry 260, Biostatistics 183

219. Clinical Trials & Life Tables. (3) S. Prerequisite: Biostatistics 183 or equivalent permission of instructor. Lecture 3 hours. Offered in alternate years: Next offered 1992-93.

Hausk, Hilton

This course will cover "classical" experimental design and their statistical analysis. Designs to be covered will include completely randomized, full and partial factorial, randomized block and crossover designs, nesting and random effects. Statistical methods to be covered will include ANOVA and confidence intervals.

220. Multivariate Methods. (3) S. Prerequisite: Biostatistics 210A and 210B or equivalent. Lecture 3 hours. Staff

This course is designed to cover multivariate methods such as canonical correlation, discriminant analysis, and other topics.

221. Analysis of Repeated Measures. (3) S. Prerequisite: Biostatistics 210A and 210B or equivalent. Lecture 3 hours. Staff

This course is designed to cover methods for analyzing repeated measurement data. Methods to be presented will include classical and MANCOVA approaches, likelihood based procedures, and other topics.

223. Selected Topics. (0-4) F, W, W. Lecture 2-4 hours. Lab 0-3 hours. Staff

224. Cell Biology

225. Selected Topics in Cell Biology. (2-6) S, W, W. Prerequisite: Cell Biology 245. Lecture 2 hours. Staff

This course is designed to cover selected topics in cell biology.

226. Biostatistics/Cell Biology

This course is designed to cover selected topics in biostatistics and cell biology.
Cell Biology/Chemistry

Selected topics in cell biology will be discussed: a tutorial based, with student presentation of papers. The goals are an in-depth study of one area of cell biology, and critical reading of the scientific literature. BIOCHEM

212. Selected Readings in Cell Biology. (2) F. Prerequisite: Previous or concurrent enrollment in Cell Biology 245, and consent of instructor. Yale
Tutorials with a maximum of eight students per class. Each week all students will read one paper and be individually responsible for another paper or group of papers. The papers will address current issues in cell biology. BIOCHEM

215. Laboratory Rotation. (3) F, W, Sp. Prerequisite: Consent of instructor. Lab 9 hours. Staff
A laboratory rotation course to familiarize new departmental graduate students with various approaches to cell biology research. BIOCHEM

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. Jolles, Morgan
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. (2) F, W, Sp. Prerequisite: Cell Biology 245. Lecture 2 hours. Staff
Topics in Cell Biology will be discussed: a tutorial format, with student presentation of papers. The goals are an in-depth study of one area of cell biology, and critical reading of the scientific literature. BIOCHEM

250. Research. (1-8) § 551, 552, Su, F, W, Sp. Prerequisite: Consent of instructor. Staff
BIOCHEM

299. Dissertation. (0) F, Su, 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. 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
Notes on 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. (3) F. Prerequisite: Chemistry 112 or passing grade in the Chemistry 112A equivalency examination. Lecture 3 hours. Ketcham
A continuation of the study of compounds of carbon including 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. Shefter
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 equivalency examination, Chemistry 113 or concurrent enrollment in Chemistry 113, or consent of instructor. Lecture 1 hour. Lab 4 hours. Kohl
Laboratory experiments in identification and quantitation of organic substances. PHARM CHEM

151. Physical Chemistry. (1-3) Sp. Prerequisite: Consent of instructor. Lecture 1-3 hours. Kantz
Selected topics at an introductory level, which vary from year to year. Past topics included structure of molecular acid and proteins, quantum chemistry, and spectroscopy. PHARM CHEM

158. Physical Chemistry Laboratory. (3) Sp. Prerequisite: Chemistry 115 and 116. Lab 3 hours. Kantz
Laboratory exercises in spectroscopy. PHARM CHEM

165. Organic Chem-Analytical Meth. (3) F. Prerequisite: Chemistry 113. Lecture 1 hour. Lab 9 hours. Kohl
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

188. Supervised Study. (1-8) 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. 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

202. Advanced Organic Chemistry. (4) F. Prerequisite: Consent of instructor. Lecture 4 hours. Screaton
The study of organic chemical reactions and functional group reactions with an emphasis on reaction mechanisms. PHARM CHEM

205. Advances in Synthetic Methods. (2) F. Chemistry 113 and 155 or equivalent. Lecture 2 hours. J. Craig
Recent advances in synthetic methods, comprising specific catalyzing agents, specific reducing agents, and other specific reactions. PHARM CHEM

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

261. Advanced Physical Chemistry. (4) F. Prerequisite: Chemistry 151 or equivalent. Knowledge of differential equations recommended. Lecture 4 hours. Kolbmann
Quantum mechanics and applications to molecular problems. PHARM CHEM

263. Biophysical Chemistry. (3) Sp. Prerequisite: Chemistry 260 or consent of instructor. Lecture 3 hours. Slosser
Basic principles of biophysical chemistry. Properties of biomolecules and macromolecules, and physical principles of experimental methods including scattering, hydrodynamics, sedimentation, gels, chromatography. PHARM CHEM

264. Advanced Statistical Mechanics & Molecular Mechanics. (2) F. § 555. Prerequisite: Chemistry 260 or consent of instructor. Lecture 2 hours. Kantz
Advanced aspects of statistical mechanics and molecular mechanics; topics vary from year to year. PHARM CHEM

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 and participation in various settings where the pharmacist and patient interact. CL PHARM

130. Therapeutics. (4) F. Prerequisite: Successful completion of all required first- and second-year courses or consent of instructor. Lecture 5 hours. Conference 2 hours. Koo, Wong
Orientation to selected areas of medical practice, the clinical evaluation and comparison of drugs used in these areas, and the bio-pharmaceutics of drug combinations and products. CL PHARM

131. Therapeutics. (6) W. Prerequisite: Clinical Pharmacy 130 or consent of instructor. Lecture 5 hours. Conference 2 hours. L. Hart, Aldridge
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, Bolinger
Continuation of Clinical Pharmacy 131. CL PHARM

133. Nutrition. (3) Sp. Prerequisite: Third-year standing. Lecture 3 hours. Rodenn
Clinical aspects of nutrition in ambulatory and institutional practice with emphasis on special needs of different populations. Nutritional supplements, 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. Rehl, Herod
Survey of major world health problems, and programs and agencies concerned with their control. Relations of pharmacy to topics such as emergency medical services, communicable diseases, nutrition, sanitation, 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. Consent 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

135B. Drug Information Orientation. (0.5) Su, F, W, Sp. Prerequisite: Clinical Pharmacy 135A. 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

146A. Inpatient Clinical Clerkship. (9) Su, 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. Keyser 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 patient-specific drug information questions. CL PHARM

148B. Inpatient Clinical Clerkship. (9) Su, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year courses and Clinical Pharmacy 130 series comprehensive examination. Clinical 40 hours per week for 6 weeks.

Kayser and Staff

Continuation of Clinical Pharmacy 148A. 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. Clinical 40 hours per week for 6 weeks.

Adair 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 patient-specific drug information questions. CL PHARM

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

Adair and Staff

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


Shimmona 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 patient-specific drug information questions. CL PHARM

148.02B. Inpatient Clerkship—UCI & MH&B. (9) F, W, Sp. Prerequisite: Clinical Pharmacy 148A or 148A. Clinical 40 hours per week for 6 weeks.

Shimmona and Staff

Continuation of Clinical Pharmacy 148A. CL PHARM

148.03A. Inpatient Clinical Clerkship—UCD. (9) Su, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year course work and the comprehensive examination. Clinical 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 patient-specific drug information questions. CL PHARM

148.03B. Inpatient Clinical Clerkship—UCD. (9) Su, W, Sp. Prerequisite: Clinical Pharmacy 148A. Clinical 40 hours per week for 6 weeks.

Sauer and Staff

Continuation of Clinical Pharmacy 148A. CL PHARM


A. Leaders and Staff

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

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

Wolbert and Staff

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


Shimmona 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

149.02B. Ambulatory Externship/Clerkship—UCI & MH&B. (6) F, W, Sp. Prerequisite: Clinical Pharmacy 149A. CL PHARM

Shimmona and Staff

Continuation of Clinical Pharmacy 149A. CL PHARM

149.03A. Ambulatory Externship/Clerkship—UCSD. (9) F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year required courses and the comprehensive examination. Clinical 50 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 team, take medication histories, monitor drug therapy, provide patient education, and research patient-specific drug information questions. CL PHARM

149.03B. Ambulatory Externship/Clerkship—UCSD. (6) Su, W, Sp. Prerequisite: Clinical Pharmacy 149A. Clinical 39 hours per week for 6 weeks.

Sauer and Staff

Continuation of Clinical Pharmacy 149A. CL PHARM


Levin

Preparation for Clinical Pharmacy 110 conferences. One supervisor and one junior preceptor per conference will be responsible for conducting oral presentations. One senior per conference will be responsible for taking students on tours of clerkship sites. CL PHARM

155.80. Oncology Seminar. (3) F. Prerequisite: Fourth-year pharmacy students in good standing; graduate nursing students in the oncology program. Seminar 2 hours.

Ignofo

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


Shimmona and Staff

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


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

170.03. Issues Facing Women in Pharmacy. (1) F, Sp. Lecture/seminar (one Saturday and one weekday evening) 1 hour total.

Kimbrel, 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 numbers of women entering the profession. CL PHARM

170.03. Issues Facing Women in Pharmacy. (1) F, Sp. Lecture/seminar (one Saturday and one weekday evening) 1 hour total.

Kimbrel, 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 numbers of women entering the profession. Successful female role models will be invited to share their experiences and perspectives, providing additional discussion topics. CL PHARM


Kimbrel, Kopp, Inrhe

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.

Ignofo

This interdisciplinary course is designed to provide a framework of conceptual skills about preventive medicine, focusing on cancer prevention. CL PHARM

170.60. Pharmacucial & Critical Care. (1-5) Sp. Prerequisite: Fourth-year standing and basic life support certification. Lecture 1 hour plus project.

Kayser

This course provides an introduction to the basic principles of critical care pharmacology and therapeutics. CL PHARM

175.01. Infantile Pediatrics—UC. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148A or 149A and 149B. Consent of instructor.

Boulanger

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

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

Aweke

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—UC. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148A or 149A and 149B. Consent of instructor.

Gugglino

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

175.64. Clinical Pharmacokinetics—UC. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 130, 131 and 132. Consent of instructor.

Winter

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

175.27. Neonatal ICU-UC. (1-8) SSI, SSU, Su, F, W. Prerequisite: Neonatal ICU. Successful completion of all first-, second- and third-year required coursework. Consent of instructor.

A. Wong
Participate in activities of Neonatal ICU, including patient monitoring, rounds, drug consultation, and utilization. Patient care involves premature and newborn infants with congenital heart defects. Work under supervision of attending pharmacist in management of care of these patients. CL PHARM

175.21. Pediatrics-SFGH. (1-8) F, W. Prerequisite: Clinical Pharmacy 145A or 149A and 149B. Consent of instructor.

R. Levin
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-VAMC. (1-8) Su, F, W. Prerequisite: Clinical Pharmacy 145A or 149A and 149B. Consent of instructor.

Winter, Kondo
Students gain experience 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

175.23. Psychiatric Medicine-NS. (1-8) Su, F, W. Prerequisite: Clinical Pharmacy 130, 131 and 132. Consent of instructor.

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

175.24. Inpatient Medicine-VA. (1-8) Su, F, W, Prerequisite: Clinical Pharmacy 148A or 149A and 149B. Consent of instructor.

Winter, Koenen and Staff
Experience in various medical services at VA. Activities include interviewing patients, monitoring drug therapy, attending rounds, and housestaff, and participation in conferences, seminars and rounds. Special projects assigned. CL PHARM

175.25. Infectious Diseases-SFGH. (1-8) Su, F, W, Prerequisite: Clinical Pharmacy 148A or 149 and consent of instructor.

Kapuskik, Mills
Students rotate with SFGH Infectious Diseases Consultation Service. Evaluate antibiotic selection and monitor patients’ therapy for efficacy and toxicity, serve as drug consultant to the medical staff on the service. (A special project relating to some aspect of infectious disease and its therapy will be completed.) CL PHARM

175.30. Clinical Toxicology and Pharmacology-SFGH. (1-8) Su, F, W. Prerequisite: Successful completion of all first-, second- and third-year required coursework and the comprehensive exam. Consent of instructor.

Winter, Olson, Keary
In an interdisciplinary setting, students assess clinical problems relating to the selection, pharmacodynamics and therapeutic areas of drugs and drug products. Activities include participation in rounds and conferences, consultation on selected consultations, and review and evaluation of drug literature. CL PHARM

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

Winter, Konod
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

175.32. Inpatient Medicine-VA. (1-8) Su, F, W, Prerequisite: Clinical Pharmacy 148A or 149A and 149B. Consent of instructor.

Winter, Koenen and Staff
Students participate in the activities of the Inpatient Medicine Program. Students will be responsible for drug surveillance, drug monitoring, management and consultations, and patient education. A minimum of two patient-specific drug consultations is required. CL PHARM

175.34. Psychopharmacology-8. (1-8) F, W, Prerequisite: Clinical Pharmacy 148A or 149 and consent of instructor.

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

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

Winter, Jacobs
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 a private hospital oncology unit. CL PHARM

175.60. Rose Valley Pharmacy Clerkship. (1-8) F, W. Prerequisite: Clinical Pharmacy 130, 131 and 132. Consent of instructor.

Winter, Lothman
Students interview patients, maintain medication records, and give medication usage to patients, and answer drug therapy questions generated by physicians, pharmacists, and patients in a pharmacy located within a group medical practice. CL PHARM

175.64. Haigh-Henis Detroit Unit Clerkship. (1-8) Su, F, W. Prerequisite: Consent of instructor.

Winter, Jacobs
Students work as co-chaplains under the supervision of the clinical pharmacist and physicians to develop individual therapy plans for drug detoxification. Where needed, students develop detailed drug information reports appropriate to specific patient care. CL PHARM

175.65. Mountlake Pharmacy Clerkship. (1-8) Su, F, W. Prerequisite: Clinical Pharmacy 130, 131 and 132. Consent of instructor.

Winter, Konod
Practical experience in a hospital-owned community pharmacy offering progressive patient-oriented services, including drug monitoring, establishment and maintenance of medical profiles, patient counseling, drug information and insurer education. CL PHARM

175.66. Senior Medication Education Program. (1-8) Su, F, W. Prerequisite: Clinical Pharmacy 130, 131 and 132. Consent of instructor.

Winter, Katcher, Zola
Students provide patient education and consultation to senior and novice providers. Students will be able to utilize their skills, knowledge, and on-site training to prevent and intervene in geriatric drug misuse problems. CL PHARM

175.70. Skilled Nursing Facility Clerkship. (1-8) Su, F, W. Prerequisite: Clinical Pharmacy 148A or 149. Consent of instructor.

Winter, Niro, Feldman
Students gain experience in both the skilled nursing facility and the Pharmaceutical Services Pharmacy. Activities include evaluating drug therapy and other consultant roles in skilled nursing facility service, participating in client documentation systems, and researching drug information. Special project required. CL PHARM

175.80. Paramental Nutrition. (1-8) F, W. Prerequisite: Clinical Pharmacy 130, 131 and 132. Consent of instructor.

McSwain
Students participate in IV fluid therapy selection and preparation, and monitor patients receiving intrave-
Participate in activities of drug information service, including answering drug-related questions, writing a newsletter and drug review. Work under supervision of the director for drug information. CL PHARM

175.99. Clinical Pharmacy Practice. (9) Su, W, F. Prerequisite: Completion of all first-, second- and third-year required coursework and consent of instructor.

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

176.01. Nephrology—UCSD. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148.01A or 149.01.

D. Adler and Staff
Students participate in the Renal Consult Service, Hemodilysis Unit and in the Renal Clinic with the medical and nursing staff. A special project selected by the student will be required. CL PHARM

176.02. Pulmonary Medicine—UCSD. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148.01A or 149.01.

D. Adler and Staff
Students participate in the activities of the Pulmonary Medicine Consult Service, Chest Clinic and Asthma Clinic associated with the Pulmonary Division at University Hospital. CL PHARM

176.03. Neonatal Care—UCSD. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148.01A or 149.01.

D. Adler and Staff
Students participate in the nursery’s morning work rounds, attending high-risk infant transportation and delivery. Students will read and evaluate current neonatal literature, and provide drug-related information to medical staff and parents. CL PHARM

176.04. Pediatrics—UCSD. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148.01A or 149.01.

D. Adler and Staff
Students participate in the activities of the Inpatient Pediatric Service. Activities include participation in the orientation of new patients, wound care, monitoring patients’ response to drug therapy, attending at conferences, seminars and rounds, and participation in selected therapeutic conferences. CL PHARM

176.05. Psychiatry—UCSD. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148.01A or 149.01.

D. Adler and Staff
Students participate in the Inpatient Psychiatric Service. A special project will be required, the subject of which shall be chosen by the student with the consent of the preceptor. CL PHARM

176.40. Anticoagulation—UCSD. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148.01A or 149.01.

Weilburt and Staff
Students participate in the services of the Anticoagulation Clinic at University Hospital under the guidance of a clinical pharmacist. CL PHARM

176.41. Hematology/Oncology—UCSD. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148.01A or 149.01.

D. Adler, P. Lee
Students participate in the activities of the Hematology-Oncology Consultation Service. Activities include review of patient charts, monitoring patients’ response to drug therapy, attendance at conferences, seminars, rounds and clinics, participation in therapeutic conferences and a special project. CL PHARM

176.42. Hypertension—UCSD. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148.01A or 149.01.

Weilburt and Staff
This hypertension clinic is an outpatient, six-week elective requiring students to become actively involved in one clinic day per week, as well as in one student-preceptor conference per week. CL PHARM

176.40. IV Additives & Fluid Therapy—UCSD. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148.01A or 149.01.

D. Adler and Staff
Students participate in the activities of the Intravenous Additive Service at University Hospital. A special project will be required, the subject of which shall be chosen by the student, with the consent of the preceptor. CL PHARM

176.41. Pulmonary Information—UCSD. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148.01A or 149.01.

MacGregor and Staff
Students participate in the services provided by the Pulmonary Information Center for San Diego County, including reviewing requests concerning impressions and normal roentgenograms, and seminars for the public and various school groups. CL PHARM

176.43. Anti-coagulation-VASD. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148.01A or 149.01.

D. Adler and Staff
Students participate in the services of the Anticoagulation Clinic under the guidance of a clinical pharmacist. CL PHARM

176.43. Drug Information—UCSD. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148.01A or 149.01.

P. Anderson
Students participate in the services provided by the Drug Information Service including reviewing drug information requests, researching and writing factual responses. CL PHARM

176.69. Skilled Nurs Facility—Pharmacy. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 130, 131, 132 and consent of instructor.

Sauer, Menet
Students participate in clinical and dispensing activities of pharmacy practice concerned with long-term care patients located within skilled nursing facilities throughout Sacramento area. CL PHARM


Gnaiger
Students attend work rounds, housestaff management rounds and teaching conferences; learn techniques utilized in caring for patients with hematology or solid tumors. Emphasis on acute care of cancer patient: anti-emetic and pain control; hyperalimentation; treatment of hyperuricemia and infections. Project: CL PHARM


Sakase
Students are responsible for patient interviewing, monitoring, rounds, and drug consultation. Patients are primarily pediatric with congenital heart defects and adults undergoing aorto-coronary bypass grafts and cardiac valve replacements. CL PHARM

185.08. Psychiatric Pharmacy—LPP. (1-8) SSI, SS2, Su, F, W, Sp. Prerequisite: Successful completion of all required first-, second-, and third-year coursework and consent of instructor. Clinical 24-hour/week, Clinic 24-hour/week. CL PHARM

Winter, Ajay
The clerkship will expose students to pharmacy practice in a psychiatric setting. The students will attend team meetings and seminars and counsel patients about their medications. A written project and a presentation to the field of psychopharmacology are required. CL PHARM

185.10. Infectious Diseases—MZ. (1-8) F, W, Sp. Prerequisite: Completion of all required first-, second-, and third-year coursework and consent of instructor.

Flaherty
Students participate in the activities of the Infectious Disease service, including patient monitoring and attendance at conferences and seminars. Students work under the supervision of the clinical pharmacist and physicians in providing care to all patients who require consultation. CL PHARM

185.11. General Medicine—MZ. (1-8) F, W, Sp. Prerequisite: Completion of all required first-, second-, and third-year coursework and consent of instructor.

Winter, Cashman
Students learn the basic principles of pharmacology related to the disease states encountered in medicine patients in an inpatient setting. Participation in ward and attending rounds with the Department of Medicine Housestaff. Preceptorship by a clinical pharmacist. CL PHARM


Winter, Boro
The Clinical Pharmacokinetics elective will expose pharmacy students to the application of pharmacokinetics principles in the clinical setting. The students will provide pharmacokinetic consultations to pharmacy, medical, surgical, and nursing staff. CL PHARM


Winter, Weid
This rotation will enable students to participate in the acute management of patients on an oncology/hematology marrow transplant unit in a community hospital. This includes involvement with daily ward rounds, chemotherapy preparation, TPN ordering, antibiotic management, and hospice interdisciplinary conferences. CL PHARM

185.30. Geriatrics. (4-8) Su, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework and consent of instructor.

M. Winter, Care-Lopez
Student participates in screening of patients over 70 years of age, biweekly multidisciplinary geriatric team conference, standing rounds, and weekly geriatric outpatient clinic. Most common problems relate to polypharmacy, poor memory, chronic diseases, depression, anxiety, dementia, and pneumonia. CL PHARM

185.31. Critical Care Medicine—PMAC. (1-8) SSI, SS2, Su, F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework and the Comprehensive Exam, and consent of instructor.

M. Winter, Lee, Louis
Students will participate in patient monitoring, teaching rounds, conferences, provision of drug information, in-service education, and the clinical management of selected critical care patients. CL PHARM

185.32. Nutritional Support—PMAC. (1-8) F, W, Sp. Prerequisite: Completion of all first-, second- and third-year required coursework and consent of instructor.

M. Winter, Lee, Whittle
Student participates in the activities of the nutritional support team which includes daily patient monitoring, weekly nutritional support work rounds and daily teaching conferences. Two weeks will be devoted to pediatric TPN as well as some exposure to TPN compounding. CL PHARM

Students participate in the activities of the drug information center including providing consultation on drug therapy questions, evaluation of the medical literature, and preparation of a written project suitable for publication. CL PHARM

185.34. Inpatient Clinical Pharmacy. (1-8) F, W, Sp. Prerequisite: Successful completion of all first-,
Clinical Pharmacy

second- and third-year required coursework and the comprehensive examination.

Winter, Garich, Inosay
The students will work with the clinical pharmacist and will be involved in the care of critically ill patients with multiple medical problems (i.e., sepsis, multiple organ failure) to provide optimal drug therapy by proper drug selection, avoiding drug interactions, and monitoring therapeutic outcomes. CL PHARM


Winter, Garich, Kindo
The student will be involved in the treatment and care of trauma-care patients with acute psychiatric illness. Under the supervision of the psychiatric pharmacist, the student will be involved with drug therapy monitoring and will attend daily rounds, meetings and conferences as scheduled. CL PHARM


Winter, Garich, Schaezauber
The student will work with the nutrition support pharmacist and will be involved in the care of patients receiving parenteral nutrition to provide optimal therapy by monitoring nutritional supplementation with regard to the patient’s specific disease state. CL PHARM


Winter, Furtado, Jones
Demonstration and management of alcoholism and poly-drug abuse. Emphasis on methods of acute detoxification and support services in rehabilitation of patients, including responsibilities of health care team members and consideration of physical and psychosocial outcomes. CL PHARM

185.56. Women's Health Care. (1-8) Su, F, W, Sp. Prerequisite: Clinical Pharmacy 130, 131, 132 and consent of instructor.

Winter, Huntley
Women participate in functions of family planning, gynecologic clinic, including management and handling of pharmaceuticals, monitoring BCP users under NCP supervision, and participating in special projects. CL PHARM


Winter, Pratt, Heinietta
Women will participate in drug regimen and internal nutrition reviews, nursing interviews and medication distribution reviews, and conduct medication ad-

ministration error audits and special projects. Students may also be involved with the development of laptop computer consulting and nutritional and pharmacotoxicology consults. CL PHARM


Winter, Leung
Students participate in the activities of an outpatient forensic mental health clinic including drug therapy monitoring, patient education and counseling, drug utilization reviews, medication clinics, medication groups, and in-service conferences. They will work under the supervision of faculty in the on-going management of selected mentally disturbed criminal justice patients. CL PHARM

185.73. Integrated Care Systems. (1-8) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework and consent of instructor.

Winter, Groess
Students participate in home health care services, including blood compounding, patient monitoring, multidisciplinary meetings, interaction with nurses in the home setting, patients with pre- and post-discharge and with physicians in their office setting to become familiar with all aspects of specialty care. CL PHARM

185.74. LifeSource—Q. (1-8) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework and consent of instructor.

Winter, Alexander
Under the supervision of a pharmacist, students participate in the compounding, monitoring, and management of parenteral nutrition and medications for home-bound patients. Students also become familiar with the administrative issues and marketing of home health services. CL PHARM

185.76. Home Care Mgmt of High-Risk Ob Patient. (1-8) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework and consent of instructor.

Winter, Epstein
Students participate in the activities of Tokai Medical Corporation, including patient monitoring and attendance at medical rounds. They will work under the supervision of the clinical pharmacist in the provision of home care to the high-risk obstetrics patient. CL PHARM

185.77. Drug Utilization Eval and Target Drug Program. (1-8) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework and consent of instructor.

Winter, Bergstrom
Students will design and implement a target drug program which will include the following components: Drug utilization evaluation, written proposal, implementation, followup, and publication. Students will participate in didactic conferences which will discuss formal drug management, DURs, cost containment strategies, and target drug implementation. CL PHARM

185.78. Drug Usage Eval and Target Drug Programs. (1-8) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework and consent of instructor.

Winter, Davis
Students will design and implement a drug usage evaluation and target drug program which will include the following: Development of a written proposal, presentation to the F&T Committee, and implementation, data collection and followup activities. Students will participate in didactic conferences which will discuss formulary management, Drug Usage Evaluation process, cost containment strategies, and target drug implementation activities. CL PHARM

185.79. V. Administ., Automated Unit Dose. (1-8) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework and consent of instructor.

Winter, K. Lee, Christa
Students will participate in a centralized IV Admixture, Automated Unit Dose system of distribution and outpatient pharmacy operation. Activities will include patient profile reviews, drug usage evaluations, drug information research and presentation. Optimal computer and management training is available. CL PHARM

185.80. Clinical Pharmacokinetics—USCD. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148A or 149A and/or consent of instructor.

Winter, A., Lawe
Discussion and review of pharmacokinetic principles in drug therapy relating to clinical cases at UCSD, including computer monitoring of specific clinical cases, and lectures to medical and nursing staff. A special project is assigned. CL PHARM

185.89. Burn and Trauma Center—USCD. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148A or 149 and/or consent of instructor.

D. Adler, J. Lawe
Discussion and review of pharmacokinetic principles in drug therapy relating to clinical cases at UCSD, including computer monitoring of specific clinical cases, and lectures to medical and nursing staff. A special project is assigned. CL PHARM

185.85. Medical Speciation—USCD. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 140A or 149A. Consent of instructor.

D. Adler, P. Anderson
Participation in activities of the Burn Unit including patient drug therapy monitoring, developing antibiotic therapy dosing recommendations, observing nursing, and nursing care procedures, conferences, seminars, and staff support conferences. Pharmacy conference and special project assigned. CL PHARM

185.86. Medical Speciation—USCD. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 140A and/or 149A. Consent of instructor.

D. Adler, P. Anderson
Participation in activities of the Burn Unit including patient drug therapy monitoring, developing antibiotic therapy dosing recommendations, observing nursing, and nursing care procedures, conferences, seminars, and staff support conferences. Pharmacy conference and special project assigned. CL PHARM

185.87. Oncology—MHLB. (1-8) W, Sp. Prerequisite: Clinical Pharmacy 148A or 149. Consent of instructor.

Shinomura, Daisuke, Towne
General orientation to the most frequently occurring diseases of oncology and hematology. Emphasis on new drug testing and application of chemotherapy to oncologic diseases, preparation and administration of agents, side effects and toxicity, applicable pharmacokinetics, clinical pharmacology. CL PHARM


Shinomura, Arsome
Participation in all aspects of clinical pharmacokinetics service including formulary evaluations, calculations, and drug dosing regulations, under approved protocols. Involvement in analysis and evaluation of serum drug levels, particularly in patients with altered drug disposition. CL PHARM

187.03. Anticoagulation—MHLB. (1-8) W, Sp. Prerequisite: Clinical Pharmacy 148A and consent of instructor.

Shinomura, R. Cook
Participation in application of heparin and warfarin guidelines, which involve dosage adjustment, clinical assessment, data collection, medical audit. Students learn about management of patients with thromboembolic diseases through conferences, selected readings and clinical participation. CL PHARM


Shinomura, Hocki, Fulli, Rivers
Participation in patient care rounds, monitoring care presentations, pharmacokinetic evaluations, literature research, and CPDR in neonatal and pediatric patients. Major pediatric disease states and appropriate drug therapy will be reviewed daily. Six to ten hours of medical seminars each week. CL PHARM

187.05. Psychiatry—UCI. (1-8) W, Sp. Prerequisite: Fourth-year standing and consent of instructor.

Shinomura, Plan
Active involvement with patients and staff in acute care mental health facility. Students interview, interact with, and monitor patients. Through background of various forms of mental disorders, treatment and role of pharmacist will be presented. CL PHARM


Shinomura, Zenk
Students participate in activities of the seasonal intensive care unit and inpatient pediatric unit, monitoring patients, attending rounds and conferences. Emphasis will be on acute inpatient pediatric medicine and neonatology under supervision of clinical pharmacists and pediatricians. CL PHARM


Shinomura, S. Gardner
Clinical Pharmacy

Students participate in the activities of the Jales Stevin Center for Patient Care, which include patient monitoring, attendance at conferences and seminars, and dispensing of oral medications. Students work under the supervision of the pharmacist preceptor in learning the management of common diseases of the eye. CI PHARM

187.06. Emergency Room—UCI. (1.5–8) F, W. Sp. Prerequisite: Clinical Pharmacy 130, 131, 132. Consent of instructor.

Shimomura, W. Departmental

Students participate in activities of the emergency room and become familiar with the role of the pharmacist in the medical team. Knowledge is on managing emergency conditions such as drug overdose, diabetic ketoacidosis, trauma, and cardiac arrhythmia. CI PHARM


Shimomura, Shikuk

Students observe and participate in activities of the pharmacy and developmental services at the hospital. Emphasis is on diagnosis and management of neurological and genetic diseases such as seizures, disorders and mental retardation. CI PHARM


Shimomura, Tobis

Students observe on the hospital floor examining geriatric patients in several long-term care facilities. Students will gain appreciation of the role of the pharmacist and learn how to adjust drug therapy and dosages for geriatric patients. CI PHARM


Shimomura, Kiyarina, Levusev

Students participate in rounds with clinical pharmacists. They are involved in monitoring TPN solutions, screening patients with positive culture results to assure appropriate antimicrobial selection and dosage, adjusting serum level of selected agents. CI PHARM


Shimomura, Luna

Students are exposed to the psychopharmacology and participate in clinical pharmacy activities of a psychiatric hospital; become familiar with federal and state regulations affecting pharmacy practice in skilled nursing, intermediate care, and acute psychiatric care facilities. CI PHARM


Shimomura, Zeiler

Students will acquire the basic knowledge in applied pharmacokinetics necessary to provide consultative assistance to the physician in developing an appropriate drug-dose regimen. Emphasis will be placed on integrating knowledge of patients' problems with the knowledge of the drug's kinetic and pharmacologic properties. CI PHARM


Shimomura, Martinine, Hany

Students round with health care team in hospitals, extended care facilities, and home. Involved in monitoring total parenteral nutrition, chemotherapy, pain management, aesthetic therapy, and related services for home care patients. CI PHARM


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 clinics. CI PHARM

187.65. PHP-MIMO Clinical Pharmacy Clerkship. (1–8) F, W. Sp. Prerequisite: Completion of all first-, second-, and third-year required coursework.

Shimomura, Glaubersone, Ponzade

Students participate in providing clinical pharmacy services in an HMO setting. Activities include attending inpatient rounds in the hospital; clinical services to ambulatory patients and providing in-service education classes and preparing pharmacy and therapeutic committee drug reviews. CI 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. CI PHARM


Shimomura, Mina

Students participate in the activities of an intravenous additive service in a large university teaching hospital. Students will learn about aseptic techniques, compatibility and stability of drugs in intravenous solution, total parenteral nutrition, prefill syringe programs, home hyperalimentation and piggyback. CI PHARM

187.82. Drug Information—UCI. (1–8) W. Sp. Prerequisite: Fourth-year standing and consent of instructor.

Shimomura, Vrabel

An on-line experience in a drug information center serving 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 services, computer skills. CI PHARM

187.83. IV Additives—UCI. (1–8) W. Sp. Prerequisite: Fourth-year standing and consent of instructor.

Shimomura, Casmelan

Clerkship provides an opportunity for students to develop and use skills relating to all areas of the clinical pharmacist: in-service, administrative, consultation, discharge counseling. CI PHARM

188.01. Oncology—UCI. (1–8) S, 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 and use skills in clinical pharmacy settings involved with oncology practice. Through observation and performance, students will develop and explore their roles as clinical pharmacists. CI PHARM

188.02. Psychiatric Medicine—UCI. (1–8) S, F, W. Sp. Prerequisite: Successful completion of all first-, second-, and third-year coursework. Clinical Pharmacy 148 or 149 and consent of instructor.

Sauer and Staff

Students participate on the UCI Medical Center inpatient acute care psychiatric ward. Activities include monitoring and interviewing patients, participation in team mental health rounding, conferences, and pharmacy medication classes. Students will also present interprofessional programs to the psychiatric staff and pharmacy staff. CI PHARM

188.03. Poison Information—UCD. (1–8) S, F, W. Sp. Prerequisite: Successful completion of all first-, second-, and third-year coursework. 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, monitoring patients, and referring patients to the public and health care professionals. CI PHARM


Sauer and Staff

Students will become members of the Neonatal Intensive Care Team, attend rounds, conferences, monitor and evaluate drug therapy, and provide drug therapy-related consultation. CI PHARM


Sauer and Staff

The student will work with pharmacists in the Medical Intensive Care Unit (MICU) and other units providing both clinical and pharmacokinetic services. Students will be exposed to drug therapy as it relates to different disease states seen in the unit. CI PHARM

188.06. Surgical Intensive Care—UCD. (1–8) S, F, W. Sp. Prerequisite: Successful completion of all first-, second-, and third-year coursework. Clinical Pharmacy 148 or 149 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. CI PHARM


Sauer, Midikawa, Slepier

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

188.08. Microcomputer Applications in Pharmacy Practice—Practicum. (1–8) S, F, W. Sp. Prerequisite: Successful completion of all first-, second-, and third-year 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 resolved by the use of microcomputer. In addition, the student will review the utility of various software used in pharmacy practice. CI PHARM


Sauer, Movers, Dunlap

Upon familiarity with the literature, the student will design and conduct a drug utilization review and present the results to the Hospital Pharmacy and Therapeutics Committee. CI PHARM

188.10. Infectious Disease—UCD. (1–8) F, W. Sp. Prerequisite: Successful completion of all first-, second-, and third-year required coursework and preclinical 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 Pharmacists, evaluating antibiotic selection, monitoring therapy and providing drug information. A project will be completed during the rotation. CI PHARM

74

Clinical Pharmacy

75
Clinical Pharmacy

188.11. Pharmacokinetics. (1-8) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework, and consent of instructor.


Sauser, Doug and Staff
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. (4-8) F, W, Sp. Prerequisite: Fourth-year standing only.

Sauser, Brown and Staff
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–DCH. (1-8) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework and consent of instructor.

Sauser, Brown and Staff
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. Managed Care, County of Sacramento. (1-8) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework, and consent of instructor.

Sauser, Mitsuko
Students will become familiar with principles and operations 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


Sauser, Dallas, Boeman
Students will concentrate on developing skills in the clinical area utilizing state-of-the-art technology, while dealing with a variety of patients in the community hospital setting. Communication with other health care disciplines is stressed. CL PHARM

188.27. State Food & Drug Branch. (1-8) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework, and consent of instructor.

Sauser, Haslet
The Food and Drug Branch (FDB) is the regulatory agency in the State of California responsible for processed food, cosmetics, drugs, and medical devices. Students, based upon interests and goals, will participate in investigational drug reviews, analysis of proposed legislation, and/or special projects. The number of hours spent in each area and total hours will depend on the student's project and will be agreed upon by the student and preceptor prior to starting the clerkship. CL PHARM

188.30. OPTION Care. (1-8) F, W, Sp. Prerequisite: Completion of all first-, second- and third-year required coursework.

Sauser, Fox
Students will participate in selected areas of a home health care pharmacy. Students will develop skills in areas of maternal and neonatal nutrition, diabetes, cardiac, surgery and pharmacy applications, and applicable medical equipment services in a home setting and a skilled nursing facility (convalescent hospital) setting. CL PHARM

188.31. Pharmacy Consultation: Skilled Nursing Facility. (1-8) F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework and the comprehensive examination.

Sauser, DiGiammatteo
The student will work in the long-term care setting. This includes learning federal and state regulations mandating frequency of drug regimen reviews and pharmacy systems operations. Projects may be DUSA, internships to training personnel or a newsletter. CL PHARM

188.32. Medical Arts Personnel Services–NMC Inc. (1-8) F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework and the comprehensive examination.

Sauser, Dager
Pharmacy students will participate in various operations within a home health care pharmacy. Subject areas include TPN, enteral nutrition, and home antibiotic therapy. Clinical monitoring of such patients will be emphasized. CL PHARM

188.33. Community Inpatient Psychiatric Clerkship–SVH. (1-8) F, W, Sp. Prerequisite: Completion of all first-, second- and third-year required coursework and consent of instructor.

Sauser, Talaga, Fritz
A supervised clinical experience in a community-based psychiatric hospital that allows students to develop skills in drug selection and monitoring of response and compliance. Through observation and participation, students will understand the contributions of clinical pharmacists in multidisciplinary treatment. CL PHARM

188.40. Veterinary Medicine–UCD. (1-8) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework and consent of instructor.

Sauser, Haslet
The student will participate in the clinical and dispensing activities of a veterinary pharmacy involved in veterinary medicine. Through observation and performance, students will explore the role of the clinical pharmacist in the care of large and small animals. CL PHARM


Sauser, Ricou
Students participate in the clinical and dispensing activities of the hematology/oncology clinic. Activities include rounding with physicians, participation on the hospice multidisciplinary team, attending required conferences, and preparation and delivery of sterile chemotherapy agents. A project is required. CL PHARM


Sauser, Lear, Ingram
The student will gain practical and didactic experience in all aspects of operation and management of an outpatient community pharmacy. Emphasis will be placed on business and management aspects of practicing in a prescription-only pharmacy, as those in a small independent group. CL PHARM


Sauser
Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. CL PHARM


Herfindal, Kishi and Staff
Resident pharmacist provide pharmacy service to patients in the wards and outpatient clinics including taking drug use histories, preparing and monitoring medication profiles, providing drug use information and consultation, and related activities. In addition, there are administrative and teaching responsibilities. CL PHARM


Herfindal, Hart
Residents provide drug information and consultative services on request. Activities include literature searches, preparing reports and other communications, and teaching and administrative responsibilities involving the Drug Information Analysis Service. CL PHARM

52. Administration. (5) Su, F, W, Sp. Prerequisite: Resident standing and approval of program director.

Herfindal, Kishi and Staff
Residents are responsible for carrying out assignments related to the administration of a modern hospital pharmacy service. Activities include preparation of budgets, supervision and development of staff, program planning and related administrative assignments. CL PHARM

Research. (1-5) Su, F, W, Sp. Prerequisite: Resident standing and approval of program director.

Herfindal, Kishi and Staff
Research programs are arranged with appropriate faculty members on an individual basis. CL PHARM

Craniofacial Anomalies


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

171.22. Craniofacial Anomalies. (2) W, Sp. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lecture 2 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 impaired functions and therapeutic needs of the individual patient. GR, DEVIL

188.01. Abnormal Orthodontic Development. (1) F, W, Sp. 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 diagnostic and preventive and corrective treatment methods is given in the clinic. GR, DEVIL

Dental Health Education

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

Raven
Introduction to communication theories and models. Considers personal and professional aspects of communication, interpersonal, transpersonal, verbal, and nonverbal communication and listening skills. Emphasis is placed on the dental hygiene-patient rela-
Dental Hygiene

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

Rowe
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 each stage of development, from infancy, childhood, adolescence, to young, middle, and late adulthood, and related health care and oral health education needs. DENT PUB HLTH

101.02. Leadership & Mgmt in Dental Hyg. (2) Sp. Lecture 2 hours.

Rowe
Consideration of dental hygiene leadership roles in the areas of practice management and career planning including goal analysis and nontraditional roles for dental hygienists. Course provides opportunity to implement leadership role in student's area of interest.

109. Clinical Dental Hygiene. (1-2) SS. Prerequisite: Dental Hygiene 155A-AL, 199, and approval of the chairperson of the division. Clinic 3-4 hours.

Staff
Course provides additional clinical dental hygiene experience before entry into the second-year clinic. DENT PUB HLTH

150.01. Theoretical Foundations for Dental Hyg. (1) Prerequisite: Dental hygiene standing. Lecture 2 hours.

M. Walsh, Heckman, Poupard
Course introduces a conceptual framework and theoretical approach to the basis for providing dental hygiene care. Basic concepts of health and illness, human need theory, the scientific method, and leadership theories are considered with emphasis on health promotion and disease prevention for the individual, family, and community. DENT PUB HLTH

150.02. Assessments in the Dental Hyg Process. (2) F. Prerequisite: DH 150.01. Lecture 2 hours.

Fannom
Course will focus on the principle of assessment as the first phase of the dental hygiene process of assessment, planning, goal setting, implementation, and evaluation used in providing dental hygiene care. The rationale for collection of assessment data, associated clinical techniques, and documentation requirements will be presented. DENT PUB HLTH

150.03. Dental Hyg Planning, Implementation, & Evaluation. (2) W. Lecture 2 hours.

Fannom
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 assessment data to plan care and set goals for the patient will be presented as well as the implementation 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

150.04. Dental Hyg Care for Patients with Special Needs. (2) Sp. Prerequisite: DH 150.01, 150.02 & 150.03. Lecture 2 hours.

Fannom
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. Modification of dental hygiene care for special needs patients will include the areas of communication, appointment planning, environmental considerations, home care, and safety precautions in treatment. DENT PUB HLTH

152. Introduction to Research. (1) Sp. Prerequisite: To be taken concurrently with Dental Public Health and Hygiene 121. Lecture 1 hour.

Poupard
Conducts with Dental Public Health and Hygiene 121, each student will prepare an associated bibliography on a research topic of choice. DENT PUB HLTH

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

Yamamoto
Seminar to discuss the dental hygiene process as applied to dental hygiene care. Each seminar will provide an orientation to each of the techniques/skills taught as part of dental hygiene practice in DH 153A-MB (Clinical/Lab application). Assessment, sequential steps for techniques performance as well as specific criteria for performance evaluation are included. DENT PUB HLTH

154.02. Clinical Dental Hyg Care Seminar. (1) Sp. Seminar 1 hour.

Yamamoto
Seminar discussion will focus on role of conveyances, patient care responsibilities, patient records, financial policies, emergency procedures, infection control protocols, clinic administrative policies/procedures and patient care, and issues related to clinical dental hygiene care. DENT PUB HLTH

155A. Intro to Clinical Dental Hygiene. (2) F. Lab 1 hour.

Yamamoto
Laboratory and clinical experiences in patient assessment, case planning, goal setting, and implementation of instrumentation techniques for providing prevention-oriented dental hygiene care. Procedures for evaluation is also emphasized. DENT PUB HLTH

155B. Intro to Clin Dental Hygiene Care. (2) W. Prerequisite: DH 155A. Lab 6 hours.

Yamamoto
Continuation of lab and clinical experiences in patient assessments with greater emphasis on dental hygiene care, planning, goal setting, case presentation, and implementation of instrumentation techniques for providing prevention-oriented dental hygiene care and non-surgical periodontal therapy. Dental hygiene care evaluation is also emphasized as an essential component of the dental hygiene process. DENT PUB HLTH

159. Clinical Dental Hygiene Care. (3) Sp. Prerequisite: DH 153A-B. Clinic 6 hours.

Yamamoto
Clinical application of the dental hygiene process for delivering patient-centered dental hygiene care incorporating a human needs theory framework. Patient care responsibilities will include prevention-oriented dental hygiene care and non-surgical periodontal therapy. Improved proficiency in assessment, planning, goal setting, implementation, and evaluation of patient care and associated professional responsibilities will be emphasized. DENT PUB HLTH

160. Ethics and Jurisprudence. (1) W. Lecture 1 hour.

Hansbrough
Introduction to the ethical, legal, professional responsibilities of the dental hygienist. Emphasis on the California Dental Practice Act, malpractice prevention, and professional organizations. DENT PUB HLTH

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

Rowe
Orientation to the various specialties and areas in the field such as dental transplantations, orthodontics, oral surgery, craniofacial anomalies, maxillofacial rehabilitation, and removable and fixed prosthodontics. This course is intended to help prepare dental hygiene students to be more knowledgeable and informed so that each patient can receive the finest care possible according to his/her respective needs. DENT PUB HLTH

163.01. Comprehensive Dental Hygiene Care. (3) F. Lecture 2 hours.

M. Walsh
Study and integration of additional clinical procedures into the dental hygiene process to insure and enhance quality comprehensive dental hygiene care. DENT PUB HLTH

163.02. Comprehensive Dental Hygiene Care. (1) Sp. Prerequisite: DH 163.01. Lecture 1 hour.

D. Perry
Continuation of the study and integration of additional clinical procedures into the dental hygiene process to insure and enhance quality comprehensive dental hygiene care. DENT PUB HLTH

164. Clinical Dental Hygiene Seminar. (0-0) F. W. Prerequisite: Second-year dental hygiene standing. Seminar 1 hour.

Yamamoto, Heckman
Clinical seminar to discuss clinical policies and procedures, dental hygiene therapeutic planning, and related topics. DENT PUB HLTH

166. Expanded Clinical Functions. (2) F. Lecture 1 hour. Lab 3 hours.

Hansbrough
Dental Hygiene/Dental Public Health & Hygiene

Study of the anatomic, physiologic, pharmacologic, and periodontal aspects of the administration of local anesthetics, nitrous oxide-oxygen sedation, and performance of soft tissue curettage. Students obtain didactic and clinical experiences in these functions. DENT PUB HLTH

169A-B-C. Compre Clinical Dental Hygiene Care. (0.5-3) W, Sp. Prerequisite: Dental Hygiene 150.01, 150.02, 150.03, 150.04, 155A, 155C, 155C. 150.02, 154.02, 154.03, 159. Concurrent enrollment in Dental Hygiene 169. Clinic 12 hours F; 15 hours W. Sp. Perry
Assessment of patient history and signs of deviation from normal in the oral-facial complex, and planning, implementing, and evaluating comprehensive dental hygiene care within a human needs framework. Includes advanced techniques of periodontal nonsurgical and maintenance therapy, pain control, gingival curetage, for the periodontally-affected patient. DENT PUB HLTH

189. Independent Study. (0.4–4) W, Sp. Prerequisite: Second-year standing in dental hygiene and consent of instructor. Walsh
Students select an area of interest for independent study or research. These may include clinical, community, educational, institutional, or other areas. DENT PUB HLTH

189M. Mobile Clinic. (0.5–5) S. Clinic variable. R. Miller
Clinical experience in mobile dental clinics. DENT PUB HLTH

190. Clinical Experience in Periodontal Dental Hygiene. (2) W, Sp. Prerequisite: Certification of competency by the various departments of the college. Clinic 30 hours. Clinic 24 hours. Wynn, Stallone, M. Garcia
Clinical experience in periodontal dental hygiene. Walsh
Clinical experience in periodontal dental hygiene. Walsh

Dental Public Health and Hygiene

190.1. Community Dentistry Rotations. (0.5) W, Sp. Prerequisite: Certification of competency by the various departments of the college. Clinic 30 hours. Clinic 24 hours. Wynn, Stallone, M. Garcia
Multi-component rotations including seminars, patient group presentations, specialty grand rounds and comprehensive patient care. Walsh

190.2. Community Health Clinic. (0.2–2) W, Sp. Prerequisite: Winter session or quarter standing of first-year dental hygiene curriculum; or fall, winter or spring standing of second-year dental hygiene curriculum. Walsh
One-half unit of credit for every five-three-hour visit 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

190. Laboratory Project. (1–5) 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 chairman of the department. DENT PUB HLTH

201A-B-C. Current Topics I. (1–1) 1–1 W, Sp. Seminar 1 hour. Walsh, Hobbs
A seminar series for dental hygiene students enrolled in the Master's Program in Oral Biology with a special track in Dental Hygiene. Includes an essay 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

202. Curriculum Theory and Design in Dental Hygiene. (3) F Lecture 3 hours. Walsh
Analysis of theories and research in education, with an emphasis on curriculum development, teaching strategies and evaluation methods used in planning educational programs in schools of dental hygiene. DENT PUB HLTH

202A-B-C. Current Topics II. (1–1) 1–1 W, Sp. Prerequisite: DHF 201A-B-C. Seminar 1 hour. Walsh, Hobbs
A seminar series for dental hygiene students enrolled in the Master's Program in Oral Biology with a special track in Dental Hygiene. Includes an essay 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

361. Teaching Practicum in Dental Hygiene Education. (1) 1 W. 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 Public Health & Hygiene

195. Community Dentistry Rotation. (0.5) W, Sp. Prerequisite: Certification of competency by the various departments of the college. Clinic 30 hours. Clinic 24 hours. Wynn, Stallone, M. Garcia
Multi-component rotations including seminars, patient group presentations, specialty grand rounds and comprehensive patient care. Walsh

195. Community Dentistry Rotation. (0.5) W, Sp. Prerequisite: Certification of competency by the various departments of the college. Clinic 30 hours. Clinic 24 hours. Wynn, Stallone, M. Garcia

199. Laboratory Project. (1–5) 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 chairman of the department. DENT PUB HLTH

201A-B-C. Current Topics I. (1–1) 1–1 W, Sp. Seminar 1 hour. Walsh, Hobbs
A seminar series for dental hygiene students enrolled in the Master's Program in Oral Biology with a special track in Dental Hygiene. Includes an essay 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

202. Curriculum Theory and Design in Dental Hygiene. (3) F Lecture 3 hours. Walsh
Analysis of theories and research in education, with an emphasis on curriculum development, teaching strategies and evaluation methods used in planning educational programs in schools of dental hygiene. DENT PUB HLTH

361. Teaching Practicum in Dental Hygiene Education. (1) 1 W. 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 Public Health & Hygiene

195. Community Dentistry Rotation. (0.5) W, Sp. Prerequisite: Certification of competency by the various departments of the college. Clinic 30 hours. Clinic 24 hours. Wynn, Stallone, M. Garcia
Multi-component rotations including seminars, patient group presentations, specialty grand rounds and comprehensive patient care. Walsh

195. Community Dentistry Rotation. (0.5) W, Sp. Prerequisite: Certification of competency by the various departments of the college. Clinic 30 hours. Clinic 24 hours. Wynn, Stallone, M. Garcia

199. Laboratory Project. (1–5) 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 chairman of the department. DENT PUB HLTH

201A-B-C. Current Topics I. (1–1) 1–1 W, Sp. Seminar 1 hour. Walsh, Hobbs
A seminar series for dental hygiene students enrolled in the Master's Program in Oral Biology with a special track in Dental Hygiene. Includes an essay 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

202. Curriculum Theory and Design in Dental Hygiene. (3) F Lecture 3 hours. Walsh
Analysis of theories and research in education, with an emphasis on curriculum development, teaching strategies and evaluation methods used in planning educational programs in schools of dental hygiene. DENT PUB HLTH

361. Teaching Practicum in Dental Hygiene Education. (1) 1 W. 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

131. Behavioral Sciences in Dental Practice. (1) SS1, SS2, Lecture 1 hour. Gerhardt
This course will cover dentin-patient communication, special patients, psychosocial aspects of dental care, and issues of professionalization. DENT PUB HLTH

140A-B-C. Multidisciplinary Topics in Dentistry. (0–6) W, Sp. Prerequisite: Senior dental student. 20 hours per week for 3 weeks. Bird and Staff
A comprehensive course designed for fourth-year students in significant aspects of Clinical and biomedical sciences, bioethics, and dental practice management, and updates students on new developments in dentistry. DENT PUB HLTH

140B. Multidisciplinary Topics in Dentistry. (1.5) Su. 15 hours per week for 1 week. Bird and Staff
This is a multidisciplinary course designed for the beginning fourth-year dental student. It is designed to prepare students for the advanced clinical skills needed in restorative, orthodontics, and orthopedic care. Bird and Staff

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

175. Dental Public Health Practice & Clinic. (1–69) Su, W, Sp. Prerequisite: Postgraduate standing and permission of instructor. Silverstein and Staff
To provide the dental public health students with the opportunity to participate in the Family and Preventive Dental Service. They will learn about marketing strategies, billing services, office management, expanded function dental auxiliaries, and the delivery of preventive dental services. DENT PUB HLTH

180. Dental Jurisprudence. (1) W. Lecture 1 hour. P. Bradley
The course broadens student insight into the legal problems and obligations of dental practice. DENT PUB HLTH

180. Multidisciplinary Geriatric Care. (1.5) F, W, Sp. Lecture 2 hours. Field work 1 hour. Conference 1.5 hours (optional). Bird, Rogers, Becker, Williams, Lead
A seminar in multidisciplinary rotation in which the student function as members of a multidisciplinary dental care team. Students evaluate geriatric patients and formulate comprehensive treatment plans. Seminar topics include functional assessment, home assessment, social resources and dental management. DENT PUB HLTH

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. Seminar 1 hour. Yee, Bird, and Staff
Practice management: communication skills for dentists with staff and other professionals. Yee, Bird, and Staff

186. Dental Private Practice: Career Guidance and Planning. (1) F. Seminar 1 hour. Yee, Bird, and Staff
Practice management: career guidance and planning. Yee, Bird, and Staff

186. Dental Private Practice: Financial Planning and Management. (1) F. Seminar 1 hour. Yee, Bird, and Staff
Practice management: financial planning and management. Yee, Bird, and Staff

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

188. Research Methods and Design in the Behavioral Sciences. (1) F. W. Seminar 1 hour. Gerhardt, Wynn
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. Hypothosis development, protocol preparation, and grant writing will also be included. DENT PUB HLTH

188. Dental Science and Health Education I. (1) F. Prerequisite: DPHEP 116 or consent of instruc-
Dental Public Health & Hygiene/Dermatology

Dermatology

Dermatology

First-Year Coordinated Instruction—Medicine
31A-B-C. Lecture-demonstrations and section work developed in conjunction with 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.

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Epidemiology

Epidemiology

Courses in Biostatistics and Anthropology, which are also offered through the Department of Epidemiology and Biostatistics, are listed separately under their respective headings.

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

Frenster

An introduction to protozoa and helminths and human diseases they produce. Parasite epidemiology and life cycle diagrams, clinical aspects, treatment, and control are considered in lectures, films, and color slide presentations. Laboratory demonstrations key to lecture will be displayed throughout the week.

EPID & BIOSTAT

101. Epidemiology and Biostatistics. (3) Sp. Lecture 2 hours. Seminar 1 hour.

Frenster, Crouse/Ashmore

Basic epidemiological and biostatistical methods. Emphasis is on the design of clinical trials and studies to investigate disease etiology, methods for evaluating screening and diagnostic tests, skills for critical review of the medical literature, and assessment of patient risk factors for use in clinical practice. EPID & BIOSTAT

140.02B. Off-Campus Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of chairperson of department.

Peterek and Staff

Clerkships in clinical epidemiology in off-campus settings. EPID & BIOSTAT

140.03. Leprosy. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 140 and consent of instructor.

Gelber

An introductory course in the diagnosis and care of leprosy patients. Selected readings will be discussed on the clinical presentation, therapy, and immunology of leprosy. Additional time on the services, with increasing clinical responsibility, may be arranged.

EPID & BIOSTAT

140.05. Clinical Clerkships Abroad. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 150, or consent of instructor.

R. Goldsmith, Breslau, S. Lane

Clinical clerkships in a developing country. Students will spend a minimum of two months at a medical school, provincial hospital, or rural health clinic for eight to twelve weeks. Arrangements may also be made to participate in public health or research programs abroad. EPID & BIOSTAT

140.06. Preventive Cardiology. (1.5 per week) F, W, Sp. Prerequisite: Medicine 110.

Stiegel, Breslau, Cheville

Clinical experience in hypertension, lipid, cardiac, and smoking cessation clinics; screening behavioral interventions. Students also participate in a seminar covering major topics in preventive cardiology, choose a topic for presentation, and develop ability to evaluate literature critically.

EPID & BIOSTAT

150.01. Medicine in Developing Countries. (1.5 per week) W. Prerequisites: Epidemiology 100 or consent of instructor.

R. Goldsmith

Two-week block elective on the recognition and treatment of diseases of tropical and developing countries. The course is designed to prepare students for clerkships abroad in developing countries. Presentation format includes lectures, seminars, films, laboratory sessions, and supervised independent study.

EPID & BIOSTAT

150.02. Research Abroad. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor. Restricions: Limited to 2 students per block.

F. Dunn and Staff

Research abroad, usually in a developing country, under supervision of a member of the Epidemiology faculty. Guidance is available principally for epidemiological studies and for research in tropical medicine, medical parasitology, medical anthropology, and topics in international health.

EPID & BIOSTAT

160.01. Cancer Epidemiology. (1.25 per week) W. Prerequisite: Epidemiology 101 or consent of instructor. Lecture 1 hour. Optional term paper for 2 units.

Peterek and Staff

Survey and discussion of key papers in the epidemiology of major cancer sites. Emphasis is on etiological and methodologic aspects and implications for prevention.

EPID & BIOSTAT

170.05. Intro to International Health. (2) W. Lecture 2 hours.

F. Dunn and Staff

Lectures and discussion to survey the history, organizational structure, major activities and topics that comprise the field of international health.

EPID & BIOSTAT

170.07. Leprosy Laboratory Project. (1.5) Su, F, W, Sp. Prerequisite: Consent of instructor.

Gelber

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

EPID & BIOSTAT

180.08. International Health Policy. (2) Sp. Lecture 2 hours.

P. Lee, F. Dunn, J. Justice

Lectures and discussions to examine topics and issues in international health at the level of policy.

EPID & BIOSTAT

190.10. Occupational Epidemiology. (1.5 per week) W. Prerequisite: Epidemiology 101 or 190. Seminar 1 hour. Optional term paper for 2 units.

Mustachio

Seminar on selected topics in occupationally related diseases with specific emphasis on their epidemiologic, preventive, and compensation aspects. Discussion, with emphasis on, the concept of disability and of the physician's basic role and responsibilities in determining in level.

EPID & BIOSTAT

190.12. Epidemiology of Infectious Diseases. (1.5 per week) F. Prerequisite: Epidemiology 101 or equivalent, and previous or concurrent enrollment in an introductory microbiology course, such as Microbiology 100B or equivalent.

Lecture/seminar 1 hour. Term paper for 2 units optional with consent of instructor.

Lifton

Course considers the public health consequences of different communicable diseases (excluding AIDS, sexually transmitted diseases, tuberculosis, measles, and food-borne bacterial diseases), and examines strategies for surveillance, outbreak investigation and prevention (including immunization) of infectious diseases in different settings.

EPID & BIOSTAT

190.13. Molecular Cancer Epidemiology. (1-2) W. Lecture/seminar 1 hour. Term paper for 2 units optional with consent of instructor.

Wisneske and Guest Lecturers

Course explores how biologic markers can be used to understand factors involved in human carcinogenesis and how to use laboratory methods and analytical epidemiology to identify, at the molecular and biochemical level, xenobiotic agents and other factors affecting human cancer risk.

EPID & BIOSTAT

180.15. HIV Intervention in Developing Areas. (1.5) Sp. Prerequisite: Consent of instructor. Seminar 1 hour. Project 1 hour.

Kiesler

Explores practical and ethical problems of health workers from developed countries interacting with developing areas. Provides client differences in perception, values, needs. Problems of goal-setting, assessment, support, communication, consensus-building, evaluation. Practical experience in teaching health promotion to underserved groups.

EPID & BIOSTAT

180.01. Tropical Medicine Clinics. (1.25) Su, F, W. Prerequisite: Epidemiology 100 and 6 months of clinical experience. Clinic 4-8 hours.

R. Goldsmith, Peterson and Staff

Examination and treatment of patients in the Tropical Medicine Clinic under staff supervision. The clinic operates in conjunction with the Infectious Diseases Service; patients seen have both parasitic and other infectious diseases.

EPID & BIOSTAT

180.04. Research Design. (2) F. Prerequisite: Consent of instructor. Lecture 1 hour. Workshop 6 hours.

Hussey

A workshop for students to design their own protocol for carrying out a clinical research project. Specific topics are: the research question, study designs, study subjects, assessments, sample size, ethical considerations, protocol development, data management, quality control, and proposal writing.

EPID & BIOSTAT

180.05. Maternal and Child Health. (2) Lecture and discussion 1 hour. Optional term paper for 2 units.

Arlnow

Lectures and discussions to review major factors affecting maternal and child health in developing countries, including the impact of poverty, nutrition, infectious diseases, transportation, organization of ambulatory care, setting of priorities, and utilization of local people as health auxiliaries.

EPID & BIOSTAT

180.07. Environmentally Induced Disease. (3) Sp. Lecture 1 hour.

Sarber

A lecture series on the cause, diagnosis, treatment and prevention of environmentally induced disease. Topics include pesticides, hazardous wastes, indoor and outdoor air pollution, water pollution, susceptible populations, and the relationship of nutrition to environmentally induced disease.

EPID & BIOSTAT


R. Goldsmith

Lectures, case histories, and film emphasizing diagnosis and treatments of tropical diseases including malaria, schistosomiasis, cholera, rheumatic fever, leprosy, and arbovirus infections, plus a review of opportunities for clinical clerkships abroad in developing countries.

EPID & BIOSTAT

130. Introduction to Epidemiology. (3) I, Su, F, W. Lecture 1 hour. Library Research

Introduction to the principles and methods used in epidemiology. Elements of research study design, critical analysis of journal articles, and understanding and application of epidemiological methods to common health risks in populations will be included.

EPID & BIOSTAT

130. Supervised Study. (1-3) I-5 F, W, Sp. Prerequisite: Consent of instructor.

Staff

Library research and directed reading under supervision of a member of the faculty.

EPID & BIOSTAT

201. Sociobiology of Aging. (3) I. Prerequisite: Consent of instructor. Lecture/seminar 2 hours. Library Research 3 hours.

Davis and Guest Lecturers

Overview of the interaction of sociobiographic structure, status, processes and changes on mortality, functioning, longevity and mortality across the adult life span, with special emphasis on changes in sociodemographic risk factors with age.

EPID & BIOSTAT
Family & Community Medicine

110. FM Care Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Completion of 20 weeks of clinical clerkship and introduction to Family Medicine. FAM CJM MED

Shore, Mitchell
Students function as family/community physicians in inpatient and outpatient settings at affiliated residency programs. Family Practice at SFCH, CHS in Santa Rosa, NAT in Salinas, VMC in San Francisco. Primary Care Internal Medicine: at UC, SFCH, SFV. FAM CJM MED

140.0.A-C-D. Advanced Family Practice. (1.5 per week) A, B, C, D are offered in all of the following quarters: Su, F, W, Sp. Prerequisite: Consent of instructor. L. Croll, N. Byl
A-San Francisco Bay Area; B-Fresno; C-other sites. Students are assigned to rehabilitation facilities for two to six weeks. Emphasis will be on the selection of patients who are suitable for rehabilitation and the interdisciplinary approach to rehabilitation. FAM CJM MED

140.49.40. Intervemt Fam Med Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Senior medicine clerkship. R. Goldschmidt
The Family Practice Intervemt Service at SFCH employs the family practice approach to hospitalized adult patients with diverse medical problems. Students function as members of the multidisciplinary inpatient team at a junior intern level. AnnuA rounds are held daily. FAM CJM MED

Students receive practical training in emergency medicine, in emergency prehosptal care, and also in the care of the critically ill and injured patient in the emergency room. Daily emergency medicine case conferences and weekly conferences augment clinical experience. FAM CJM MED

140.52. Rural Family Practice-Selma. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110, Surgery 110, Obstetrics 110, Ob/Gyn 110. Zavala, I. Sanchez
Primary care at Selma Community Health Center, in an agricultural community. The practice includes pediatrics, obstetrics, gynecology, and chronic diseases. Includes patient rounds, deliveries, and emergency room experience in a rural hospital. Exposure to rural family practice skills. FAM CJM MED

140.53. Inpatient Medicine/Family Practice. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor. L. S. Lane
Students work with a family physician, after notice of internt or general practitioner, in the office, observing the practice and performing duties as training permits. Experience will teach common health problems and primary care in a community. Rural preceptors are encouraged. FAM CJM MED

140.5A-C-D. Social Medicine. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor. L. S. Lane
Field work experience or research germane to social medicine individually arranged with consideration to student's major area of interest. FAM CJM MED

140.5A-B-C-D. Rehabilitation Medicine. (1.5 per week) A, B, C, D are offered in all of the following quarters: Su, F, W, Sp. Prerequisite: Consent of instructor. L. Croll, N. Byl
A-San Francisco Bay Area; B- Fresno; C-other sites. Students are assigned to rehabilitation facilities for two to six weeks. Emphasis will be on the selection of patients who are suitable for rehabilitation and the interdisciplinary approach to rehabilitation. FAM CJM MED

140.49.40. Intervemt Fam Med Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Senior medicine clerkship. R. Goldschmidt
The Family Practice Intervemt Service at SFCH employs the family practice approach to hospitalized adult patients with diverse medical problems. Students function as members of the multidisciplinary inpatient team at a junior intern level. AnnuA rounds are held daily. FAM CJM MED

Students receive practical training in emergency medicine, in emergency prehosptal care, and also in the care of the critically ill and injured patient in the emergency room. Daily emergency medicine case conferences and weekly conferences augment clinical experience. FAM CJM MED

140.52. Rural Family Practice-Selma. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110, Surgery 110, Obstetrics 110, Ob/Gyn 110. Zavala, I. Sanchez
Primary care at Selma Community Health Center, in an agricultural community. The practice includes pediatrics, obstetrics, gynecology, and chronic diseases. Includes patient rounds, deliveries, and emergency room experience in a rural hospital. Exposure to rural family practice skills. FAM CJM MED

140.53. Inpatient Medicine/Family Practice. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor. L. S. Lane
Students work with a family physician, after notice of internt or general practitioner, in the office, observing the practice and performing duties as training permits. Experience will teach common health problems and primary care in a community. Rural preceptors are encouraged. FAM CJM MED

140.5A-C-D. Social Medicine. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor. L. S. Lane
Field work experience or research germane to social medicine individually arranged with consideration to student's major area of interest. FAM CJM MED

160.53. Family Practice Practicum. (1-3) Su, F, W, Sp. Prerequisite: 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 preceptors in order to gain an introduction to family care. FAM CJM MED

160.44. Seminars in Sports Medicine. (5) F. Open only to second-year School of Medicine students or graduate students in Physical Therapy. Seminar 2.5 hours. Field work 1 hour. Brown
A seminar series and practical field experience providing basic information on a broad variety of issues in sports and dance medicine, including evaluation, prevention of injury, conditioning, environmental issues and sports psychology. FAM CJM MED

160.55. Mission Community Health Electives. (1-3) Su, F, W, Sp. Prerequisite: Consent of instructor. Lab 2-4 hours. Field work 2-8 hours. D. Sanchez, D. Fink
Exploring health care attitudes, health problems and health care resources in the multi-ethnic Mission District of San Francisco. Students receive clinical assignments in one or more community health and social service agencies. Field experience is arranged in seminars and tutorials. FAM CJM MED

160.57. Family Health & Care. (3) F. Seminar 2 hours. Ransom, Braverman, Segal
Introductory principles of family medicine are discussed in class and discussion groups led by family physicians and family psychologists. Preceptors work with family physicians in private offices and community clinics. Each student will interview a family and present a case report. FAM CJM MED

160.70. Community Medicine in International Perspectives. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor. FAM CJM MED

160.60. Community Medicine Field Work. (1.5 per week) Su, F, W, Sp. Prerequisite: Medical student standing. Consent of instructor. Field work 4-8 hours. S. Lane
Barbacco
Non-block assignment to community health agencies where students have patient contact. Students choose an aspect of the agency's program for analysis. FAM CJM MED

160.62. Family Practice Continuity. (3) Su, F, W, Sp. Prerequisite: Consent of instructor. Course must be taken for full academic year. W. Shore
Course will provide students the opportunity to follow a small number of patients and families in an unscheduled time during any medical school year. Attempts will be made to select families of special interest to the student, e.g., prenatal, adolescent, geriatric, minority. FAM CJM MED

175.01A-B-C. Special Issues in Health Care. (0-3) A, B, C are offered in all of the following quarters: Su, F, W, Sp. Prerequisite: Consent of instructor. Lecture and reading 1-3 hours. Rendrick, Staff
Explorers in systematic (lecture/readings/discussion) focus on issues in health care or special contexts areas related to family and community health. Topics are developed and prepared according to faculty student interests. FAM CJM MED
170.02. Elderly Community Programs. (2) W. Lecture 1 hour. Conference 2 hours. Enrollment limited. 
Barbaccia, Robinson, Weits 
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. One-hour activities are held at representative programs and facilities serving the aged. PAM CAM MED MCD 
170.03. Developmental Disabilities. (2-5) Su, F, W, Sp. Prerequisite: Consent of instructor. Field work 1-4 hours. 
L. Creat 
A resource overview with reading assignments correlated with field observations of the spectrum of community and institutional services, including comprehensive diagnostic, therapeutic, and counseling services for children and adults with developmental disabilities. PAM CAM MED 
170.04. Rehabilitation in Primary Care. (1) Su, F, W, Sp. Prerequisite: Consent of instructor. Seminar 2 hours for 6 weeks. 
Byl, Berrol 
Course exposes medical and other health science students to 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. PAM CAM MED 
170.05. Rehabilitation Medicine. (1-5) F, W, Sp. Prerequisite: Consent of instructor. Field work 4-8 hours. 
L. Creat 
Through individualized arrangements, course provides an introduction to the broad spectrum of rehabilitation services for children and/or adults with chronic or disabling diseases. PAM CAM MED 
J. Cook 
Lecture 2 hours. Lab 1 hour. 
Braveman, Koreck, Vasquez-Vega 
A practical course designed to develop basic skills in overcoming cultural and linguistic barriers to health care for Spanish-speaking patients. PAM CAM MED 
170.08. Complementary Forms of Healing. (1) F. Medical students only. Lecture 1 hour. 
Lau 
This course explores the general theory and practice of several widely utilized non-allopathic healing modalities with the aim of demonstrating how these therapies can be complementary to modern technology-centered health care. PAM CAM MED 
Baron, Braverman, Perez-Stable 
A lecture-discussion course on current issues in health care in Central America. Emphasis is on relationship 
between health situations in Central American nations and in relation to Central American patients seen in San Francisco. PAM CAM MED MCD 
172A. Legal Medicine—Basic Concepts. (2) F. Lecture 2 hours. 
Tennenhous 
Fundamental legal principles and procedures affecting medical practice, with emphasis on medical negligence; the physician's role in the litigation process; the areas of medical practice which most frequently involve litigation; and practical measures to minimize the risk of lawsuits. PAM CAM MED 
173B. Legal Medicine—Practical Aspects. (2) W. Lecture 2 hours. 
Tennenhous 
Fundamental legal principles and procedures affecting medical practice, with emphasis on medical negligence; the physician's role in the litigation process; the areas of medical practice which most frequently involve litigation; and practical measures to minimize the risk of lawsuits. PAM CAM MED 
J. Cook 
Exploration of various aspects of primary care as related to family medicine. A practicing family physician will discuss topics of specific interest to the students. Emphasis will be on the practical as well as the issues and demands of family practice. PAM CAM MED 
Rodnick 
An exploration of the comprehensive role of the family physician in providing longitudinal health care. Students will learn to recognize patterns in patient care, with an emphasis on the patient as a whole person. PAM CAM MED 
180. Intro to Social & Preventive Med. (1-2) F. Lecture and seminar 1-2 hours. 
Barbaccia 
Lectures and seminar introduce entering students to social, political, economic and environmental issues influencing health of the community and prevention of care. Topics include preventive health care, health care delivery and formulation of policy. PAM CAM MED 
L. Fisher 
Review of theoretical and methodological alternatives for studying the family as a psychosocial unit, within the context of health and illness. PAM CAM MED 
Pettili 
Lecture-seminar on the basic concepts of preventive medicine, the integration of preventive medicine into clinical practice, the evaluation of preventive strategies in medical care, and the role of the practicing physician in influencing policies on prevention. PAM CAM MED MCD 
Braveman, Sanchez, Koreck 
An introduction to demographic, political/economic, anthropological and sociological issues of importance for the health of diverse Latino subcultures in the US. PAM CAM MED 
Barbaccia 
Lecture-seminar format is used to cover more aspects of the organization and function of the health care system in its subsystems, including manpower, hospitals, ambulatory care, planning and control, economics, government programs and health services research. PAM CAM MED MCD 
190. Supervised Study. (1-5) Su, W, Sp. Prerequisite: Consent of instructor. 
Rodnick and Staff 
Library research and directed reading under supervision of a member of the faculty with approval of the chairman of the department. PAM CAM MED 
Genetics 
200A. Principles of Genetics. (3) F. Lecture 3 hours. 
Herskowitz, Kornberg 
In-depth analysis of genetic mechanisms in selected prokaryotes, eukaryotes. Topics include genetic exchange, mutation, recombination, transformation, recombination (general, site-specific, ' illegitimate'), mapping, mutation (induction and consequences), mobile genetic elements, gene expression, metac and mitochondrial segregation, allelism, 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. (1-5) F, W, Sp. Prerequisite: Consent of graduate advisor on genetics. 
Herskowitz and Staff 
Students will attend a discussion on a topical issue of interest in genetics. A different faculty member will act as advisor each week. This is a required course each quarter for first- and second-year students in genetics. BIOCHEM 
224. Advanced Human Genetics. (1.5) F. Lecture 1.5 hours. Offered in alternate years. Not offered 1992-93. 
Epstein, Kam, Cox, Gittler, Packman, Wolff 
Course covers topics in 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 management. BIOCHEM 
BIOCHEM 
Growth and Development 
110. Normal & Abnormal Craniofacial Dev. (1) F. Lecture 1 hour. 
Kahn, S. Fisher, C. Cook, R. Coleman, Kapila 
Developmental processes underlying normal and abnormal craniofacial morphogenesis are presented and the biologic basis for congenital malformations are discussed. GR. DIESEL 
120. Orofacial Functions/Dysfunctions. (3) W. Lecture 1 hour. 
Vargervik, Peterson-Palzone, Kapila 
Clinical considerations of normal and abnormal patterns of oro-facial function are discussed to provide a basis for diagnosis and prognosis of functional disorders involving the orofacial region. GR. DIESEL 
122. Oral Physiology. (1) F. Lecture 3 hours. 
A. Miller 
The physiology of the craniofacial region will be taught emphasizing muscle control of calcium and phosphorus, mineralization, swallowing and sense, sensory control related to craniofacial regions and characteristics of craniofacial muscles. GR. DIESEL 
180. Relevance of Neurosensory System to Craniofacial Dev. (2) F. Prerequisite: Physiology. 
Zoellner limited to senior dental students and post-doctoral graduate students in orthodontics, pediatric dentistry, removable prosthodontics. 
A. Miller 
Course illustrates how the neurosensory system of the craniofacial and surrounding region affect and interacts with craniofacial development by modeling function, diet, force development, parameters of growth and function, and altering occlusion. GR. DIESEL 
216. Developmental Biology of the Craniofacial Complex. (2) F. Prerequisite: SS1, SS2. 
Available for credit to graduate students in Oral Biology, dental postgraduate specialty programs, and is elective to upper class students in Dentistry and Medicine. Lecture 1 hour. Seminar 0.5 hour. Conference 0.5 hour. Kahan, Dreynick, Vargervik, Chlarec, Damsky
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.

**Health Sciences Education**

200. Intro to Teaching Health Sciences. (1) F, W. Prerequisite: Consent of instructor. Lecture 2 hours. 

Lectures, seminars, and classroom discussion on the fundamental mechanisms underlying cranioskeletal development and the etiology, pathogenesis, and treatment of craniofacial defects. GRI. DEVIL.

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

Staff

History and research toward a more successful involvement of a supervision of a faculty member with approval of the department chairman. HIST HIL SC.

208A. Introduction to Medical History. (2-4) F. Prerequisite: Consent of instructor. Lecture 2 hours. Seminar 1 hour (optional). Term paper (optional). 

Risse

General survey chronologically arranged from primitive to the Renaissance. This course examines the changing horizons of disease across cultural and geographic boundaries and presents broad conceptual developments that in such periods influenced the evolution of medical knowledge and professional activities. HIST HIL SC.

208B. Introduction to Medical History. (2-4) F. Prerequisite: Consent of instructor. Lecture 2 hours. Seminar 1 hour (optional). Term paper (optional). 

Risse

A seminar to review and develop objective techniques in assessing the clinical performance and competence of students and practitioners. Techniques will be developed and evaluated for a number of clinical disciplines, MEDICINE.

310. Eral of Clinical Performance. (2) F, W. Prerequisite: Consent of instructor. Seminar 3 hours.

Rovinski

A seminar to review and develop objective techniques in assessing the clinical performance and competence of students and practitioners. Techniques will be developed and evaluated for a number of clinical disciplines, MEDICINE.

**History of Health Sciences**

150. History of Pharmacy. (2-3) F. Lecture 2 hours; term paper (optional) for 3 units.

Sade

In this course, students learn on the historical development of pharmacy, its relationship to other health professions, and the personalities who significantly contributed to the advancement of health care. HIST HIL SC.

150.01. Issues in American Medical Practice. (3) F, W, Sp. 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, discussions 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 HIL SC.

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

**Staff**


Risse

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

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

Prymas, Risse

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

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

Prymas

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

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

Prymas

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

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

Prymas

Evolution of conceptions of madness and treatment of the mentally ill from the Renaissance to the 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 HIL SC.

210. Topics in the History of Nursing. (3-3) Sp. 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 HIL SC.

211A. History of Hospitals I. (2-4) W. Prerequisite: Consent of instructor. Lecture 2 hours. Seminar 1 hour. Term paper (optional). 

Risse, Prymas

Analysis of institutional developments from pre-Chernovics times. Classical hospitality and segregation schemes, the assimilation and medicalization of the hospital during the Enlightenment. HIST HIL SC.

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

Risse

Course begins with the early Industrial Revolution and ends with the modern technologically intensive institution that dominates current medicine. HIST HIL SC.

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

Prymas

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


Risse

Clinical development 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 HIL SC.

220. Selected Topics. (2-4) F, W, or Sp. Prerequisite: Consent of instructor. Lecture 1 hour. Seminar 1 hour. Term paper (optional). 

Staff

A 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 HIL SC.


Staff

Supervised independent research, including presentation and criticism of research sources, methods, and papers. HIST HIL SC.

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

Clarke

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


Staff

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

298. Thesis. (3) F, W. Sp. Prerequisite: Advancement to candidacy and permission of the graduate advisor. 

Staff
Human Development & Aging

200. Off-Campus Study. (3) F, W, Sp. Prerequisite: Approval of graduate advisor. Staff
Full-time graduate study in the Human Development and Aging program through the intercampus exchange or consortium program. PSYCH 311

201-A-B-C. Fundamental Theories & Methods. (1-4) F, W, Sp. Prerequisite: Consent of instructor. Seminar 3 hours. Staff
Psychological and sociological theories and methods in the study of the human life cycle. Topics include models of development, life course, adult socialization, age stratification, intergenerational issues, cognition, historical and demographic perspectives, personality, stress, transitions, age-comparative coping, and psychophysiology. PSYCH 320

202. A-B-C. Sex in Adult Dev & Aging. (4) F, W, Sp. Prerequisite: Consent of instructor. Lab 6 hours. Staff
This three-quarter course covers major methods and technologies of life course/life span research including survey, field observations, analysis of quantitative and qualitative data, and longitudinal research. PSYCH 330

204. Personal Development. (2) F, W, Sp. Prerequisite: Consent of instructor. Lecture 2 hours. Staff
Kliefer
Representative works from behavioral science literature and world poetry and prose are brought together in the study of personality development in adult life. Course content taken from the two fields on how the developing person copes with social, historical, and psychological challenges. PSYCH 340

205. Data Analysis. (3) F, W, Sp. Prerequisite: Consent of instructor. Lecture 3 hours. Staff
Mullen
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. PSYCH 350

207. Methods of Survey Research. (3) F, W, Sp. Prerequisite: Consent of instructor. Lecture 3 hours plus field work. Staff
Pearls
Course covers the major trends of survey research. Topics such as conceptual specification, the development of indicators and measures, the construction of questionnaire, sampling, field testing, interviewing, and analysis are covered. PSYCH 360

PSYCH 370

Social, behavioral, and clinical aspects of human sexuality are covered in 8 series of lectures. Lectures will present didactic material. PHARMAC

Interdepartmental Studies

100. Cell & Tissue Biology. (3) F, S. Lecture 7 hours. Lab 4 hours. Conference 2 hours. Colby, Winsig, Michaeli
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. Intended for students in the School of Medicine and for beginning graduate students. ANATOMY & BIOCHEM

A four-week required clerkship in the surgery specialties including Ophthalmology, Orthopaedic Surgery, Otolaryngology and Urology. The curriculum will consist of lectures, seminars, physical diagnosis, operating room and ward activities, and a limited degree of procedure and surgical experience in both ambulatory and operating room areas. ORL/OTOLARYNGOL, ORTHO SURG, UROLOGY

135. Reproduction Growth & Dev. (3) F, S. Staff
Parrish, Stimmerman
Course examines the socio-psychological aspects of aging and life cycle changes. Course also examines the socialization of an aged role, norms for older people, and special problems of aging individuals. PSYCH 345

199. Special Studies. (1-6) 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 analyses or methodologies. PSYCH 395

PSYCH 399

200. Dissertation. (6) 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. PSYCH 350

Human Sexuality

159. Human Sexuality. (1.5) Sp. Lecture 1.5 hours. Offered in alternate years. Offered 1992-93. R. Day
Social, behavioral, and clinical aspects of human sexuality are covered in 8 series of lectures. Lectures will present didactic material. PHARMACY

Laboratory Medicine

140.01. Principles of Lab Med-SEFG (1.5 per week) Su, F, W, Sp. Prerequisite: Two years of medical school.
Gutfried, Ng, Hadley, Toy, Kharym-Bashi
Correlate laboratory tests with clinical case studies. This course covers general principles and specific topics in chemistry, hematology, microbiology, serology, immunology, and transfusion medicine. The schedule may be modified to accommodate special interest. LAB MED

140.05. Clinical Pathology-VMC (1.5 per week) F, W, Sp. Prerequisite: Medicine 110 and consent of instructor. Staff
Obhasan, M. Runyan
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, radiotrophic pathology, serology, microbiology, and transfusion medicine. LAB MED

140.06. Laboratory Medicine in Fresno. (1.5 per week) Su, W, F, Sp. Prerequisite: Medicine 110. Bolinder, D. Mann
Utilization of different laboratory settings, organizations, and approaches by pathologists in hospitals throughout the Fresno community. Included is coverage of traditional areas of clinical pathology in addition to such specialized areas as cytogenetics and therapeutic drug monitoring. LAB MED

140.07. Laboratory Medicine Hematology. (1.5 per week) SS1, SS2, Su, F, W, Sp. Third- or fourth-year medical students. Englund, Cornsh, Roth, Levin, Gortzied
Active participation in all aspects of a UCSC hematology laboratory including comprising cases, daily rounds of cardiovascular surgery patients, attendance at hematology conferences, and daily bone marrow aspirates. One-on-one instruction in blood and marrow morphology. Experience at Moffitt/Long, VAMC, and SUTP LAB MED

140.08. Laboratory Medicine Microbiology. (1.5 per week) Su, W, Sp. Third- or fourth-year medical students. Hadley, Pullum, Brooks
Course provides practical microbiology laboratory instruction correlated with clinical infectious disease rounds. The student will observe laboratory diagnosis
110. Medicine

110.1. Medicine Core Clerkship—UC-SFGH/VA-MZ/VAP/PMC: (1.5 per week) SS, SU, Tu, W, F, Sp, W, Prequise: Completion of Medicine 110. UC: Open to UCSF students only.

110.2. Medicine Clerkship—UC: VA-VA-MZ/VAP: (1.5 per week) Tu, W, F, Sp, W, Prequise: Completion of Medicine 110. UC: Open to UCSF students only.

110.3. Medicine Clerkship—UC-Papadakis, VA-Tyrian, MZ-Weeber, VAP-Freeman, SFGH-Haber: Students are part of the ward team with the housestaff and faculty. Bedside instruction in history-taking, physical diagnosis, assessed sessions in general medicine including the psychiatric aspects of medicine, and presentations and demonstrations of relevant cases.

111. Mechanics of Disease: (1.5 per week) Sp, Prequise: Fourth-year standing in medical school.

111.1. Mechanics of Disease: (1.5 per week) Sp, Prequise: Fourth-year standing in medical school.

111.2. Philadelphia Clinical Clerkship in an off-campus hospital approved by the department head and the dean. MEDICINE
Emphasis on applied pathophysiology and clinical therapeutics. Cross-disciplinary workshops present the principles of therapeutics with application to specific therapy of coronary cardiovascular, respiratory, gastrointestinal and infectious diseases as well as diabetes. 

SEBASTIAN, MARIE

Sebastian spends most of his time in the hospital, working on patients with heart disease, diabetes, and respiratory issues. He also spends time in the clinic, seeing patients in the outpatient setting. His primary role is to provide education and support to patients and their families. 

140.19. Cardiology-VA (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and fourth-year standing.

Sebastian, David

Sebastian specializes in the diagnosis and treatment of cardiovascular diseases. He works closely with cardiologists to ensure the best care for his patients. He has been published in several medical journals and is a member of the American College of Cardiology. 

140.20. Infectious Disease-UC (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110.

Sebastian, Mark

Sebastian specializes in infectious diseases, focusing on the immune system. He is involved in research projects aimed at understanding the immune response to various pathogens. 


Papadaki, ANGELO

Papadaki is an expert in the field of endocrinology, with a focus on diabetes and thyroid disorders. He actively participates in research and has published several articles on the topic. 


Sebastian, Daniel

Sebastian is a medical student who is particularly interested in the cardiovascular system. He is currently involved in a research project studying the effects of exercise on heart function. 


Sebastian, Ivan

Sebastian is a medical student with a focus on renal disease. He has been involved in several kidney-related research projects and has published his findings in medical journals. 

140.22F. Pathophysiology-Therapeutics (6) W. Prerequisite: Medicine 110 or Pediatrics 110 or Surgery 110. Minimal class size 15; maximum class size 40. 

Sebastian, Benjamin

Sebastian is a medical student with a focus on the pathophysiology of lung diseases. He has been involved in several research projects studying the effects of smoking on lung health. 

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

Sebastian, Jordan

Sebastian is a medical student with a focus on cardiopulmonary medicine. He has been involved in several research projects studying the effects of exercise on heart function. 

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

Sebastian, Adam

Sebastian is a medical student with a focus on hematology. He has been involved in several research projects studying the effects of blood disorders on patients. 

140.30. Endocrinology-UC (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110. 

Sebastian, Matthew

Sebastian is a medical student with a focus on endocrinology. He has been involved in several research projects studying the effects of diabetes on patients. 

140.31. Nephrology-UC (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110. 

Sebastian, Michael

Sebastian is a medical student with a focus on nephrology. He has been involved in several research projects studying the effects of kidney disease on patients. 

140.32. Pathophysiology-Critical Care (6) W. Prerequisite: Medicine 110 and fourth-year standing. 

Sebastian, Edward

Sebastian is a medical student with a focus on critical care medicine. He has been involved in several research projects studying the effects of critical illness on patients. 

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

Sebastian, David

Sebastian is a medical student with a focus on critical care medicine. He has been involved in several research projects studying the effects of critical illness on patients. 

140.34. Rheumatology-UC (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110. 

Sebastian, Andrew

Sebastian is a medical student with a focus on rheumatology. He has been involved in several research projects studying the effects of arthritis on patients. 

140.35. Cardiology-SFGH (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110. 

Sebastian, Joshua

Sebastian is a medical student with a focus on cardiology. He has been involved in several research projects studying the effects of heart disease on patients. 

140.36. Advanced Clerkship in Emergency Medicine (1.5 per week) Su, F, W, Sp. Prerequisite: Fourth-year standing. 

Sebastian, Adam

Sebastian is a medical student with a focus on emergency medicine. He has been involved in several research projects studying the effects of trauma on patients. 

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

Sebastian, Steven

Sebastian is a medical student with a focus on emergency medicine. He has been involved in several research projects studying the effects of trauma on patients.
140.42. Clinical Toxicology & Pharmacology-SFCH. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and fourth-year standing.

C. Becker, Olson

Students evaluate patients in hospital and clinic settings, as well as from consultations from San Francisco Poison Control Center. Students participate in patient evaluation 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. Seaman

A four- to six-week introduction to rheumatology and immunology, offering both clinical and laboratory experience. The student will participate in inpatient and outpatient care and will be part in didactic and practical aspects of the research programs. MEDICINE

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

An introduction to the diagnosis and treatment of endocrine-metabolic diseases. Areas covered include those endocrinopathies involving the major endocrine glands, as well as diabetes mellitus and hyperparathyroidism. Patients will be examined and treated in both the inpatient and outpatient setting. MEDICINE

140.46. Pulmonary Medicine-SFCH. (1.5 per week) Su, F, W, Sp. Prerequisite: Fourth-year medical student in good standing. J. Murray, Hopewell, Sheppard

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. Radiology Medicine-VA. (1.5 per week) SS1, SS2, Su, F, W, Sp. Prerequisite: Medicine 110. Pollack

Students evaluate patients with acute and chronic disease, acute and chronic illness, and fluid and electrolyte problems. Amend 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. Cimino

Clinical and laboratory experience providing integrated approach to infectious disease. Emphasis on learning techniques of diagnostic medicine (e.g., Gram stains, bacterial and viral culture), and correlating these findings with clinical diagnosis and patient management. Attends daily rounds; research opportunities available. MEDICINE

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

Busch

Students, under supervision, will evaluate and share in the care of patients admitted to an acute care hospital. Experience includes history and physical examinations, diagnostic test planning, and writing orders and progress notes. Attends daily rounds and conference. MEDICINE

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

Goodstein, Feigenbaum

Students, under supervision, perform consults on hospitalized and clinic patients. They participate in multidisciplinary geriatric assessment and become acquainted with Geriatric Day Care, Alzheimer's Day Care, and other community programs and resources. MEDICINE

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

D. Swanson

Students see patients in the coronary care unit, wards and clinics at the University of California Teaching Hospital at Fresno. They will develop and implement treatment plans with the consultant, perform echocardiograms, and attend all seminars and conferences.

140.58. Pulmonary Disease-VAP. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 or consent of instructor. P. Baylor

Students on Chest Service will have primary care responsibilities for medical inpatients under supervision of the Physician Director of the Respiratory Care Service. Instructions on topics such as use of respirators, arterial blood gas sampling and techniques. MEDICINE


Amend, Viscardi

Rotation on an active renal transplant service including clinical immunology, clinical renal pathology, renal diagnosis such as X-ray, biopsy, scan. The student's experience in the care of inpatients and outpatients will encompass other internal medical problems as well. MEDICINE

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

R. Freeman

Assignment to team with first- and second-year residents; rounds with attending faculty to five to six times weekly; attend daily staff conference; inpatient care 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.

Savitsky

Emergency room experience providing acute care to a mixed inpatient 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-KP. (1.5 per week) Su, F, W, Sp. Connolly

Fourth-year elective rotation for one month on medical ward at Kaiser Foundation Hospital in Oakland. Students will be integrated into the residency training program and will be involved in the care of hospitalized 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, Scheinman

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 pathology of disease processes, management of acute medical problems. Examine infants in history-taking, physical examination, write-ups, presentations, techniques of diagnostic procedures. MEDICINE

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

Lieber

Management of common and unusual infectious diseases. May include use of anti-infective drugs in presence of impaired renal or hepatic function. Treatment of infection in immunologically compromised host, etc. Participation in patient evaluation, treatment follow-up, 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, conferences, 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.

Stillberg

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, tumor board meetings and specialty conferences. MEDICINE

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

Lohns, Hiraiwa

Evolution 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 expansion 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.

Gittin

Participation in evaluation of patients with gastrointestinal problems (gastrroesophageal reflux disease, cholelithiasis, liver biopsies, peritoneal dialysis, bowel biopsy) on wards and in outpatient clinic. Experience includes demonstration of investigation (acid perfusion and others), weekly clinical conference, liver histology, and tutorial sessions. MEDICINE

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

I. Goldstein, H. D. Perez

Students will be assigned inpatients and outpatients for work-up and management under the supervision of fellows 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.

Fouad

Students based at Kaiser Foundation Hospital serve as clinical clerks. They examine patients, participate in ward rounds, and attend teaching sessions and conferences of the Department of Medicine. MEDICINE

140.77. Endocrinology/Diabetes-Fresno. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110.

Shipp

Students gain extensive experience in the care of patients with diabetes and other endocrine disease through...
active participation in special diabetes inpatient units, wound care clinics, diabetes and endocrine clinics, and patient educational programs located at Valley Medical Center and in the community. MEDICINE

4.0.78. Critical Care Medicine—VMC. (1.5 per week) Su, F, W, Sp.

Hirunma

Students participate in the management and evaluation of critically ill patients in the Medical Intensive Care Unit. This includes the interpretation of laboratory results, blood gases and chest X-rays and the use of mechanical ventilation and hemodynamic monitoring. Supervision is by full-time faculty with senior Medicine residents. MEDICINE

4.0.79. Inpatient Medicine—SMH. (1.5 per week) Su, W, F, Sp.

Prerequisite: Medicine 110.

Lerneth

The student, trained with a resident, will evaluate and follow the care of patients admitted to a community based hospital. Students will take call, attend teaching rounds and conferences, will attend clinical noon-hour per week. MEDICINE

1.0.01. Research in Medicine. (1.5 per week) Su, F, W, Sp.

Prerequisite: Consent of faculty member in charge of student’s research project and approval of third- and fourth-year coordinator.

Papadakis

Students continue previously initiated research projects under the guidance of faculty members. MEDICINE

1.0.03. Cancer Viruses. (1.5 per week) Su, F, W, Sp.

Prerequisite: Basic course in microbiology. J. A. Levy

Targeted techniques and animal experimentation will be used to demonstrate the role of viruses in animal malignancies and autoimmune disease. Research serves as a model system for studying similar disorders in man. MEDICINE

1.0.04. Med Science & Clinical Problems. (6-9)

SS1, SS2, F, W, Sp. Lecture 1 hour. Seminar 1 hour. D. G. Threlkeld

The course is designed to develop a historical perspective of what and how clinical problems can be approached in a basic medical research laboratory and to develop, by example, an analytical approach relating basic medical research to clinical medicine. MEDICINE

1.0.06. Chronic Fatigue Syndrome: Fact or Fiction? (1) W, Lecture 1 hour.

Hughes, Root

This class will meet once a week, and will cover the CDC Case definition, history, epidemiology, diagnosis, treatment, research update, resources, sociopolitical context, doctor-patient interaction, etc. Guest lecturers will be used. MEDICINE

1.0.10. Clinical Medical Ethics. (1) F, Seminar 1 hour.

Lo

Introduction to clinical medical ethics through discussion of the medical ethical literature. Active class participation and critical reading of articles will be required. Topics will include life-sustaining treatment, diuretics regarding HIV infection, care of critically ill patients, and allocation of resources. MEDICINE


Prerequisite: Medicine 132A-B-C. Lecture 1 hour. M. Goldman

Instruction in basic electrocardiographic principles and interpretation of electrocardiograms. MEDICINE

1.0.30. EKG Interpretation. (1) W. Prerequisite: Medicine 131A. Lecture 1 hour.

Rapaport

Review of principles of electrophysiology and clinical application of electrocardiographic interpretation. MEDICINE


Cox, Nettle

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

1.0.12. 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 confusional states. Techniques of rehabilitation medicine, use of medications, health care policies, multidisciplinary geriatric health care teams, and erosity in old age are reviewed. MEDICINE

1.0.15. 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.

Laff

This course covers issues from the design and writing of grant proposals to choice of data, analysis techniques, presentation of results, publication strategies, and project management. Students should be involved in a dissertation or major project. MEDICINE

1.0.35. Industrial Toxicology. (5) F. Prerequisite: Consent of Instructor. Lecture 2 hours. Osterloh

To provide understanding of basic principles of toxicology as 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

1.0.31. Theory of Biomedical Ethics. (1-2) W. Prerequisite: Graduate standing and consent of instructor. Seminar 2 hours. Paper required for 2 units. Archey

A brief introduction to Bioethics, followed by a case-oriented approach to the understanding and use of those basic ethical principles necessary to understand and resolve frequently encountered biomedical dilemmas in medical practice. MEDICINE

1.0.38. 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 of the population, the determinants of health, and health care. Jointly offered with Sociology 160 and Sociology 220. 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, and incentives; supply of physicians’ services; health sector planning; and an alternative view of the system. MEDICINE

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

Papadakis

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

1.0.37. 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

2.0.02. Health & Aging. (2-6) W, Sp. Prerequisite: Graduate standing. Consent of instructor. Lecture 2-4 hours.

P. Lee, H. Lipton

Examines the health status of the aged in the U.S. in light of relevant biological, behavioral, sociocultural and environmental factors. Social, cultural and economic factors affecting the organization, financing, and delivery of health care to the aging population are examined. MEDICINE

2.0.03. Medical Staff Conferences. (2) F, W, Sp.

UC R.R. Root, SFCHI Rapaport, VA Steilager

Interns and residents prepare and present case histories of patients at medical staff conferences including references to the literature, laboratory work, and special studies. Faculty members and visiting professor discuss the cases and present new developments to their respective fields. MEDICINE


R.R. Root

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

2.0.05. Medical Literature Seminar. (1.5) F, W, Sp.

VA Steilager

Seminar on recent literature in internal medicine, with assigned reading, required reports, and evaluation of presented material by interns, residents, and faculty. MEDICINE

2.0.06. Specialty Seminar. (2) F, W, Sp.

R.R. Root

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


SFCHI H. Williams and Staff

Seminar are conducted in cardiology, hematology, gastroenterology, infectious diseases, metabolic disease, and pathology, involving discussions, required reading, and reports. Effective seminars involve a clear disease orientation, joint medical and surgical conference, tumor board, dermatology conference, and neuropathology conference. MEDICINE


UC R.R. Root, SFCHI Williams, VA Steilager

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


SFCHI H. Williams, VA Steilager

Residents take an active part in the presentation and discussion of problems connected with the correlation of clinical manifestations of disease with post-mortem studies. Conferences include reference to the literature, clinical demonstrations, and laboratory work. MEDICINE

2.0.10. EKG Interpretation. (2) Su, F, W, Sp.

Sokolow

Seminar (individual instruction) for residents in medicine and trainees in cardiology by cardiac consultants in the interpretation of all electrocardiograms and phonoangiograms taken at UC. MEDICINE
411A. Introduction to Molecular Genetics. (4) Su. Section 3 hours, Conference 1 hour. Gitschier, Ganesan, Padworth.  A general overview of molecular genetics, aimed primarily at freshmen in clinical departments. MEDICINE


411C. Laboratory Techniques. (3) Su. Prerequisite: Medical Ethics.  Clinical evaluation of laboratory techniques. Lab: 40 hours/week for 2 weeks. Welch, Pytelka.  A short, but intensive, laboratory course in modern laboratory techniques of cell and molecular biology aimed to familiarize medical fellows beginning their rotations in basic research laboratories. MEDICINE

420. Intro to Structural Biology. (3) Sp. Lecture 3 hours. Cohen, Kirsten, Craig.  Introduction to structural biology. Focus on understanding protein structure and how protein structure is determined. Implications of protein structure for function. MEDICINE

440. Postdoc Seminar in Health Economics. (4) Sp. Designed to provide postdoctoral fellows in JWPH Clinical Scholars Program & NIMH-funded Clinical Sciences Research Training Program. Seminar 4 hours. Hanns.  Provides survey of economic methods, models, and empirical findings related to the health care sector. Students will learn to use economic techniques to examine health care problems and policy options. MEDICINE

450. Clinical Medicine. (10) Su, F, W, Sp. SIGGH, H., Williams, UC R.K. Root.  Residents are responsible for the care of patients under the direction of the attending staff, and participate in student teaching. MEDICINE

451C. Clinical Medicine-MZ. (10) Su, F, W, Sp. Weeber.  Residents are responsible for the care of patients under the direction of the attending staff, and participate in student teaching. Resident seniors provide teaching and consultation service in the hospital and outpatient clinics. MEDICINE

452. Clinical Medicine. (5 per week) Su, F, W, Sp. VAF Reznikoff.  Residents are responsible for patient care under the direction of the attending staff, including history-taking, physical examination, laboratory tests, and consultations. The chief resident, in addition, has certain responsibilities involving the residents, and consults for all other hospital service. MEDICINE

460. Clinical Primary Care. (1.5 per week) Su, F, W, Sp. Crede and Staff.  Interns in the Primary Care Track of Internal Medicine are responsible for patient care in a multispecialty primary care clinic. Other rotations include those common to the regular medicine Internship Program as well as related clinical services such as Dermatology, Neurology, MEDICINE

461. Clinical Primary Care. (1.5 per week) Su, F, W, Sp. Crede and Staff.  Interns in the Primary Care Track of Internal Medicine are responsible for patient care in a multispecialty primary care clinic. Other rotations include those common to the regular medicine Internship Program as well as related clinical services such as Dermatology, Neurology, MEDICINE

490. Clinical Medicine. (1.5 per week) Su, F, W, Sp. SIGGH, H. Williams.  Interns rotate through medical wards and emergency hospital. Under the supervision of the attending staff, they are responsible for the care of patients, including history-taking, medical workups, laboratory tests, and consultation. MEDICINE

495. Clinical Medicine. (1.5 per week) Su, F, W, Sp. UC R.K. Root.  Interns are responsible for the care of patients under the direction of the attending staff, and participate in student teaching. MEDICINE

Microbiology and Immunology

100A. Medical Immunology. (2) Sp. Prerequisite: Biochemistry 100A-B. Lecture 2 hours. Equivalent to Microbiology 121 and 190A. W. Levinson.  Lectures on the fundamentals of immunology. Small group seminars on patient-related problems in this field. MICROBIO

100B. Medical Immunology. (4) Sp. Prerequisite: Biochemistry 100A-B. Lecture 4 hours. Lab 3 hours. Conference 1 hour. Equivalent to Microbiology 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. MICROBIO

110. Immunology in Pharmacy. (2) Sp. Prerequisite: Biochemistry 120A-B. Required course for students in the School of Pharmacy. Lecture 2 hours. Breaks.  Lectures on the fundamentals of immunology, drugs in immunosuppression and immunomodulation. MICROBIO

116. Microbiology and Immunology in Dentistry. (6) W. Lecture 4 hours. Lab 6 hours. Felton, DaFranco.  Comprehensive presentation of microbiology including bacteria, fungi, viruses, fundamentals of infection and resistance, immunology, disinfection, sterilization, and antiviral agents. 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.  Lectures on 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, distribution, and sterilization. MICROBIO

150.01. Microbiology Research. (1.5 per week) Su, F, W, Sp. Prerequisite: Microbiology 100A and 105A and consent of instructor. Staff.  Research in microbiology. Block elective for fourth-year students. MICROBIO

170.01. Medical Problem-Solving. (2) W, Sp. First-year medical students only. Conference 2 hours. Library research 2 hours. W. Levinson.  Small group medical problem-solving conference using real clinical cases as a springboard for exploration of underlying issues in basic and clinical sciences. The emphasis is on pathophysiological reasoning, independent learning, and working as a group. Teaching is Socratic and minimally directive. MEDICINE

170.02. Case of the Week. (1) F. Prerequisite: Medical Problem-Solving 100B concurrently. Seminar 1 hour. W. Levinson.  Infectious disease cases are discussed in a problem-solving format. MEDICINE

190A. Med Immunology-Grad Students. (2) Sp. Prerequisite: Biochemistry 100A-B. Lecture 2 hours for 10 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. MICROBIO

190B. Graduate Medical Microbiology. (6) Sp. Prerequisite: Biochemistry 120A-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. MICROBIO

198. Supervised Study. (1-5) Sp. F, 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. MICROBIO

199. Laboratory Project. (1-5) 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 chairperson of the department. MICROBIO

200. Cellular Immunology. (3) F. Prerequisite: General knowledge of immunology and biochemistry. Lecture 3 hours. Offered in alternate years. Offered 1992-93. DaFranco, J. G. Goodman.  Course covers chemical and genetic basis of immunoreactivity, properties of immunocompetent cells, cell interactions in the immune system, and regulatory circuits. MICROBIO

204. Molecular and Cellular Immunology. (3) S. Prerequisite: General knowledge of immunology. Lecture 3 hours. DaFranco, Brooks, Littman, Wohl.  Topics to be covered: immunoregulation, structure and genetics of immunoglobulins, lymphocyte surface molecules, T cell receptors, signal transduction, antigen presentation, MHC restriction, tolerance. T cell effector mechanisms, lymphocytes, and autoimmunity. MICROBIO

208. Molecular Biology of Animal Viruses. (3) Sp. Prerequisite: General knowledge of molecular structure and chemistry of nucleic acids. Lecture 1.5 hours. Seminar 1.5 hours. Offered in alternate years. Offered 1992-93. Varma, Green, J.M. Bishop, Levitov.  The nature of viruses: dynamics of virus-cell interactions with emphasis on virus genetics, virus nucleic acid replication and control, expression of virus-specific information in lytic and temperate infections, and role of viruses in malignant transformation of cells. MICROBIO

209. Special Topics in Immunology. (3) Sp. Conference 2 hours. Goodson.  Small group tutorial in which topics and correlative reading will be selected for discussion with individual faculty members. MICROBIO.
Residents are responsible for the care of patients, under the direction of the attending staff, including history-taking, physical examination, laboratory tests, and consultations. In addition, the junior resident has certain teaching and administrative responsibilities and case management.


VA Neurology Staff


Clinical care involves teaching and specific neurological cases, including hospital inpatient and outpatient care.

140.01A–B–C. Outpatient Clinical Neurology. (1.5 per week) Su, F, W, Sp. Prerequisite: Neurology 110 and consent of instructor.

A. UCB: SFCH. VA

These students will serve as clinical clerks in the outpatient clinics. Attendances at clinical rounds, seminars, and conferences are required. Prior arrangements must be made.


Berg

Participation in child neurology activities, both inpatient and outpatient, and all regularly scheduled conferences of the Child Neurology Division. Study of the developing nervous system and diseases of the nervous system affecting infants, children, and adolescents.

140.05. 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. Attendances at departmental clinical rounds, seminars, and conferences are required. Prior arrangements must be made.

140.07. Neurology Clerkship—Fresno. (1.5 per week) Su, W, Sp. Prerequisite: Neurology 110.

Margolin, Pelsum

Advanced students will have the opportunity to broaden and enrich their clinical neurological experience and expertise. Opportunities will be given to participate in inpatient and case conference presentations. The opportunity exists for subspecialty clinical experiences (e.g., behavioral neurology, neuromuscular disease, etc.).

140.08. Pain Mechanisms and Management—UC. (1.5 per week) Su, F, W, Sp. Prerequisite: Neurology 110 and consent of instructor. Enrollment limited.

Fields, Barbosa, McKay

Diagnosis, medical and surgical management of patients with chronic pain. Students will participate in conferences and rounds of the pain service at UCFS's Parassisi campus. Direct patient contact will be under supervision of attending physicians (neurologists, anesthesiologists, pain medicine). Students will learn to perform pain examinations and local anesthesia nerve blocks. They will learn pain management for acute post-operative pain, cancer pain, neuropathic pain, headache, and low back pain. They will be expected to identify major psychological aspects of acute and chronic pain.

150.01. Neurology Research. (1.5 per week) Su, F, W, Sp. Prerequisite: Anatomy 110.

Hassan

Clinical care involves teaching and specific neurological cases, including hospital inpatient and outpatient care.
Course involves pathologic and clinicopathologic research into various aspects of neuropathology. Specific subjects of research are chosen in conjunction with members of the staff. NEUROLOGY.

Neuroradiologic techniques and interpretations are reviewed in detail with particular emphasis on X-rays of the skull and spine, pneumoencephalography, myography and arteriography. NEUROLOGY.

Clinical and basic research in neurological disease. After consultation, assignments to one of several departmental laboratories will be possible. NEUROLOGY.

Specific projects in experimental pathology of the nervous system may be undertaken by direct arrangement. Techniques include neurohistochemistry, histologic autoradiography, and electron microscopy. NEUROLOGY.

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.

453. Clinical Electrencephalography. (1.5 per week) Su, F, W, Sp. Arndoff 
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. Instructors are accredited by the Board of Qualification of the American Electroencephalographic Society. NEUROLOGY.

454. Clinical Electromyography. (1.5 per week) Su, F, W, Sp. Olsen 
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.

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

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

Neuroscience

117. Neurobiology. (6) Sp. Prerequisite: First-year Dentistry standing, Lecture 5 hours. Lab 2 hours. 
Sargent, Wentworth, Christie, Stalker 
Structure and function of the nervous system. The course will cover the fundamentals of neurophysiology and the organization of the nervous system. Emphasis will be placed on the oral cavity. STOMATOL.

154. Neurobiology. (5) Sp. Prerequisite: First-year Dental Hygiene standing. Lecture 5 hours, Lab 4 hours. 
Sargent, Wentworth, Christie, Stalker 
Structure and function of the nervous system. The course will cover the fundamentals of neurophysiology and the organization of the nervous system. Emphasis will be placed on the oral cavity. STOMATOL.

L. Jan, Y.-N. Yan 
An introductory interdisciplinary to fundamental aspects of nervous system function. Course emphasizes the ionic basis of neuronal signaling, neurochemistry, the cell biology of the neuron, and mechanisms of neuronal integrations. PHYSIOLOGY.

215. Laboratory Rotations. (4) F, W, Sp. Prerequisite: Consent of instructor. Lab 12 hours. 
Rachford 
A laboratory rotation course to familiarize new departmental graduate students with various approaches to neurobiological research. PHYSIOLOGY.

Z. Hall 
Topic in neurobiology is selected such as development, anatomy and physiology of the visual system, biochemistry of neurotransmitters. Pertinent papers from the recent literature are read and discussed. Each student must participate regularly and present one seminar per quarter. PHYSIOLOGY.

Moberly 
Lectures and critical discussion of current research on neurochemical functions, their receptors and molecular aspects of neural signal transduction. PHYSIOLOGY.

233. Developmental Neurobiology. (3) W. Prerequisite: Neuroscience 201 and consent of instructor. Lecture 3 hours. 
Rachford, Y.-N. Jan, I.-J. Jan, L. LaValle 
Course covers important areas of nervous system development with emphasis on molecular, genetic, and cellular approaches. Much of the course will focus on recent studies using nematodes, Drosophila, leeches, and zebrafish. PHYSIOLOGY.

225. Neurobiology of Disease. (3) W. Prerequisite: Neuroscience 201 and consent of instructor. Seminar 3 hours. 
Moberly, Fields, Rubenstein 
Seminar format with students reading and presenting papers in the current literature of neurological disease. Emphasis will be on the physiological and molecular basis of disease. Representative topics include neurodegenerative diseases such as dementia, demyelinating disorders, and neuromuscular disease. PHYSIOLOGY.

238. Biophysics of Membrane Excitability. (3) F. Sp. Prerequisite: Neuroscience 201 and consent of instructor. Seminar 3 hours. 
Levitan 
Course is designed to acquaint students with analytical methods used in ionic excitation in nerve and muscle. Topics include: review of electrical fundamentals, Laplace transforms, linear cable theory, thermodynamic and kinetic; descriptions of ionic models, voltage clamp methods, and Hodgkin-Huxley analysis of nerve excitation. PHYSIOLOGY.

234. Neurotransmitter Mechanisms in the CNS. (3) F. Sp. Prerequisite: Neuroscience 201. Seminar 3 hours. 
Nicol, Julius, Malekzad 
This is primarily a reading course in which recent papers on various aspects of synaptic pharmacology and plasticity in the CNS will be discussed in depth. PHYSIOLOGY.

240. Advanced Topics in Integrative Neurobiology: The Ventrolateral Retina. (5) W. Prerequisite: Neuroscience 201. Seminar 3 hours. 
Stenzel, Copenhaver 
Selected topics in the physiology of the ventrolateral retina. Emphasis on the main problem areas of current retinal research as studied by electrophysiological and pharmacological methods. Study of the retina following the path of signal processing from photoreceptor to outer plexiform layer, inner plexiform layer, and the ganglion cell. PHYSIOLOGY.
Course focuses on biopsychosocial 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 new mother and infant during the first postpartum month. FAM HUTH

148. Socio-Cultural Issues in Health, Illness. (2) W. Prerequisite: 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 societies. Attention will be given to cultural diversity associated with ethnicity and social class. SOC BEH

149. Psych/Mental Health Nursing. (3.5) Sp. Prerequisites: N140, N141, N142, N143, N144, N145, N146, N147, N148. Lecture 3 hours. Contact 7.5 hours.
L. Chaletta, 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 psychological rehabilitation of the identified mentally ill individual and his family. MENT HUTH COM ADM

150. Community Health Nursing. (8.5) Sp. Prerequisites: N140, N141, N142, N143, N144, N145, N146, N147, N148. Lecture 4 hours. Contact 13.5 hours.
D. Ode
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. Group projects may be applied to specific vulnerable populations. MENT HUTH COM ADM

151. 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 HUTH COM ADM

152. Community Gerontological Nursing. (1) Sp. Lecture 1 hour.
M. Williams
Course focuses on the elderly person in the community and factors which influence independence. Common problems found in the elderly will be discussed along with an introduction to appropriate assessment/management strategies. An overview of community services will be presented. PHYSIOL NURS

181. Law and the Practice of Nursing. (2) Sp. Lecture 2 hours.
D. Tenenhouse
Survey of federal and clinical current issues in law with respect to the theory and practice of nursing. Emphasis on legal contingencies encountered in the everyday practice of nursing in both hospital and community settings. PHYSIOL NURS

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

T. Ayers
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 HUTH

Staff
Student conducts clinical investigation and study special problems 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. (1-3) SSI, SSS, F, W. Prerequisite: Consent of instructor. Lab 5-15 hours.
Staff
Student conducts literature research and does directed reading under supervision of a faculty member with approval of the chairperson of the department.

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

201. Curriculums & Program Development. (3) F. Prerequisite: Graduate standing or consent of instructor. Lecture 5 hours. Seminar 2 hours.
N. Okamoto
Course reviews educational principles, nursing models, and conceptual frameworks for curriculum and program development to enable students to analyze, critique, and develop curricula and programs for schools of nursing and health delivery systems. PHYSIOL NURS
202. Theory Development in Nursing. (3-6) § F. Prerequisite: Doctoral standing. Lecture 3 hours.
A. Meleis
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 relation to current exchange toward independent discovery. MENT HLTH COM ADM

202B. Prototype Theories in Nursing. (3-4) § W. Lecture 3 hours.
J. Fawcett
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 HLTH COM ADM

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

E. Oda
Course provides a study of theories and concepts of consultation as a facilitative process relevant to nurses working in primary, secondary, and tertiary prevention service. Emphasis will be on consultation strategies. Optional laboratory for theory testing. MENT HLTH COM ADM

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

205.01. Clinical Knowledge Development. (4) § F. Prerequisite: N202A. Lab 6 hours. Seminar 2 hours.
P. Larson
Course defines the nature of advanced clinical practice relevant to the area of focus in the doctoral program. Problems common to selected patients are presented. Phenomena are analyzed in developing knowledge for advanced nursing in clinical and administrative settings. PHYSIOL NURS

205.02. Clinical Knowledge Development. (4) § F. Prerequisite: N202A. Lab 6 hours. Seminar 2 hours.
I. Martinson
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 in developing knowledge for advanced nursing in clinical and administrative settings. PAM HLTH

205.03. Clinical Knowledge Development. (4) § F. 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 in developing knowledge for advanced nursing in clinical and administrative settings. MENT HLTH COM ADM

206. Nursing Management of Adult Psych Cond. (5) § F. Prerequisite: N227 and N219 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 HLTH COM ADM

207. Clin Neg Physio. (3-5) § S21, S22, S2, F, W. 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 disruption and/or illness. In-depth examination of patient problems, assessment and management in the student's selected specialty area. Seminar with clinical laboratory. PHYSIOL NURS

208.01A. Conceptualization in Physiological Nursing. (3) § W. Prerequisite: N205.01 or N205.02 or N205.03. Seminar 3 hours.
V. Carewski-Kohans
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. PHYSIOL NURS

208.02A. Conceptualization 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. PAM HLTH

208.03A. Conceptualization in Mental Health, Community, and Administrative Nursings. (5) § W. Prerequisites: 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 HLTH COM ADM

208.04B. Conceptualization in Physiological Nursing. (5) § Sp. Prerequisite: N205.01 or N205.02 or N205.03. Seminar 3 hours.
P. Larson
Seminar focuses on measurement of selected concepts and their clinical manifestations. Existing measures are examined from theoretical, clinical, and empirical perspectives when the need for new measures is identified. PHYSIOL NURS

208.05B. Conceptualization in Family Health Care Nursing. (3) § Sp. Prerequisite: N205.01 or N205.02 or N205.03. Seminar 3 hours.
Staff
Seminar focuses on measurement of selected concepts and their clinical manifestations. Existing measures are examined from theoretical, clinical, and empirical perspectives when the need for new measures is identified. PAM HLTH

208.07B. Conceptualization in Mental Health, Community, and Administrative Nursing. (3) § Sp. Prerequisite: N205.01 or N205.02 or N205.03. Seminar 3 hours.
Staff
Seminar focuses on measurement of selected concepts and their clinical manifestations. Existing measures are examined from theoretical, clinical, and empirical perspectives when the need for new measures is identified. MENT HLTH COM ADM

208.08C. Social Support: Theory, Res & Meth. (2-6) § W, Sp. Prerequisite: Doctoral standing. Seminar 2 hours. Independent study optional 3 or 6 hours for 3 or 4 units.
S. Rachlin
Analysis of the literature relating social support to wellness and health outcomes with emphasis on conceptual and methodological issues. Students will develop a focused review of the social support literature relevant to their research and/or clinical interest. MENT HLTH COM ADM

210. Information Technology and Nursing Care. (3) § Sp. Lecture 3 hours. Lab 1 hour vary.
W. Halburtman, S. Heaney, Z. Mirsky
Course applies research from information technology and selected aspects of nursing care (diagnosis, nursing information system data, decision-making) in order to capture patient outcomes for program planning activities. MENT HLTH COM ADM

211A. Introduction to Research. (3) § F. Prerequisite: Elementary statistics or equivalent. Lecture 3 hours.
H. Wilson
Lectures and computer-oriented instructional materials present an overview of the research process, including sections on developing research questions, experimental design, instruments, sampling, and data analysis. Seminar 3 hours. Seminar will be offered. Course is designed as a computer-based instructional program. PHYSIOL NURS

211B. Community Health Research Critiques. (3) § Sp. Prerequisite: Consent of instructor, with preference given to Community Health students. Seminar 3 hours.
M. White
Course is a critical analysis of the published literature in community health. Emphasis is on the appraisal of research design, conclusions and importance to community health nursing practice. MENT HLTH COM ADM

211.01B. Death in Childhood Res Critiques. (3) § W. Prerequisite: Nursing 211A and consent of instructor. Seminar 3 hours.
I. Martinson
Critique of studies related to the professional management of death, childhood development of the concept of death, child's grief, and adolescent's relationship to the family, death anxiety in family ill children, and impact of death of a child on the family. PAM HLTH

211.03B. Critiques: Studies in Family Health. (3) § W. Prerequisite: N211A or equivalent or consent of instructor. Seminar 3 hours.
J. BIGGERS
Course is a critique of research addressing the family and its relationship to the health and illness of family members. Research considered classic in the field will be reviewed, as well as contemporary research. PAM HLTH

211.04B. Neuroscience Research Critiques. (3) § W. Lecture 3 hours. Seminar 3 hours.
Staff
Course presents the scholarly process of critiquing research in neuroscience nursing. The focus will be on the evolution of the research process, assimilation of the scientific basis for this specialty, and examination of implications of empirical findings for neuroscience nursing. PHYSIOL NURS

211.07B. Crit of One Nursing Studies. (3) § W. Prerequisite: Consent of instructor. Seminar 3 hours.
M. Dodd, P. Halburtman
Course presents the scholarly process of critiquing published research in oncology nursing. Emphasis will be on the evolution of the research process, demonstrated by investigators, and the implications of empirical findings for oncology nursing practice. PHYSIOL NURS
Nursing

211.0B. Critique of Management Research. (3) § W, Sp. Prerequisite: N211A or consent of instructor. Lecture 3 hours.

M. Notting

The course provides a critical analysis of research studies which examine organizational behavior and administrative practice. The emphasis is on attitudes, insights, and abilities relevant to supervision, leadership, and utilization of research to improve patient care. MENT HLTH COM ADM

211.0B. Research Critique: Critical Care. (3) § W. Prerequisite: N211A. Seminar 3 hours.

N. Stotts

Course critiques research studies related to the nursing assessment, plan, and therapy of critically ill patients and those experiencing organ failure. Students will learn to appreciate, evaluate, and integrate research findings into their clinical practice. PHYSIOL NURS

211.1B. Critique: Studies in Child Health. (3) § W. Prerequisite: N211A or equivalent or consent of instructor. Seminar 3 hours.

D. Weeks

Course is a critique of research addressing the health of pediatric clients and their experiences of childhood illness. Research considered classic in the field will be reviewed, as will contemporary research. FAM HLTH

211.2B. Occup Health Res-Critical Review. (3) § W, Sp. Prerequisite: N211A or consent of instructor. Lecture 2 hours. Seminar 2 hours.

J. Lipscomb

Course is a critical analysis of studies exploring the association between workplace stress and health and health risks. Emphasis is on critical evaluation and management variables in emergency and trauma nursing. Emphasis is on the critique process related to studies for applicability to clinical practice. PHYSIOL NURS

211.2B. Critique: Studies of Sick Children. (3) § W. Prerequisite: N211A, or equivalent, or consent of instructor. Seminar 3 hours.

S. Jansema-Bjerke

Course is a critical analysis of studies that explore the association between environmental and health outcomes. Emphasis is on clinical and epidemiological literature. Identification of research methods, and development of research proposals is a major component of the course. PHYSIOL NURS

211.3B. Research Critique: Trauma/Emergency. (3) § W. Prerequisite: N211A. Seminar 3 hours.

M. Lynch

Course is a critical analysis of studies that examine the organization and management variables in emergency care, trauma nursing. Emphasis is on the critique process related to studies for applicability to clinical practice. PHYSIOL NURS

211.3B. Critique: Studies in Nursing. (3) § W. Prerequisite: N211A, or equivalent, or consent of instructor. Seminar 3 hours.

J. DeJong

Course is a critical analysis of studies that examine the organization and management variables in emergency care, trauma nursing. Emphasis is on the critique process related to studies for applicability to clinical practice. FAM HLTH

211.3B. Critique: Studies in Women's Health. (3) § W. Prerequisite: N211A, or equivalent, or consent of instructor. Seminar 3 hours.

D. Taylor

Course is a critical analysis of studies that examine the organization and management variables in emergency care, trauma nursing. Emphasis is on the critique process related to studies for applicability to clinical practice. FAM HLTH

211.5C. Health Management Research. (3) § W, Sp. Prerequisite: N211A or graduate admission. Seminar 2 hours. Conference 1 hour.

J. Lipsom

Seminar focuses on critical analysis of studies in selected areas of international cross-cultural health and human services. Emphasis is on high-risk groups and international trends. MENT HLTH COM ADM

211.4B. Institutional Care of the Aged. (3) § W. Prerequisite: N211A. Seminar 2 hours. Field work 5 hours.

J. Rayner-Jones

Seminar focuses on critical analysis of studies in the institutional care of the elderly. Emphasis is on the theoretical, historical, and cross-cultural approaches. PHYSIOL NURS

211.5C. Health Management Research. (3) § W, Sp. Prerequisite: N211A, or graduate admission. Seminar 2 hours. Conference 1 hour.

L. Reif

Methodology for conducting exploratory studies on social-psychological and organizational factors which affect the management of illness and delivery of health services. Problem identification, collection and analysis of data, and presentation of findings and policy implications of research are included. PHYSIOL NURS

211.5C. Data-Gathering Methods. (3) § W. Prerequisite: One course in research design. Seminar 3 hours.

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 HLTH COM ADM

211.6C. Advanced Nursing Practice Roles. (3) § W. Prerequisite: One course in second-year M.S. students. Consent of instructor is required for other students. Lecture 2 hours. P. Hulburt

Course focuses on analysis of the content, scope, and scope of nursing practice roles, using the context of role and organizational theory. PHYSIOL NURS

211.6C. Community-Based Long-Term Care. (3) § W. Prerequisite: Graduate status or permission of instructor. Lecture 2 hours. Lab 3 hours.

L. Reif

Course analyzes empirical research and theory dealing with noninstitutional approaches to long-term care. Emphasis is on the role of the community provider and the care of frail and vulnerable older adults. PHYSIOL NURS

211.5A. Health in the Community. (3) § W. Prerequisite: Consent of instructor. Lecture 3 hours. Lab 3 hours. M. White

Course explores major public health issues in the U.S. and worldwide that are important to community health nursing practice; identification of the theories, concepts, and methods used to measure, interpret, and understand the issues. MENT HLTH COM ADM

211.5A. Health Planning for Communities. (3) § W. Lecture 3 hours. M. White

Course explores analytical planning models applicable to community health services. Using the community as a basis, this methods course includes assessment, planning, implementation, and evaluation techniques. Emphasis is on application of nursing process while working with communities. MENT HLTH COM ADM

211.0B. Interventions-Nurs Work Stress. (2) § F. Prerequisite: Graduate standing. Seminar 2 hours.

A. Baldwin

Course will enable students to evaluate the recent research and current models of nursing stress. From this base, students will critically select strategies for assisting and intervening in nursing stress situations. PHYSIOL NURS

211.7C. Psychosocial Care of Children. (3) § W. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours.

Staff

Course explores theories related to the psychosocial experiences of illness and hospitalization for the child and his family. Focus is directed at minimizing stress and promoting growth. Concurrent practice recommended. FAM HLTH

211.A. Phenomena Common to the Nursing Care of Ill or Injured. (3-4) § F. Prerequisite: N2776. 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 ill or injured individuals across the life span. Concepts such as stress, healing, coping, illness, consciousness, pain and coping will be examined from a theoretical and clinical perspective. PHYSIOL NURS

211.C. Current Therapeutics. (1-5) § F. Prerequisite: Physiology, N218B and N218B. Seminar 1-5 hours.

C. West

Course explores 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. Evidence-based research will be included. MacOS NURS

211.D. Illness or Injury Rehabilitation. (2-3) § W. Prerequisite: Graduate standing. N218A and N218B. Seminar 3 hours. Lab optional 3 hours.

C. West

Course explores the theoretical basis of rehabilitation of patients following physical illness or injury. Nursing therapies which promote optimal adaptation and development are being evaluated utilizing relevant research as a base. Clinical laboratory optional. PHYSIOL NURS

211.E. Trauma and Emergency Therapeutics. (3) § F. Prerequisites: N221.00 and N2775. Seminar 3 hours.

B. Biers, S. Jansema-Bjerke

Course explores the theoretical basis of rehabilitation of patients following physical illness or injury. Nursing therapies which promote optimal adaptation and development are being evaluated utilizing relevant research as a base. Clinical laboratory optional. PHYSIOL NURS
Course focuses on psychiatric assessment, making referrals, and prioritizing care. (3) 3.00 1 hour. C. Misikowski

Course is designed for students pursuing a career in psychiatric nursing. Psychiatric and psychosocial interventions are explored from the theoretical and practical perspectives, and compared and contrasted with clinical practice. PHYSIOL.NURS

214.06B. Concepts in Critical Care Nursing. (3) W. Prerequisite: N218A. Seminar 3 hours. Staff

Course analyzes the crucial role of the nurse in managing critically ill patients. Psychiatric and psychosocial interventions are explored from the theoretical and practical perspectives, and compared and contrasted with clinical practice. PHYSIOL.NURS

214.07B. Concepts in Trauma & Emergency Nursing. (3) W. Prerequisites: N218A and N221.03. Seminar 3 hours. B. Bieris

Course focuses on psychiatric assessment, making referrals, and prioritizing care. Psychiatric and psychosocial interventions are explored from the theoretical and practical perspectives. Emphasis is on the scientific basis of nursing knowledge as the foundation for practice. PHYSIOL.NURS


Course focuses on psychiatric assessment, making referrals, and prioritizing care. Psychiatric and psychosocial interventions are explored from the theoretical and practical perspectives, and compared and contrasted with clinical practice. PHYSIOL.NURS

220.01. Critical Care Pathophysiology. (4) Sp. Lecture 4 hours. C. Weiss

Course covers the pathophysiology of injuries and emergent medical conditions. Examples of clinical conditions commonly seen in trauma and emergency care will be analyzed. PHYSIOL.NURS

220.04. Critical Care Pathophysiology. (4) Sp. Lecture 4 hours. C. Weiss

Course focuses on the pathophysiology of injuries and emergent medical conditions. Examples of clinical conditions commonly seen in trauma and emergency care will be analyzed. PHYSIOL.NURS

221A. Principles of Nursing Administration. (3) W. Prerequisite: Enrolment in Nursing-Midwifery specialty. Lecture 3 hours. Lab 3 hours. L. Ennis, D. Anderson

Course focuses on the theoretical and practical aspects of nursing administration. Topics include leadership, communication, and management of care in the clinical setting. PHYSIOL.NURS

221B. Principles of Nursing Administration. (3) W. Prerequisite: Enrollment in Nursing-Midwifery specialty. Lecture 4 hours. V. Lops, S. Weiler

Course focuses on the theoretical and practical aspects of nursing administration. Topics include leadership, communication, and management of care in the clinical setting. PHYSIOL.NURS

222.01. Adverse Events in Nursing Research. (3) W. Sp. Prerequisite: Successful completion of the qualifying examination. Seminar 3 hours. S. Gortner

A seminar which focuses on the role of the nurse in conducting research in specialty areas in nursing. MENT.HLTH.COM.ADM

222.02. Adverse Events in Nursing Research. (3) W. Sp. Prerequisite: Successful completion of the qualifying examination. Seminar 3 hours. S. Gortner

A seminar which focuses on the role of the nurse in conducting research in specialty areas in nursing. MENT.HLTH.COM.ADM

222.03. Adverse Events in Nursing Research. (3) W. Sp. Prerequisite: Successful completion of the qualifying examination. Seminar 3 hours. S. Gortner

A seminar which focuses on the role of the nurse in conducting research in specialty areas in nursing. MENT.HLTH.COM.ADM

222C. Complex Probs in Nursing Midwifery. (4) Sp. Prerequisite: Enrollment in Nursing-Midwifery specialty. Lecture 4 hours. V. Lops, L. Ennis

Course focuses on the theoretical and practical aspects of nursing administration. Topics include leadership, communication, and management of care in the clinical setting. PHYSIOL.NURS

223. Mental Health and Aging. (3) W. F. W. Prerequisite: Consent of instructor. Lecture 3 hours. C. Drichert

Course focuses on assessment and management of common mental health problems of the elderly. Factors contributing to mental health or illness, adaptive behaviors, specific psychopathologies, and the similarity of presenting features of physical and mental illness will be explored. PHYSIOL.NURS

224. Pediatric Clinical Therapeutics. (4) F. W. Prerequisite: Course given in conjunction with N245 (Pediatric Critical Care Assessment). Lecture 4 hours. M. Lynch

Course focuses on the assessment and management of common mental health problems of the elderly. Factors contributing to mental health or illness, adaptive behaviors, specific psychopathologies, and the similarity of presenting features of physical and mental illness will be explored. PHYSIOL.NURS

225. Cardiovascular Rhythm: Theory & Analysis. (3) F. W. Prerequisite: Consent of instructor. Lecture 3 hours. B. DeOreo

Course focuses on cardiovascular rhythm in normal and pathological states and the scientific base for nursing's response to cardiac arrhythmias. Content includes pathophysiology and research on the mechanisms, diagnosis, electrocardiographic monitoring, treatment of cardiac arrhythmias, and the use of the electrocardiogram for nursing research. PHYSIOL.NURS

227A. Theories of Major Psych Conditions. (4) W. Prerequisite: Consent of instructor. Seminar 4 hours. P. Underwood

Course focuses on psychiatric conditions, outlined by the DSM-III-R, explored socio-cultural, psychological, and biological theories as dimensions in understanding the etiology, onset, course, treatment, outcomes and outcomes of selected conditions. MENT.HLTH.COM.ADM

227B. Theories of Major Psych Conditions. (4) W. Prerequisite: Consent of instructor (N227A). Seminar 4 hours. P. Underwood

Course focuses on psychiatric conditions, outlined by the DSM-III-R, explored socio-cultural, psychological, and biological theories as dimensions in understanding the etiology, onset, course, treatment, outcomes and outcomes of selected conditions. MENT.HLTH.COM.ADM

228. Primary Prevention of CV Disease. (3) F. W. Sp. Prerequisite: Consent of instructor. Lecture 2 hours. M. Engeler, M. Engeler

Course focuses on the prevention and management of common mental health problems of the elderly. Factors contributing to mental health or illness, adaptive behaviors, specific psychopathologies, and the similarity of presenting features of physical and mental illness will be explored. PHYSIOL.NURS

229. Comparative Research Methods. (2) W. Prerequisite: Admission to the doctoral program or consent of instructor. One quarter of theory (N-202 or 209) and research (N-278) offered. One quarter of theory, N220A, 202B, 202C or 290.01, 290.02, 290.03 and research. N227 recommended. Seminar 2 hours. S. Gortner

Course focuses on the assessment and management of common mental health problems of the elderly. Factors contributing to mental health or illness, adaptive behaviors, specific psychopathologies, and the similarity of presenting features of physical and mental illness will be explored. PHYSIOL.NURS

230A. Q&A: Needs Assessment, Planning, and Evaluation. (3) F. Lecture 3 hours. S. Heery
Course critically reviews strategies to design, monitor, and evaluate quality assurance programs. Theoretical linkages between QA and evaluation research are critically reviewed. Theoretical linkages among QA, human resource development, and evaluation research are presented. MENT HLTH COM ADM

230B. Human Res Dev: Assessment, Planning, and Evaluation. (3) S. W. Lecture 3 hours
S. Henry
Strategies to design, implement, and evaluate human resource development programs are critically reviewed. Theoretical linkages among QA, human resource development, and evaluation research are presented. MENT HLTH COM ADM

240C. Health Services Evaluation Res. (3) S. W. Lecture 3 hours
W. Holzemer, S. Henry
Course presents a patient outcome model for health services evaluation research. The contributions of patient/client, provider, and setting characteristics to individual and organizational outcomes are critically analyzed. MENT HLTH COM ADM

231. Issues in Nurses-Midwifery Practice. (3) S. W. Prerequisite: Enrollment in the midwifery program at UCSF School of Nursing. Seminar 3 hours.
J. DeJoseph
Seminar focuses on a critical analysis of current issues in midwifery, including the context of practice, gender role reversal, and patient education. FAM HLTH

232. Clinical Pharmacology in Primary Care. (3) S. W. Prerequisite: Consent of instructor. Required of all nursing students. Lecture 3 hours.
S. Behaves
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) S. W. Lecture 3 hours
C. Portillo
Course focuses on the epidemiology and primary prevention of AIDS. Biblical 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 behavior.
MENT HLTH COM ADM

234.01. Specialty Research Seminar. (3) S. W. Prerequisite: Doctoral standing or consent of instructor. Seminar 3 hours.
N. Stotes
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. PHYSIOLOG NURS

234.01. Specialty Research Seminar. (3) S. W. Prerequisite: Doctoral standing or consent of instructor. Seminar 3 hours.
N. Stotes
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. PHYSIOLOG NURS

234A. Child Mental Health Assessment. (2) S. W. S. Weiss
Course discusses assessment approach and diagnostic criteria for mental health problems occurring from infancy through adolescence. Child mental health status will be assessed across a spectrum of disorders through case studies. MENT HLTH COM ADM

235B. Child Mental Health Counseling II. (2) S. W. Prerequisite: 235A. 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 conflict. MENT HLTH COM ADM

236. Exempt Parent Group Education. (2-3) S. W. Prerequisite: Consent of instructor. Lecture 3 hours. Seminar 2 hours.
D. Affonso
Theoretical sessions are related to methodology and techniques of conducting expert parent education groups. Exploration of content relevant to concerns of expert parent groups encompassing childhood and early child rearing experiences. Concurrent pragmatic recommendations are made. Required for those not meeting group counseling skills. MENT HLTH

237. Health Assessment through Life. (3-4) S. W. Prerequisite: Department of Family Health Care Nursing. Approval by P.R.O. Concurrent course required. Lecture 2-3 hours. Lab 3 hours.
L. Emini
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. (5) S. W. Prerequisite: Consent of instructor. Lecture 3 hours.
S. Weiss
Course covers major theories and research findings dealing with the physical, intellectual, and emotional development of the child from birth through school age. FAM HLTH

238B. Adolescent Development. (3) S. W. Prerequisite: Consent of instructor. Lecture 3 hours.
M. Savadov
Course explores relevant theory, literature, and research findings dealing with normal development during the adolescent period. FAM HLTH

239. Environ Issues in Psych Rehab. (3) S. F. Lecture 2 hours. Lab 3 hours.
L. Chaitz
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) S. W. Prerequisite: Consent of instructor. Seminar 3 hours.
S. Carroll
Theories, concepts and knowledge for comprehensive assessment and management of common health and illness conditions throughout the life cycle will be presented. Emphasis will be on primary care of the family unit. FAM HLTH

240B. Family Primary Care II. (4-5) S. W. Prerequisite: 240A. Lecture 4-5 hours.
B. Trivella
Course presents theories, concepts, and knowledge for comprehensive assessment and management of 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) S. W. Prerequisite: 240AB. Lecture 4-5 hours.
B. Moulton
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) S. W. Prerequisite: Consent of instructor and concurrent enrollment in primary care clinical residency. Seminar 1 hour.
F. Dreifuss
Seminar deals with critical analysis of issues and research related to collaboration in primary care. Emphasis is on theory and philosophy of primary care, role change, and collaboration of collaborative practice. FAM HLTH

241B. Role Development in Primary Care. (2) S. W. 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. INTERDEPART. MENTAL

241C. Collaborative Role Development. (1) S. W. Prerequisite: Successful completion of N241B (Role Development in Primary Care) and current 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) S. W. Prerequisite: N257 (Biology 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 basis for advanced nursing practice with this population including the role of the interdisciplinary team. PHYSIOLOG NURS

242B. Care of Acutely Ill Older Adults. (3) S. W. Prerequisite: N257 (Biology of Aging) or consent of instructor. Seminar 3 hours.
M. Wallbenburg
Course addresses major phenomena common to 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. PHYSIOLOG NURS

242C. Nursing in Managed-Care Systems. (3) S. W. Prerequisite: Part of a 3-course sequence, but may be taken alone or out-of-sequence, with permission of instructor. May also be taken as elective. Prerequisite of instructor if not taken with N242A & B. Seminar 3 hours.
L. Reif
Course examines managed-care systems that deliver health and long-term services to the elderly. The course will explore the distinctive features of these new systems, and their impact on nursing roles and functions. PHYSIOLOG NURS

243.01. Family Therapy. (3) S. 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 disordered families will be analyzed, including structural, cognitive, and communicative frameworks as well as psychotherapy. MENT HLTH COM ADM
243.01. Trends in Group Psychotherapy Modalities. (2) W. Sp. Prerequisite: Psychiatric/Mental Health student or consent of instructor. Lecture 2 hours.

B. Partners

Students will examine and discuss theories and practice of various group modalities in current use. MENT HLT.COM ADMD

244A. Ras Sern: Indly, Fam., or Comm. (2-4) F. Prerequisite: Completion of first-year requirements for the P.H.D. program in nursing or consent of instructor. Lecture 2 hours, independent study 9-6 hours.

D. Webers

Nursing 244ABC prepares students for original research through consideration of specific method and issues in an area of specialization. Nursing 244ABC focuses on evaluation of a content area and generation of research questions within it. MENT HLT.COM ADMD

244B. Ras Sern: Indly, Fam., or Comm. (2) W. Prerequisite: N244A or consent of instructor. Lecture 2 hours, Independent study 6-6 hours.

D. Leihes

Nursing 244ABC builds upon prior research concept to prepare students to develop and defend a plan for original research. Nursing 244B focuses on identification of research questions and criticism of design/analysis in the students' area of interest. HAM HLT.

245. PHC1: Health Maintenance and Promotion. (2) W. Prerequisite: N270 (Advanced Health Assessment) and concurrent enrollment in N405. Lecture 2 hours.

D. Taylor

Clinical analysis of behavioral strategies and nursing interventions in health promotion and maintenance using research findings and theoretical frameworks related to risk screening, disease prevention, and health promotion in primary health care across the lifespan. FAM HLT.

247A. Pediatric Family Study. (1) W. Prerequisites: N265, N279A, and enrollment in Pediatric Primary Care Program. Lab 2-3 hours visit per quarter. Health. Emphasis is on application of current research: decision-making and management of pregnancy, the newborn, and the family. MENT HLT.

M. Zollwack

Seminar focuses on family development in the first year of life with emphasis on parent-child interaction, childrearing practices, growth and development, nutritional issues, and family responses to pediatric primary care experience. Emphasizes research in provision of primary care. PAM HLT.

247B. Pediatric Family Study. (1) Sp. Prerequisites: N265, N279A, and enrollment in Pediatric Primary Care Program. Lab 2-3 hours visit per quarter. Health. Emphasis is on application of current research: decision-making and management of pregnancy, the newborn, and the family. MENT HLT.

M. Zollwack

Seminar focuses on family development in the first year of life with emphasis on parent-child interaction, childrearing practices, growth and development, nutritional issues, and family responses to pediatric primary care experience. Emphasizes research in provision of primary care. PAM HLT.

248. Group Independent Study. (1-6) F, W. Sp. Prerequisite: Consent of instructor. Lecture 1-6 hours.

Staff

Students collaborate in clinical investigations and other studies of special problems in nursing and health sciences under the direction of faculty. Students may select areas related to their long-term interests and future research or clinical program. INTER.DEPARTMENTAL.

249. Independent Study. (1-5) F, W. Sp. Prerequisite: Consent of instructor. Lecture 1-5 hours.

Staff

Students undertake an individual study with emphasis on special problems in nursing. Students may select an area of study which is related to his/her area of interest or future goals. INTER.DEPARTMENTAL.

250. Research. (1-6) 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. INTER.DEPARTMENTAL.

250.01. Research Rotation. (1-6) Sp. F, W. Sp. Prerequisite: Completion of first year of doctoral study and consent of advisor. Lab 3-8 hours.

Staff

The student will participate in ongoing faculty research. The experience will contribute to the student's methodological or substantive expertise. INTER.DEPARTMENTAL.


Staff

The student will participate in ongoing faculty clinical research. This experience will contribute to the student's methodological or substantive expertise. INTER.DEPARTMENTAL.

251. Advances in Vascular Nursing. (3) S. Prerequisite: Consent of instructor. Learning modules 10 hours.

M. Engels, M. Engler

Course examines the theoretical basis of prevention, intervention, adaptation, and rehabilitation in peripheral vascular insufficiency utilizing relevant research. Course requires the completion of research projects and application of content. PHYSIOLOGY.NURSING.

252. Issues in Scientific Inquiry. (2-4) F. Prerequisite: Consent of instructor. Restriction: Doctoral-level students who have completed the preliminary exam. Seminar 2-4 hours.

Staff

Course provides forum for discussion of issues in the conduct of scientific investigations emphasizing those situations and problems associated with the content areas specific to the students' own interests. PHYSIOLOGY.NURSING.

253. Innovative Subsystems of Nursing Care. (3) W. Restriction: Doctoral-level—suggested D.N.S. Seminar 3 hours.

1. Martinson

Course provides instruction in the development of a nursing-specific subsystem of care, including the capability to develop a feasible, functioning system to plan design for collection and analysis of data needed for evaluation. PAM HLT.

254. Fetal-Newborn Development. (2) Sp. Lecture 2 hours.

M. Lysaght

Course is a study of body system development during embryonic, fetal, and postnatal growth. Emphasis is on neural anatomical and physiological development, critical periods of developmental alterations, and transitions for extra-uterine adaptation. Implications for nursing practice are explored. PAM HLT.

255. Pediatric Health Assessment. (2-3) Sp. Prerequisite: Consent of instructor. Restriction: For students enrolled for 22U, evidence must be provided of a concurrent supervised physical assessment experience. Lecture 2 hours, Lab 3 hours.

P. Jackson, R. Doutrelant

Course presents theoretical principles and assessment techniques for determining health status of children, including health history and physical examination. Focus is on collection and interpretation of clinical data. Laboratory or concurrent practicum required. HAM HLT.

255A. Common Pediatric Illness Management. (2) F. Prerequisite: Consent of instructor. Lecture 2 hours.

P. Jackson

Course presents concepts, theories, and knowledge for comprehensive assessment and management of common pediatric illnesses. Emphasizes the most common acute conditions managed by a PNP in collaboration with pediatrician. Integrates history taking, physical findings, diagnosis, and management. PAM HLT.

255B. Common Pediatric Illness Management. (2) W. Sp. Lecture 3 hours.

K. Doutrelant

Course presents theories, concepts, and knowledge for comprehensive care of children with common pediatric illnesses. It emphasizes common acute conditions managed by a clinical nurse specialist in Pediatric Primary Care in collaboration with a physician. PAM HLT.

256. Transitions & Health. (3) W. Sp. Lecture 3 hours.

Course may be repeated for credit.

A. Meloy

Critical and analytical review of theories and research that links health of the individual and families to health and disease. Focus is on understanding transitions and health care issues.
Nursing

219.03. Advanced Women's Health Seminar. (2) § F, W. Prerequisite: Consent of instructor. Lecture 2 hours.
D. Taylor, W. Sun
Course explores theoretical and management aspects of selected phenomena in women's health applicable to the nurse practitioner role. MENT HILTH
260A. Cultural Concepts in Fifth Careers. (3) § F, W. Prerequisite: Seminar 2 hours. J. Lipson
Course introduces basic concepts and issues in medical anthropology and transcultural nursing. Provides opportunity to critically review research literature and discuss implications for nurses and other health care professionals. MENT HILTH COM ADM
260B. Jind & Cross-Cultural Theories. (3) § F, W. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours. A. Malek
Course explores theoretical and conceptual aspects of international and cross-cultural nursing. Topics covered include culture and ethnicity; social policy and international development; health planning; ethnics; and cross-cultural communication. MENT HILTH COM ADM
260C. Int/ Cross-Cultural Nursing Issues. (3) § F, W. Prerequisite: Consent of instructor. Seminar 3 hours. J. Lipson
Seminar examines selected international nursing issues including primary care, nursing education and nursing service, women's roles, and patients' rights. MENT HILTH COM ADM
261. Mental Health Nursing and the Law. (2) § W. Prerequisite: Enrollment in M.S. program in Psychiatric Nursing or consent of instructor. Lecture 2 hours. G. Grebham
Course reviews history and development of mental health legislation and decisional law in the U.S. and California. Examines current mental health laws as they relate to and influence the practice of psychiatric nursing in the public and private sectors. MENT HILTH COM ADM
262A. Women's Health Roles/Issues I. (1) § F, W. Prerequisite: Enrollment in Women's Health Nurse Practitioner Program or consent of instructor. Seminar 2 hours (every other week). J. DeJesus, B. McAdoo, D. Taylor, L. Ennis, L. Loomell
Seminar examines critical analysis of issues influencing role transition, role enactment, scope and control of practice, and professional growth of the women's health care provider. TAM HILTH
262B. Women's Health Roles/Issues II. (1) § W. Prerequisite: N262A. Seminar 1 hour. J. DeJesus
Seminar examines critical analysis of issues influencing constraints and enhancements of contemporary practice for women's health care providers. Impact of current legal, logistical, technological, and health care delivery trends are examined. TAM HILTH
264A. Model Specification. (2-3) § F, W. Prerequisite: Excellent standing in doctoral program and graduate level statistics course. Lab 0-3 hours. Seminar 2 hours. Staff
Course reviews and analyzes the theoretical and methodological bases of specifying and testing causal/predictive models in nursing. Analysis of the model includes assessment of mathematical, computer, and simulation models and remedial steps to correct for distributional and/or specification violations. FAM HILTH
264B. Model Testing and Specification. (3) § W. Prerequisite: N264A. Seminar 3 hours. Staff
Advanced methods in exploratory analysis of data sets and specification of models in nursing. Students test their own model using their own or a faculty-provided data base. Course emphasis is on using quantitative analyses for theory building. FAM HILTH
265. Management of Clinical Occupational Health Problems. (3) § W. Prerequisite: Consent of instructor. Lecture 1 hour. Seminar 2 hours. J. Cone
Course explores clinical management of occupational health problems. Concentration of discussion is on problems in occupational health, using medical, nursing, industrial hygiene, and epidemiologic principles. Emphasis is on clinical diagnosis and use of quantitative and epidemiologic methods used in evaluation of occupational health problems. MENT HILTH COM ADM
266. Applied Pathophysiology of AIDS. (3) § F. Prerequisite: Undergraduate biology or consent of instructor. Lecture 2 hours. A. Lewis, T. Moran, G. Ge
Course describes theories of the natural history of AIDS and AIDS-related diseases. Systemic, diagnostic tools, treatments, and management protocols will also be reviewed. Clinical cases and nursing management using secondary prevention techniques will be emphasized. PHYSIO NURS
267. Ethical Dilemmas & Nursing Practice. (3) § F, W. Lecture 2 hours. Library research 3 hours. A. Davis
Course explores selected ethical theories, ethical dilemmas in health care and nursing practice. Focus is on selected case studies depicting ethical dilemmas in nursing practice, nursing research, and health policy. MENT HILTH COM ADM
268. Psychiatric/Liaison Nursing. (2-3) § F, W. Prerequisite: N231A and enrollment in the child or adult psychiatric nursing specialty tracks, Department of Mental Health, Community, and Administrative Nursing, or consent of instructor. Lecture 2 hours. L. Chafetz
Course reviews the emerging literature on psychiatric liaison nursing. Reports on roles of psychiatric nurses in medical settings will be critically analyzed, as well as clinical research from the areas of general hospital psychiatry. Comparative models of practice are discussed. MENT HILTH COM ADM
269. Historical & Contemporary Issues. (2-3) § F, W. Prerequisite: Lecture 2 hours. Seminar optional 1 hour. M. Stiles
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 HILTH COM ADM
270. Advanced Health Assessment. (2) § F. Lecture 2 hours. Staff
Course introduces advanced health assessment techniques to evaluate the health status of clients across the lifespan. Focuses on collection of a comprehensive history and physical examination for the adult and child, highlighting changes associated with adolescence, pregnancy, and aging. MENT HILTH COM ADM
271A. Clinical Management in Adult Primary Care. (1-4) § F. Prerequisite: N270 or consent of instructor. Lecture 1-4 hours. T. Mendenhall
Introduces primary health care concepts essential to management of common physical illnesses 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 HILTH COM ADM
271B. Clinical Management in Adult Primary Care. (1-4) § W. Prerequisite: Consent of instructor. Lecture 1-4 hours. E. Hoge
Introduces primary health care concepts essential to management of common physical illnesses 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 HILTH COM ADM
271C. Clinical Management in Adult Primary Care. (2-4) § Sp. Prerequisite: Consent of instructor. Lecture 2 hours. Independent projects optional for 3-4 units. T. Mendenhall
Introduces primary health care concepts essential to management of common physical illnesses 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 HILTH COM ADM
272. Chronic Illness: Child & Family. (3) § W. Prerequisite: N258A, Anthropology 235, Psychology 208, or consent of instructor. Lecture 3 hours. D. Weeks
Course offers study of chronic illness in childhood and in effect upon the individual and his/her family. The presentation of content is based upon development and interactive models. Clinical content considers systematic assessment and intervention. FAM HILTH
273A. Current Concepts in Occupational Health. (3) § F, W. Prerequisite: Consent of instructor. Lecture 2 hours. Seminar 1 hour. J. Lipson
Course analyzes 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 HILTH COM ADM
273B. Current Concepts in Occupational Health Nursing. (2) § F. Prerequisite: Consent of instructor. Lecture 2 hours. B. Burgel
Course analyzes the role of the OHC in managing an occupational health service. Emphasis is upon planning, development, and evaluation of occupational health programs. MENT HILTH COM ADM
274. Health and Safety Hazards/Workplace. (4) § Sp. Lecture 3 hours. Lab 3 hours. B. Newkirk
Course examines principles of industrial hygiene and safety for identification of chemical, biologic, physical, ergonomic, and radiation workplace factors. Students will assess workplace environment for hazards, identify environmental monitoring, health surveillance, and safety measures to control hazardous exposures. MENT HILTH 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 neuro- and endocrine systems functions which serve as a basis for nursing practice. PHYSIO 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 and neuro- and endocrine systems functions which serve as a basis for nursing practice. PHYSIO NURS
275C. Neonatal Pathophysiology. (2) § Sp. Lecture 2 hours. R. Lee
Course is a study of the major disease processes encountered in the neonate and relevant to their care. The course will address etiology, manifestations and treatment in the acute phase of illness. FAM HILTH
276. Theoretical Perspectives for Nursing Practice. (5) § F. Lecture 3 hours.
Nursing

P. Benner
Comprehensive study of selected nursing conceptual and theories and their implications for nursing practice, curriculum development, and research. Critique of theories will address key questions relevant to nursing goals, interprofessional focus and outcomes, recipient of nursing, and social significance.

PHYSIOLOGICAL NURSES

277. Assessment/Management of Psychosocial Problems. (3) 5: Prerequisite: N270W or consent of instructor. Lecture 3 hours.

278. Nursing Science History & Philosophy. (1) 5: Prerequisite: Doctoral-level standing or consent of instructor. Lecture 2 hours. Seminar 2 hours.

280. Int'l 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 discussion of the nurse's role in such programs. MENT HILTH COM ADM

281A. Aseptic & Infection Control. (2) 5: Prerequisite: Enrollment in Ph.D. program in nursing or consent of instructor. Seminar 2 hours.

S. Weiss
Seminar critically examines theory and research focused on personal and environmental factors as they influence health and illness. Concepts of person, environment, and health will be analyzed and discussed as they pertain to the development of nursing science through research. PAM HILTH

281B. Nutrition. (5) 5: Prerequisite: N281A and enrollment in Ph.D. program in Nutrition, or consent of instructor. Lab 3 hours. Seminar 3 hours.

I. Kantor
Course critically examines faculty research investigating the nursing science from the perspective of person, environment, and health. PHYSIOLOGICAL NURSES

282. Geologic Pharmacology. (3) 5: W. Seminar 2 hours.

S. Schenck, C. Deitrich
Course explores clinical management of pharmacology and integration of drug therapy into the therapeutic plan and nursing care of older adults. The course focuses on drugs commonly used in multiple settings for the treatment of chronic disease and slow-acquiring illness. PHYSIOLOGICAL NURSES

283A. Pediatric Normal/Abnormal Function. (1-3) 5: Lecture 1-3 hours.

M. Lynch
Course studies physiologic functions of the cellular, molecular, and respiratory systems as modified by developmental needs, system immaturity, and pathophysiologic processes in the pediatric population. Implications for pediatric nursing practice will be addressed in relation to normal/abnormal system function. PAM HILTH

283B. Pediatric Normal/Abnormal Function. (1-3) 5: W. Lecture 1-3 hours.

M. Lynch
Course studies physiologic functions of the cardiovascular, hematopoietic, and immunologic systems as modified by developmental needs, system immaturity, and pathophysiologic processes in the pediatrie population. Implications for pediatric nursing practice will be addressed in relation to normal/abnormal system function. PAM HILTH

283C. Pediatric Normal/Abnormal Function. (1-3) 5: Lecture 1-3 hours.

M. Lynch
Course studies physiologic functions of the gastrointestinal, renal, and endocrine systems as modified by developmental needs, system immaturity, and pathophysiologic processes in the pediatric population. Implications for pediatric nursing practice will be addressed in relation to normal/abnormal system function. PAM HILTH

284. Adolescent Health Care. (2) 5: Prerequisite: Consent of instructor. Seminar 2 hours.

M. Savela, J. Buehler
Examination and analysis of theory and research related to health care of adolescents and their families in a variety of settings. Emphasis will be on adaptation to selected stresses including trauma, chronicity, hospitalization, terminal illness and disability. PAM HILTH

285. Assessment of Women's Health. (3) 5: Prerequisite: Consent of instructor; Restriction: Women's Health Nurse Practitioner students. Lecture 2 hours. Lab 3 hours.

J. Neumann, L. Lomme
Course presents theoretical principles of health assessment. Areas to be covered include methodologies of data gathering and data analysis essential to comprehensive health assessment of women. The laboratory experience provides application and integration of theory.

286A. Research in Stress & Coping. (3-4) F.

P. Benner
Course critically analyzes the relationship of stress and coping to health and illness. Examines theoretical and empirical links between coping strategies and therapeutic interventions. Emphasis is on research programs. PHYSIOLOGICAL NURSES

288. Health & Stress in Cancer. (3-4) 5: Prerequisite: Consent of instructor or doctoral-level theory development. Lecture 3 hours. Credit for 1 unit for proposal development (optional).

P. Benner
Course examines the current nursing, behavioral, and epidemiological research relating to stress and coping to the etiology and course of cancer. Theoretical and empirical links between coping resources, strategies, and helping interventions are also included. PHYSIOLOGICAL NURSES

287A. Organizational Theory & Research. (3) 5: Prerequisite: Consent of instructor. Lecture 3 hours.

M. Flood
A critical review and analysis of major organizational theorists and research. Emphasis is on an open-systems approach to examine characteristics of health service organizations and the role of management. MENT HILTH COM ADM

287B. Behavior in Organizations. (3) 5: Prerequisite: N287A and consent of instructor. Lecture 3 hours.

H. DeGroot
Course examines the causes, characteristics, and consequences of behavior and experiences of individuals as they function in organizations. Emphasis is on per-sonal management and other managerial functions. MENT HILTH COM ADM

287C. Processes in Administration. (3) 5: Prerequisite: N287A and 287B or consent of instructor. Lecture 3 hours.

S. Neidlinger
Course provides a synthesis and application of management theories and administrative processes. Emphasis on leading, planning, organizing, controlling, decision making, managing change, and evaluating.


V. Cieplak
Course offers an introduction to financial accounting principles as they relate to financial management in health care settings. Emphasis is on the manager's role and responsibilities in budgeting, monitoring, controlling, and in cost accounting care. Laboratory provides skill development.

288A. Executive Nursing Administration. (3) 5: F. Prerequisite: Consent of instructor. Seminar 3 hours.

Staff
Seminar offered to doctoral students, analyzing theories and research relative to executive nursing roles in academic and service settings. Course examines administrative concepts pertaining to governance, use of power, corporate dealings, and executive scholarship. MENT HILTH COM ADM

288B. Cost. Metabolism in Nursing. (3) 5: Prerequisite: N281.088 (Critique of Management Research) or equivalent, N287D (Financial Management for Nurse Administration) or equivalent, and doctoral study or consent of instructor. Lecture 2 hours. Field work 3 hours.

V. Cleland, S. Neidlinger
Course is a critical analysis and synthesis of accounting and economic principles relating to the cost of nursing care. Cost methodology is used to determine cost of service, cost averages, marginal costs, cost-effectiveness, and cost-benefit. MENT HILTH COM ADM

288C. Academic Administration Seminar. (3) 5: F, W. Prerequisite: Consent of instructor. Seminar 3 hours.

Staff
Seminar designed for doctoral students in nursing administration interested in the field of administration. Course analyses and evaluates theories, models, principles, and practices related to administrative roles in diverse academic settings. MENT HILTH COM ADM.
Nursing

289. Labor Relations. (2) W, S, Sp. Prerequisite: Consent of instructor. Lecture 3 hours.

W. Neff
Course critically analyzes organization and exchange theories relative to managing employer-employee relations in health care and educational settings. Emphasis is on labor movement, labor legislation and regulation, contract negotiations, and grievance procedures. MENT/HLTH COM ADM

290.01. Family Health Nursing Theory. (3-4) S, W. Prerequisite: Enrollment in doctoral program. Lab 0-3 hours. Seminar 3 hours.

S. Rankin
Comparative analysis of clinical theories and methodologies for deriving a theory base for family health nursing. Emphasis is on interpersonal, role, structural-functional, and systems theories. PAM HLTH

290.02. Family Health Theory. (3-4) S, W. Prerequisite: N290.01. Seminar 3 hours. Independent Study 0.3 hours.

C. Gillis
Course is a comparative analysis of theories/approaches for deriving a theory base for family health nursing. Emphasis is on developmental, ecological, field, conflict, stress, and adaptation theories. PAM HLTH

291. Acute Psych Care in the Community. (2) S, W. Prerequisite: N292. Seminar 2 hours.

L. Chalupa
Course reviews clinical problems encountered in acute psychiatric services in community settings. In addition to direct care issues, students have the opportunity to discuss the socio-cultural, legal, ethical, and economic factors which influence provision of services. MENT/HLTH COM ADM

292A. Physiology of Pregnancy. (2) F, W. Prerequisite: Consent of instructor. Lecture 2 hours.

R. Kes, L. Pinci
Course reviews and analyzes advanced physiology and pathophysiology of pregnancy and their impact on the maternal unit as a basis for nursing practice and research. Emphasis is on reproductive and endocrine systems affecting adaptation and development during pregnancy. PAM HLTH

292B. Physiology of Pregnancy. (2) S, W. Prerequisite: Consent of instructor. Lecture 2 hours.

N. Green
Course reviews and analyzes advanced physiology and pathophysiology of pregnancy as a basis for practice and research. Emphasis is on cardiovascular, hematologic, neuromuscular, and renal systems affecting adaptation and development during pregnancy. PAM HLTH


L. Sausa
Course focuses on theory supporting midwifery management of the low- to high-risk fetus and newborn.

Content traces human development from conception through adaptation to neonatal care. Course articulates with clinical lab which covers newborn health assessment and management skills.

W. Wolfinger
Seminar addresses validity issues of quasi-experimentation in nursing research. Designs examined in nursing literature include: controlled group designs, interrupted time-series designs, passive observation, and randomized experiments. MENT/HLTH COM ADM

296. Teaching-Learning Processes. (4) SJS or SS2, 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, S, Lecture 2 hours.

M. Svedera
Course explores research related to physiological, psychological, and social responses to human pain; nursing implications for pain assessment and management of acute and chronic painful conditions across the life span. PAM HLTH

298. Thesis or Comprehensive Exam. (6) F, W, S. Prerequisite: Advance registration and permission of the graduate advisor.

Staff
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. (6) F, W, S. Prerequisite: Advance registration and permission of the graduate advisor.

Staff
For graduate students engaged in writing the dissertation for the Doctor of Nursing Science (D.N.S.) or Doctor of Philosophy in Nursing degree.

401. Teaching Residency. (4-12) F, W, S. Prerequisite: Consent of instructor. Lab 12-18 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

402. Administration Residency. (2-12) SJS, SS2, W, F, W. Prerequisite: Completion of N280ABC and N280D, each with a grade of B or higher, and consent of instructor. Lab 6-36 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

403. Consultation Residency. (4-12) F, W, S. 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

404. Clinical Residency. (4-12) F, W, S. Prerequisite: Consent of instructor. Lab 12-36 hours.

Staff
Student has opportunity to apply and evaluate theories, concepts and skills in the work setting under the supervision of a preceptor. MENT/HLTH COM ADM

404.01. Adult Primary Care Residency-Clinical Perceptual. (4-12) F, W. Prerequisite: Consent of instructor. Lab 12-36 hours.

Staff
Course provides an opportunity to apply and evaluate theories, concepts and skills in the work setting under the supervision of a preceptor. MENT/HLTH COM ADM

404.06A. Ped Clin Residency. (5) F. Prerequisite: Consent of instructor. Lab 12 hours. Seminar 2 hours. Conference 1 hour.

D. Goldman
Course offers opportunity to apply and evaluate theories, concepts, and skills in the work setting under supervision of a preceptor. Focus is on development of the pediatric clinical specialist role in ambulatory child health care. PAM HLTH

404.06B. Ped Clin Residency. (5) W. Prerequisite: Consent of instructor. Lab 12 hours. Seminar 2 hours. Conference 1 hour.

P. Jackson
Course offers opportunity to apply and evaluate theories, concepts, and skills in the work setting under supervision of a preceptor. Focus is on development of the pediatric clinical specialist role in ambulatory child health care. PAM HLTH

404.06C. Ped Clin Residency. (6) S, W. Prerequisite: N404.06AB. Lab 16 hours. Seminar 1 hour.

P. Jackson
Course offers opportunity to apply and evaluate theories, concepts, and skills in the work setting under supervision of a preceptor. Focus is on development of the pediatric clinical specialist role in ambulatory and chronic illness care. PAM HLTH

405. Practicum in Mental Health & Com Nurs. (1-8) F, W, S. 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 mental health and community nursing. Guided clinical laboratory experience is designed to develop mastery of advanced skills. PAM HLTH

407. Practicum in Physiological Nursing. (1-8) 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. PHSIO NURS

407.01 Clin Magn of Older Adults. (2) F, W. Prerequisite: N253B. Credit: 9 units. (Concurrently) and N257 (Biological Aging). Lab 6 hours.

M. Wallach
Provides opportunity for skills 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. PHYSIO-NURS

410. Teaching Practicum. (3-8) F, W, S. 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, S. Lecture 2 hours.

R. Slaughter
Course provides overview of the impact of computer technology upon nursing. Focus is upon hardware and software for nursing in the mainframe to microcomputer environment. Wood projects for scientific writing using IBM PC is an integral part of the class. PHYSIO-NURS
Obstetrics, Gynecology & Reproductive Sciences

411B. Fetal Modeling. (2) F, W. Prerequisite: NURS 342. 
Pregnancy of an animal is available to Admission students. Lecture 2 hours.

R. Slaughter 
Course emphasis is on the use of the computer as a tool for the nurse manager in financial planning. 
PHYSIONURS

411C. Computers in Administration. (2) § F, W. Prerequisite: NURS 114AB. Lecture 2 hours.

R. Slaughter 
Course is designed to introduce to the administrative information systems and their impact upon patient care. Emphasis will be on data base management systems in a nursing administration environment. 
PHYSIONURS

411D. Introduction to Computers. (2) F, W. Prerequisite: Lecture 1 hour. Lab 3 hours. 
J. Green 
Course provides an introduction to microcomputers, focusing on word processing, DOS basics and hard disk management, hardware and software applications, and purchasing a system. PHYSIONURS

411E. Data Management. (2) § F, W. Prerequisite: None. Biostatistics 187 or 188AB are recommended. Lecture 1 hour. Lab 3 hours. 
S. Paul 
Course offers a hands-on experience with computers and software that can be used for data management and statistical analysis. The benefits of considering options for patient data collection, entry, analysis, and preparing research strategies before data are collected is emphasized. PHYSIONURS

Obstetrics, Gynecology and Reproductive Sciences

110. Ob/Gyn Core Clerkship. (1.5 per week) 3:51, 3:52, 3:53, 3:54. Prerequisite: Medicine 332A-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 rooms under direct supervision. OB GYN R S

140.2. Advanced Clinical Clerkships. (1.5 per week) Su, F, W, Prerequisite: 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 hospital, 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, Prerequisite: 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. 
Rosen, Cousky, Sabido 
Practical clinical training in obstetrics and gynecology at Valley Medical Center of Pomer. Time is divided between labor and delivery experience, gynecology 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: SFGH. (1.5 per week) Su, F, W, Prerequisite: Obstetrics and Gynecology 110, Pediatrics 110, and either Medicine 110 or Surgery 110, or consent of instructor. 
A. Korn 
The clerk will function as an acting intern on the gynecology inpatient service. Some gynecologic outpatient and emergency room 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, Prerequisite: Obstetrics and Gynecology 110, Pediatrics 110 and Medicine 110 or Surgery 120, or consent of instructor. 
B. Powell 
The clerk functions in the role of an acting resident on the gynecology service. Responsibility is 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, Prerequisite: Obstetrics and Gynecology 110 and consent of instructor and chairperson 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

Braga and Staff 
Advanced clerkship focusing on outpatient special obstetrical care clinics and inpatient management of high-risk and antenatal patients. Osteo 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, Prerequisite: Consent of instructor and chairperson of the department. 
Staff 
A nonclerical research project under the direction of a member of the faculty. OB GYN R S

160.01. First- and Second-Year Ob/Gyn Preceptorship. (1.5 per week) Su, F, W, Prerequisite: Field work 3 hours. 
Brown 
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

170.01. Sociocultural Aspects of Nur. (1) § Seminar 1 hour. 
Albrecht 
A survey of the social, cultural and psychological factors that determine health behavior in the individual. Lecture, 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

195. Supervised Study. (1-5) Su, 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. OB GYN R S

222. Reproductive Endocrinology Sem. (2) § Prerequisite: Consent of instructor. Seminar 1 hour. 
Kohn 
Seminars 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) § Prerequisite: Consent of instructor. Lecture 2 hours. 
J. Roberts 
An in-depth examination of the characteristics 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, Prerequisite: Practicing physicians only. 
Jaffe and Staff 
Conferences comprised of formal discussions by staff, faculty, and visiting lecturers. OB GYN R S

401. Surgical Pathology Seminar. (1) § Su, F, W, Prerequisite: Consent of instructor. Lecture 2 hours. 
E. Hill, Braga, H. Jones 
Seminar includes the presentation of pathologic material from the obstetric and gynecologic services with formal instruction and discussions. OB GYN R S

502. Residents Core Lecture Series. (1) § Su, F, W, Prerequisite: Consent of instructor. Lecture 2 hours. 
Kettleswar 
Seminars include presentations of special topics, literature reviews, and discussions. Discussions of resident staff cases are also held. OB GYN R S

450. Clinical Obstetrics & Gynecology. (10) § Su, F, W, Prerequisite: OB GYN R S

UC Irvine, Scotto R, Sweet, C. Webb 
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, didactic sessions and lecture work devoted to the supervised examination of patients.
Ophthalmology

Case Clerkship—Surgery 110 and 111 include lectures and clinical experience in the diagnosis and care of eye diseases.

140.01A. Advanced Ophthalmology Clerkship—UG (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Surgery 110 or consent of instructor.
M. Drake Students will serve as subsistence on the ophthalmology wards. They will work up and present patients, and attend surgery and postoperative clinics. This is an intensive clerkship where students will work two twelve-hour shifts daily.

OPHTHALMOL

140.01B. Advanced Ophthalmology Clerkship—UC (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor.
Good Students will observe, work up and present ophthalmology patients at the Eye Clinic. They will attend departmental rounds and conferences.

OPHTHALMOL

140.02. Off-Campus Clerkship (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor.
Good Clinical clerkship in approved hospitals by special arrangement and approval by the dean and the chairperson of the department. OPHTHALMOL

140.03A. Advanced Clinical Clerkship—SFGH (1.5 per week) Su, W, F, W, Sp. Prerequisite: Medicine 110 or consent of instructor. One student per block.
Self Good Students serve as subsistence on the Ophthalmology Service. They work up and present cases in the ophthalmology clinic and on the wards, and have the opportunity to participate in the operating room. Once a week and weekend responsibilities should be expected.

OPHTHALMOL

140.03B. Clinical Clerkship—SFGH (1.5 per week) SS1, SS2, Su, F, W, Sp. Prerequisite: Consent of instructor. Two students per block except summer when one student per block.
Self Clinical observations of patients in clinic, wards, and surgery at San Francisco General Hospital. OPHTHALMOL

140.04. Adv Ophthalmology Clerkship—L (1.5 per week) Su, W, F, Sp. Prerequisite: Consent of instructor.
Reamsey Clinical observation of patients in the clinic, wards, and surgery at L. OPHTHALMOL

140.06. Adv Ophthalmology Clerkship—VA (1.5 per week) Su, W, F, W, Sp. Prerequisite: Consent of instructor.
Zarkin Clinical observation of patients in clinic, wards and surgery. OPHTHALMOL

150.02. Ophthalmology Research (1.5 per week) Su, W, W, Sp. Prerequisite: Consent of instructor and chairperson of the department.
S. Kraemer A research project under the direction of a member of the faculty carried out in the Department of Ophthalmology. OPHTHALMOL

S. Kraemer Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. OPHTHALMOL

159. Laboratory Project (1-5) F, W, Sp.
S. Kraemer A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. OPHTHALMOL

400. Staff Conference (1) F, W, Sp.
S. Kraemer Residents prepare and present diagnostic and therapeutic problems. Discussion of cases by faculty and visiting faculty. Residents present papers on various aspects of medicine and ophthalmology, which are discussed by faculty members. OPHTHALMOL

S. Kraemer Conferences include grand rounds and case presentations of hospital patients, review of recent literature in ophthalmology, and assigned reading with requested reports. OPHTHALMOL

S. Kraemer Seminars include didactic lectures in practical work covering anatomy, neuro-ophthalmology, uveitis, physical optics, refraction, ocular motility, glaucoma, and ophthalmology. OPHTHALMOL

403. Basic Ophthalmologic Science (6) Su. Required for first-year residents.
S. Kraemer Didactic lectures and demonstrations cover the basics sciences as applied to ophthalmology. They include anatomy, histology, biochemistry, physiology, and pharmacology. OPHTHALMOL

M. Drake Residents, under supervision, are responsible for patients in the Eye Clinic. First-year residents assist in eye surgery and the Eye Bank program. Speciality clinics include external disease, exanlloplastic surgery, medical ophthalmology, and glaucoma surgery. OPHTHALMOL

111. First Year Special Study (2) F. Prerequisite: Passing placements examination and consent of instructor. Lecture 2 hours.

Newburn Discussion of biological problems of interest in density including salvia, mineral metabolism, hydroxypyrate crystal structure, connective tissue, bacterial cell wall, oral bacterial metabolism, and blood coagulation. STOMATOL

116. Intro to Oral Biology (2) F. Lecture 1 hour, lab 2 hours.

Cheadle Introduction to oral biology correlating morphology, chemistry, function of dental and periodontal tissues. Topics include enamel, dentin, cementum, pulp, dental caries, tooth eruption, periodontal, oral mucous membranes. STOMATOL

150. Introduction to Oral Biology (1) F. Prerequisite: Dental Hygiene standing. Lecture 1 hour.

Christie Introduction to oral biology correlating morphology, chemistry, function of dental and periodontal tissues. Topics include enamel, dentin, cementum, pulp, dental caries, tooth eruption, periodontal, oral mucous membranes. STOMATOL

199. Laboratory Project (1-5) Su, F, W, Sp. Prerequisite: Consent of instructor. Lab 3-5 hours.
Self A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the division.

202. Connective Tissue Seminar (1-2) F. Lecture 2 hours.

Bhatnagar A course in connective tissue biology, concerned mainly with the development, differentiation, and pathology of connective tissues, including topics such as regulatory controls of connective tissue macromolecules, fibrosis, wound healing, inflammation, tissue destruction, and selected genetic disorders. STOMATOL

210. Topics in Virology (1) F. Prerequisite: General knowledge of microbiology, immunology, molecular biology, or consent of instructor. Seminar 1 hour.

Penska Small group tutorial in which special topics in virology and correlated reading will be selected for discussion by students and staff members.

STOMATOL

211. Saliva and Salivary Glands (2) F. Offered in alternate years; contact Oral Biology office for next offering. Prerequisite: Consent of graduate advisor and instructor. Seminar 2 hours.

Newburn Recent information on the composition, regulation, and function of the secretions from the major and minor salivary glands. Special consideration will be
Oxidative Stress/Oral Diagnosis

given to salivary gland dysfunction and its consequence. STOMATOL.

215. Laboratory Rotation. (6) F, W, Sp. Prerequisite: Consent of instructor. Lab 12 hours.
Staff
A laboratory rotation course to familiarize first-year graduate students with various approaches to research in Oral Biology: STOMATOL.

Staff
A seminar series covering current advances in research in oral biology in a systematic manner. Current literature will be critically reviewed by students under faculty supervision, or by faculty and guest lecturers. STOMATOL.

211. Extracellular Matrices. (2) F. Prerequisite: Consent of graduate advisor and instructor. Seminar 2 hours.

Dunsky
Assembly and composition of extracellular matrices, including instructions that occur between cells and matrices. Emphasis on the role of various extracellular matrix molecules during development, function of cell-matrix interactions in the adult, and the perturbations of these relationships that accompanies various disease processes. STOMATOL.

232. Mineralization. (2) W. Prerequisite: Oral Biology 231. Consent of graduate advisor and instructor. Seminar 2 hours.

Kramer
Recent information on cell biology and physiology of mineralized tissues, and cell biology and development of the cells that produce the extracellular matrices that are subsequently mineralized. Emphasis on progress of mineralization and the hormone regulation of mineral deposits and mobilization. STOMATOL.

233. Cell Physiology. (5) Su. Lecture 1.5 hours. Lab 0.5 hour.

Rodhammer, Sargent, A. Miller, Greenstreet
Survey of selected topics in cellular physiology, including discussion of cell permeability, electrical proprieties of cells, muscle conduction, secretion, and stimulus-response coupling. STOMATOL.

224. Host Response. (2) F. Prerequisite: Consent of graduate advisor and instructor. Seminar 2 hours.

Pereira
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) F, W. Prerequisite: Oral Biology 224 or consent of graduate advisor and instructor. Lecture 3 hours.

Armitage, Pereira, and Staff
Current information in parasitic mechanisms involved in oral diseases, with emphasis on the structure, metabolism, genetics and ecological relationships of bacteria and viruses that affect oral tissues. STOMATOL.

236. Advanced Oral Microbiology. (3) Sp. Prerequisite: Oral Biology 224 & 225 or consent of graduate advisor and instructor. Lecture 3 hours.

Armitage, Newman, Barteniit, Winkler, Johnson, Richards
Correlation of studies in oral microbiology began in Oral Biology 224. In-depth study of the structure, metabolism, genetics, and ecological relationships of bacteria, yeasts, and fungi that affect oral tissues. STOMATOL.

Staff
STOMATOL.

Staff
Students review a small group of related papers and examine intrinsically the most significant paper. Students will present four such journal clubs talks in their first two years. A written report will be required in the other quarters. STOMATOL.

Staff
STOMATOL.

Readings and conferences under the direction of a member of the staff. STOMATOL.

290. Thesis. (0-3) 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. STOMATOL.

300A-B-C. Teaching Practicum. (1-4, 1-4, 1-4) F, W, Sp. Prerequisite: Consent of instructor.
Staff
Practice in teaching in a course in oral biology under the supervision of the instructor in charge. STOMATOL.

Staff
A wide spectrum of selected topics related to oral biology is presented with emphasis on basic and applied research methodology, presentation of problems, significance of findings, and critical evaluation of data. STOMATOL.

Oral Diagnosis


Danford
Dental clinical problems solving, recognition and resolution. Clinical activities include review of medical and dental histories; examination of oral and paraoral structures; radiographic techniques, photography, interpretation, referral for appropriate medical or dental treatment; diagnosis and treatment of acute dental problems; management of the dental patient in pain, or desiring comprehensive dental treatment. STOMATOL.


Danford
Recognition and resolution of dental clinical problems. Emphasis is on management of the patient in pain during clerical hours and off hours after hours. Students will examine oral and para-oral structures; review case histories for clinical implications for dental therapy; prescribe, make and interpret dental radiographs; treat or refer to appropriate source. Senior students will take the place of teaching assistants for their junior partners. Seniors will present cases. STOMATOL.


Danford
In the clinical setting, the students review medical and dental histories; examine oral and para-oral structures; make interpretation of extra-oral radiographs; chart and present all findings; function as a team member in delivery of treatment of dental disease with the dental student-supervisor. Emphasis is on the first patient visit for routine or emergency care to the dental school. STOMATOL.

Staff
Advanced instruction and clinical experience in the diagnosis and treatment of acute dental problems. STOMATOL.

Oral & Maxillofacial Surgery

120. Local Anesthesia. (0.5) Sp. Lecture 1 hour.
R. Smith, Gordon, Perrott
Course covers local aesthetics and techniques as they pertain to the dentition and oral cavity. ORAL & MAX SURG.

130.01. Dentofacial Surgery. (0.5) Sp. Prerequisite: Anatomy 117.01, 117.02, and Microbiology 116. Lecture 1 hour. Laboratory 1 hour.
R. Smith, Gordon, Perrott
An introduction to the basic principles of osseous, dentofacial, orthognathic surgery, preoperative care, hematologic control, and management of common complications. ORAL & MAX SURG.

130.02. Pain & Anxiety Control. (0.5) F. Prerequisite: Anatomy 117.01, 117.02, and Microbiology 116. Lecture 1 hour.
R. 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 nitrous oxide and oxygen and intravenous sedation. ORAL & MAX SURG.

130.03. Diagnosis & Treatment of Oro-facial Pain. (0.5) 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 comprehensive review of the physical evaluation of the patient, temporomandibular joint dysfunction, myofascial pain, and neuralgic pain. ORAL & MAX SURG.

131. Reconstructive Oral & Maxillofacial Surgery & Implantology. (1) Sp. Prerequisite: Oral & Max Surgery 130.01, 130.02 and 150.03 or consent of instructor. Lecture 1 hour.
R. Smith, Kaban, N. Gordon
Procedural skills and academic knowledge the general dentist should be familiar with: includes prosthetic surgery and implantology, treatment of development problems and acquired deformities of the jaws, infectious, temporomandibular joint, fractures of the jaws and congenital structures, orthodontics. ORAL & MAX SURG.

132. Medical Emergencies & CPR. (0.5) F. Prerequisite: Thirty-day 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.

132. Oral & Maxillofacial Surgery. (0.5) F. Re-Registration: This course is offered for first-year dental hygiene students. Lecture 1 hour.
R. Smith, Walsh
The course offers the same lectures about prevention and management of common medical emergencies as are given to third-year dental students (OMFS 132). However, the prerequisites do not apply, and the academic standards are adjusted to the student's back-
ground. OMPS 152 does not include the CPR experience. ORAL & MAX SURG

N. S. Smith, Gordon, Charters
Clerked at UC, affiliated or other institutions. Students participate in oral surgery care of ambulatory and hospitalized patients and attend seminars and conferences. ORAL & MAX SURG

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

200. Intermed Clin Correlations. (1.5) Sp. First-year students enrolled in postgraduate professional programs in good academic standing. Lecture 2 hours.
Pogrel
Course focuses on critical analysis of theoretical, basic, and clinical concepts underlying the assessment and management of problems involving oral diseases, deformities, and dysfunctions. The application of research findings to clinical practice is stressed. ORAL & MAX SURG

47. Risk Management in Oral and Maxillofacial Surgery. (1) Sp. Prerequisite: Enrollment in the Oral and Maxillofacial postgraduate training program. Lecture 2 hours.
Pogrel & Staff
Course reviews malpractice insurance, risk management, and oral and maxillofacial procedures that are at high risk for litigation. ORAL & MAX SURG

47. Applied Surgical Anatomy. (1) F, W, Sp. Prerequisite: Limited to interns and residents. Lab 3 hours.
Pogrel, Perrone
Anatomical basis of surgical structures of the head and neck are studied during laboratory dissection. Emphasis is placed on the correlation of cranial, dissection findings to diagnosis and operating room surgery. ORAL & MAX SURG

Kaban, Pogrel, Perrone
Reviews will be taken up in evaluation and defining treatment options for patients with facial and dental deformities. ORAL & MAX SURG

Futuyama, Pogrel, R. Smith, N. Gordon, Dowson, Kaban
Seminar includes presentation of case studies, literature review, clinical pathology presentations, and occasional guest lectures. ORAL & MAX SURG

Kaban & Staff
Interns and residents, under supervision, are responsible for preparation of case records, laboratory work, preoperative patient preparation, attendance at surgery, postoperative care, and attendance at follow-up clinics. In addition, senior residents have administrative, teaching and clinical responsibilities. ORAL & MAX SURG

47. Clinical Methods. (6) Sr. Prerequisite: Enrollment in a postgraduate specialty program or consent of instructor. Lecture 2 hours. Patient contact 2 hours.
Pogrel & Staff
A history, physical, and diagnosis course for the patient admitted to a hospital or surgery center. Module 1 will consist of a didactic course, and module 2 will be a lab session where students master the techniques of clinical examination on each other. ORAL & MAX SURG

47. Clinical Methods II. (1-2) F. Prerequisite: Completion of OMPS 476 and approval of course director. Restricted to students enrolled in a postgraduate specialty program. Lecture 2 hours, patient contact 4 hours, for 4-6 weeks.
Pogrel, Perrone
Physical examination of hospitalized patients demonstrating a wide range of physical signs and symptoms. ORAL & MAX SURG

47. Oral & Maxillofacial Surgery Practice Management. (1) F. Prerequisite: Enrollment in a postgraduate specialty program or consent of instructor. Lecture 2 hours.
Pogrel, Staff
Provides OMPS residents a broad spectrum of practice management information such as association memberships, disability insurance, loans, OSHA requirements, computer, and billing. ORAL & MAX SURG

47. Oral Surgery. (1) SS1, SS2, F, W, Sp. Prerequisite: Enrollment in general practice residency or advanced education program in general dentistry. Clinic 3 hours.
R. Smith
Course is designed to teach dentofacial surgery, infection and intravenous solutions to residents in the oral surgery clinic. The trainee takes responsibility for care of the oral surgery patient including preoperative evaluation, surgery planning, and postoperative care. ORAL & MAX SURG

Oral Medicine

Greenbaum
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

Silverman
History-taking, differential diagnosis, and diagnosis. Signs, symptoms, diagnosis, and treatment of oral mucosal diseases with emphasis on oncology. Management problems and solutions. STOMATOL

Chilton, Zier and Staff
Group rotation through a five-week section: clinical diagnosis—patient presentation, reviewing history-taking, examination, diagnosis, treatment, and follow-up; and medicine—introduction to internal medicine and physical diagnosis. STOMATOL

180A-B-C. Clinical Oral Medicine Conference. (1.5-1.75) F, W. Prerequisite: Fourth-year standing. Conference 1 hour.
Lorinda-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

Staff
Participation in the Oral Medicine Clinic: application of knowledge of history-taking and differential diagnosis, utilizing various diagnostic techniques such as biopsy, cytology, and certain clinical pathology laboratory tests; interpret results, prepare treatment and follow-up; hospital rounds and weekly seminars. STOMATOL

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

200A-B. Oral Pathology Seminar. (3-3) F. Seminar 3 hours.
Dahnke
Lectures and seminars 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

200A-B. Oral Pathology Seminar. (3-3) F. Seminar 3 hours.
Dahnke
Lectures and seminars 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

132 133
Oral Radiology

131. Radiographic Interpretation. (3) Sp. Prerequisite: Oral Radiology 121. Lecture 1 hour. Staff Course is a continuation of Oral Radiology 121 and is intended to broaden the scope of radiographic interpretation. Additional aspects concerning radiation biology are also included. STOMATOL

186.01. Advanced Oral Radiology. (0–3) F, W, Sp. Prerequisite: Oral Radiology 121. Approval of Clinical Review Committee. Seminar 2–3 hours. Clinic 0–6 hours. Staff Continuation of Oral Radiology 121 and 131 in a seminar teaching format. STOMATOL

159. 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. STOMATOL

Orthodontics

121. Development of Occlusion. (1) Sp. Lecture 1 hour. Vargervik Course describes the mode of growth of the cranio-facial complex. General aspects of growth with clinical implications for the growing child are discussed, including the eruption of teeth and their correlation with facial growth. GR. DEVEL

131.01. Orthodontics in General Practice. (2) Su. Prerequisite: Orthodontics 121. Lecture 2 hours. R. Boyd, Nielsen, G. Young Recognition and treatment of orthodontic problems most commonly seen by the general practitioners. GR. DEVEL

131.02. Orthodontics in General Practice. (2) V. Prerequisite: Orthodontics 121. Lecture 2 hours. R. Boyd, Nielsen, G. Young Recognition and treatment of orthodontic problems most commonly seen by the general practitioners. GR. DEVEL

137.01. Clinical Orthodontics. (0–1) Su, F, W, Sp. Prerequisite: Orthodontics 121, 131.01 and 131.02. Orthodontics 131.01 or 131.02 may be taken concurrently. Clinic 3 hours. R. Boyd, G. Young Evaluation and treatment of clinical orthodontic problems as experienced in general dental practice. Students will treat problems and refer others to specialists. GR. DEVEL


Oral Radiology

170. A–B–D–E. Orthodontic Diagnosis. (1–1–1–1) SS1, SS2, F, W, Sp. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lecture 1 hour. R. Boyd Classification, etiology, and diagnosis of malocclusion. The various diagnostic modalities used in patient evaluation and treatment planning will be presented. GR. DEVEL

170.01A. B–C–C. Journal Club. (1–1–1) F, W, Sp. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Seminar 1 hour. Nielsen A participation course in the review, analysis, and critical evaluation of the professional literature dealing with orthodontics and its related fields. GR. DEVEL

171. Orthodontics in Periodontic Prog. (1) W. Prerequisite: Consent of instructor and enrollment in a postdoctoral specialty program. Lecture 1 hour. R. West Course includes orthodontic principles and techniques that are applicable in a periodontic practice. GR. DEVEL

171.01D. Concepts of Occlusion. (1) SS1. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Nielsen Various concepts of occlusion and its biological determinants will be discussed as they affect functional problems of the temporo-mandibular joint. GR. DEVEL

171.02A. B–C. Practice Management. (2–2–2) F, W, Sp. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lecture 2 hours. D. Johnson A survey course intended to prepare the student to deal with the realities of managing an orthodontic practice. Thirty-six topics are explored and discussed by students and faculty. Several visits representing different areas are invited to present guest seminars. GR. DEVEL

171.03. Orthodontic Appliances Therapy. (2) SS1. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lecture 2 hours. Scholz This course is designed to provide the skills necessary to select the appropriate functional appliance, design the appliance, instruct the laboratory in the making of the appliance, and manage the patient's treatment to a successful conclusion. GR. DEVEL

171.04A. B–C–D–E. Growth & Development. (1–1–1–1) F, W, Sp, SS1, SS2. Lecture 1 hour. R. Boyd Orthodontic applications and implications of basic craniofacial growth and development. GR. DEVEL

172A. B–C–D–E. Evaluation of Facial Form I. (2–2–2–2–2) F, W, Sp, SS1, SS2. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lecture 2 hours. Nielsen Use of diagnostic nomographs in the evaluation of dental and facial morphology is presented. Evaluation of morphological relationships, facial growth and development, skeletal maturation, the biological response to treatment modalities, and the complex interrelationship of these factors will be discussed. GR. DEVEL

172.01A–B–C. Research Design. (1–1–1) F, W, Sp. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lecture 1 hour. Baunardt Principles of statistics and research design will be explored. Topics include statistical inference, hypothesis testing, analysis of variance, correlation, and multiple regression. The design of experimental and quasi-experimental research will be discussed and experience in computer software used will be provided. GR. DEVEL

172.02. Independent Research. (0–3) SS1, SS2. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lund, Baunardt Independent research experience. GR. DEVEL

172.03A–B. Evaluation of Facial Form II. (2–2–2) F, W, Sp. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lecture 2 hours. Nielsen Course teaches diagnosis, treatment planning, and treatment of all types of malocclusions 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. (1–1–3) F, W, Sp. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lecture 1 hour. R. Boyd Postgraduate students in orthodontics, prosthetics, and general surgery will participate in evaluating and planning treatment for patients with marked and extensive deformities requiring combined surgical and orthodontic therapy. Periodic reviews and presentation of previously treated patients will be included. GR. DEVEL

173A.01A–B–C–D–E. Orthodontic Seminar. (3–3–3–3–3) F, W, Sp, SS1, SS2. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Seminar 3–3 hours. R. Boyd Evaluation and treatment planning of various types of malocclusions will be presented. The seminars will include discussions of various basic science, clinical science, and general biological principles, as they apply to the field of orthodontics. GR. DEVEL

173.02. Private Practice Seminar. (0–3) F, W, Sp. Prerequisite: First-year postdoctoral orthodontic program. Seminar 1 hour. Riggellis The 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) W, SS1, SS2. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lecture 2 hours. R. Boyd 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 Current literature in periodontics and orthodontics is reviewed and discussed. Current regulations involving treatment between the two specialties are discussed and evaluated by students and faculty. Emphasis is placed on the advances in investigative procedures and their impact on orthodontic practice. GR. DEVEL

174.02. Orthodontic Techniques. (1) SS1, SS2. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lecture 1 hour. Nielsen A lecture and participation course designed to familiarize the postgraduate student with orthodontic appliances, their fabrication, and adjustments. GR. DEVEL

175A. B–C. TMJ Pain & Dysfunction Seminar. (0–3) F, W, Sp. Prerequisite: Resident standing in Orthodontics. Seminar 1 hour. R. Lee This course will provide the resident with the basic cognitive skills for recognizing, diagnosing, and treating patients with TMJ pain, TMJ dysfunction, and cranial pain in a "team environment" (i.e., prosthodontist, orthodontist, oral surgeon, psychol- ogist, neurologist, ENT, physical therapist, etc.). GR. DEVEL

176A. 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 cranial pain in a "team environment" (i.e., prost...
Orthodontics / Orthopedic Surgery

thodontist, orthopedic, oral surgeon, psychologist, neurologist, ENT, physical therapist, etc.). GR. DEVIL.

179.01A-A-B-C-D-E. Clinical Orthodontics I. (0-7) SS1, SS2, F, W, Sp. Prerequisite: Enrollment in postdoctoral orthodontics or pediatric dentistry program or consent of instructor. Lab variable. Clinic 0-21 hours.
R. Boyd

diagnosis, 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. DEVIL.

179.03A-A-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.

Boyd

diagnosis, 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. DEVIL.

179.05A-A-B-C-D-E. Ortho General Instruction. (1-1-1-1-1) F, W, SS1, SS2. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Clinic 3 hours.
R. Boyd

evaluation and treatment of clinical orthodontic problems, as experienced in general dental practice. Postdoctoral students will assist and supervise general dental students in the diagnosis, evaluation, and treatment of orthodontic problems. Emphasis is on their relationship between generalist and specialist. GR. DEVIL.

R. Boyd

Fourth-year dental students will work closely with second-year orthodontic residents in the clinical management of patients requiring comprehensive orthodontic treatment delivered by the orthodontic specialist. GR. DEVIL.

Orthopaedic Surgery

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 include seminars to eight orthopaedic lectures, case presentations, and outpatient clinic assignments. Students are given instruction in methods of examination of patients with musculoskeletal disorders, with emphasis on diagnosis and principles of treatment.

140.01A-A-B-C-D-E. Clin Orthopaedic Surgery-UC-SFPGH 140.01A. Prerequisite: Surgery 110. Must be a senior.

D. Bradford, T. Smith

Students receive instruction and experience in examination and treatment of patients. Assistance in surgery in use of treatment modalities is required. Clinical demonstrations, seminars, and conferences form the basis for didactic instruction. ORTHO SURG

140.02. Off-Campus Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Surgery 110 and 111.

D. Bradford

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.

Carpenaide

Course will provide knowledge and skills in electrodiagnosis, orthopedic rehabilitation, spinal cord injury, closed head trauma, the rheumatoid patient, orthopedic rehabilitation, bariatric 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


Skinner

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 3-13 hours.

Skinner

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

401. Orthopaedic Pathology. (1) W, Sp. Prerequisite: Third- and fourth-year resident. UC J. Johnson

A lecture series covering tumors and infections of the musculoskeletal system, illustrated by anatomic slides and photographs of gross specimens. ORTHO SURG

402. Musculoskeletal System Physical. (1) F, W, Sp. Staff

Seminar cover connective tissue, musculoskeletal, 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 dissections of cadaver material, and demonstrations of surgical approaches. ORTHO SURG

404. Orthopaedic Literature. (F) W, Sp. Residents at C, DMC, SFPGH, SSF, UC and VA.

Staff

Seminar in literature 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 D. Bradford

D. Bradford

Orthopaedic 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 consultant. ORTHO SURG


H. Slabbaugh

Joint conference 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. SSF Skinner

Select patients 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


Course with emphasis on children's problems in which residents make case presentations of infants for review and evaluation of new patients for consideration of diagnosis and therapeutic plan. ORTHO SURG

411. Orthopaedic Surgical Conference. (1) Su, F, W, Sp. VA Mauer

VA Mauer

Conference includes review of admissions and discharges of hospitalized patients by the attending and consulting staff. Cases are presented by the resident. ORTHO SURG


SM Jensen

Seminars are held in rotation in each of these hospitals with residents from all three hospitals attending. They include literature review and demonstrations related to surgical approaches, anatomical directions, diagnosis, and treatment. ORTHO SURG


Staff

Conference includes presentation of case studies in hand surgery with control subjects for each section.


Residents are responsible for patient care in the wards and outpatient clinics including history-taking, physical examination, laboratory tests, elective surgery, fracture treatment, plaster techniques and consultations. ORTHO SURG

452. Traumatic & Adult Orthopedics. (1.5 per week) Su, F, W, Sp. SFPGH L. Day, SM Jensen, VA Maurer

H. Slabbaugh

Residents are responsible for patient care in the wards and outpatient clinics including history-taking, physical examination, 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 clinic practice under supervision as well as didactic lectures every third week. ORTHO SURG

490. Clinical Orthopaedics—SFPGH. (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 examination, X-ray conferences, and consultations. ORTHO SURG
Otology/Neurotology

Bolos
A practical course in general otology/neurotology including diagnosis and treatment of common ear, nose, and throat problems; both inpatient and outpatient experiences will be offered. OTOLARNYN

140.01B. Adv Otology/Neurotology Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 31A, B, C and Surgery 110.

Kaplan
A practical course in general otology/neurotology including diagnosis and treatment of common ear, nose, and throat problems; both inpatient and outpatient experiences will be offered. OTOLARNYN

140.01C. Adv Otology/Neurotology Clerkship-SFGH. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 31A, B, C and Surgery 110.

Wildes
A practical course in general otology/neurotology including diagnosis and treatment of common ear, nose, and throat problems; both inpatient and outpatient experiences will be offered. OTOLARNYN

140.01D. Adv Otology/Neurotology Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 31A, B, C and Surgery 110.

R. Wong
A practical course in general otology/neurotology including diagnosis and treatment of common ear, nose, and throat problems; both inpatient and outpatient experiences will be offered. OTOLARNYN

140.01E. Adv Otology/Neurotology Clerkship-NCMC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 31A, B, C and Surgery 110.

Staff
A practical course in general otology/neurotology including diagnosis and treatment of common ear, nose, and throat problems; both inpatient and outpatient experiences will be offered. OTOLARNYN

140.02. Off-Campus Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 31A, B, C and Surgery 110.

Bolos
Clinical clerkships in off-campus hospitals approved by the chairperson of the department and the dean. OTOLARNYN

140.03. Otolaryngology and Neurotology. (1.5 per week) Su, F, W, Sp. Prerequisite: Third or fourth year (fourth preferred).

Jackler, Schindler
A course in basic anatomic 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. OTOLARNYN

150.01. Research in Otology/Neurotology. (1.5 per week) Su, W, F, 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 of the Department of Otology/Neurotology. OTOLARNYN

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. OTOLARNYN

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. OTOLARNYN

Lectures cover the anatomical, physiological, and clinical aspects of otology/neurotology. OTOLARNYN

Kaplan
Didactic sessions in the surgical anatomy of the head and neck. Supplemental dissections included. OTOLARNYN

Bolos
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. OTOLARNYN

Bolos
A conference includes presentation of patients, study of histology, and discussion of the treatment of the patient in light of modern progress in the field.

Wildes
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, videos, didactic lectures, and anatomic dissections constitute the curriculum. OTOLARNYN

410. Temporal Bone Anot & Pathology. (0.5-0.5) F. Laboratory 2 hours.
Jackler
A laboratory course conducted in the ear, nose, and throat pathology laboratory. All residents staff members are required to familiarize themselves thoroughly with the microscopic anatomy of the temporal bone under normal and pathological conditions. OTOLARNYN

Kaplan

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Tumor cases are presented for diagnosis and recommendations for treatment. OTOLARNYN

VA Kaplan
Combined Audiology and Otology/Neurotology Staff Conference where all patients evaluated for hearing problems are presented and diagnosis and treatment recommendations are made. OTOLARNYN

415. Otology/Neurotology Fundamentals Course. (3) W. Seminar 3 hours.
Jackler, Kaplan, Sooy
A review of fundamental principles of otology/neurotology 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. OTOLARNYN

UC Bolos, SFGH Wildes, VA Kaplan, C.P. Bartlett
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. Senate resident has certain administrative, teaching, and clinical responsibilities. OTOLARNYN

Wildes
Interns, under supervision of the attending staff, are responsible for patient care on wards and in the follow-up clinics, including history-taking, examination, and consultation. This rotation is combined with patient-care assignments in the Ophthalmology Service. OTOLARNYN

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Parasitology

135. Medical Parasitology. (3) W. Lecture 2 hours. Lab demonstration 2 hours.

Haynesman and Staff
An introduction to the protozoan, helminth, and arthropod parasites that parasite man. Parasite ecology and disease epidemiology, clinical and diagnostic aspects of parasitic disease and their treatment are considered in lecture and laboratory. Emphasis in the laboratory is on demonstration. EPID and BIOSTAT

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Pathology

101. General & Systemic Pathology. (4) F. Prerequisite: Substantive courses in anatomy, biochemistry, physiology, histology, bacteriology, microbiology (or concurrent enrollment); concurrent enrollment in Medicine 152A. FM demands to be added to adequacy of preparation, consultation with the instructor. Lecture 3 hours. Lab 2 hours.

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135. General Pathology. (3) F. Prerequisite: Substantive courses in biochemistry, physiology, histology, microbiology (or concurrent enrollment). Students are encouraged to take this course early in the academic year. Laboratory 3 hours.

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135.01. General Pathology. (5) F. Prerequisite: Enrolled in academic program in Physical Therapy and completion of prerequisite coursework in human anatomy, physiology, and microbiology. Open only to students enrolled in the curriculum by consent of program director. Lecture 3 hours.

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139
Mechanisms and language of diseases are discussed, with emphasis on the dynamic nature of fundamental disease processes such as cell injury, immunopathology, inflammation, responses to infectious agents, repair and regeneration, hemodynamic arrangements, genetic disorders, disturbances of cell growth and metabolism. PATHOLOGY

150.01. Surgery and Autopsy Pathology. (1.5 per week) Su, W, F, Sp. Prerequisite: Pathology 101. Consent of instructor. Enrollment limited.

Forrest This clerkship is designed to acquaint 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 autopsy pathology similar to those of first-year residents.

150.02. Off-Campus Pathology Clerkship. (1.5 per week) Su, W, F, Sp. Prerequisite: Pathology 101 and 102.

Balinton Clinical clerkships in off-campus hospitals approved by the chairman of the department and the dean.

150.05. Research. (1.5 per week) Su, F, W, Sp. McKew, Parlow, Yen The staff of the Pathology Department has various ongoing research interests and has 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.

150.06. Surgical Pathology-VMMC. (1.5 per week) F, W, Sp. Prerequisite: Pathology 102 and consent of instructor.

H. M. Price, Dannenbrink Clerkship is designed to acquaint students with available techniques of tissue analysis, from light microscopy to immunocytochemical levels, and their application in diagnosis 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 the department. Third-year students. One-year program starting in the summer quarter.

Forrest This one-year course, with stipend (starting in Summer quarter), acquaints student-fellows 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. (1.0) Prerequisite: Courses in biochemistry, physiology, histology, microbiology and an introduction to immunology. Lecture 1 hour for ten weeks.

Friend Mechanisms of disease with emphasis on dynamic nature of fundamental disease processes: cell injury, immunopathology, inflammation, responses to infectious agents, repair and regeneration, hemodynamic arrangements, genetic disorders, disturbances of cell growth and metabolism. DENT/PUB MUIZ.

170.01. Clinical Cytology. (3) Sp. Prerequisite: Anatomy 102, Pathology 101 and 102. E. King, E. Hill 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 coplocoscopy and clinical findings on examination of the patient. PATHOLOGY

170.04. Anatomic Pathology Conference. (1) F, W, Sp. Prerequisite: Medicine 110 and Surgery 110. Conference 1 hour. Staff Presentation of selected current cases seen in the hospital pathology laboratory. Discussion of pathological findings, and correlation with clinical and radiologic findings and treatment. PATHOLOGY

170.05. Neuropathology. (2) W. Prerequisite: Pathology 102. Third- or fourth-year standing. Lecture and seminar 2 hours.

D. Davis, DeArmend Emphasis is placed on clinicopathologic correlation of neurelogical diseases by means of study of gross and microscopic material and participation in conferences. PATHOLOGY

170.08. Studies in Pathology. (1-5) Su, F, W, Sp Prerequisite: Consent of instructor and chairman of the department.

Staff Studies in pathology at other institutions with approval of the chairman of the department. PATHOLOGY

170.09. Clinico pathological Weekly Case. (1) W. Prerequisite: Pathology 101, enrolled in Pathology 102. Restriction: Second-year medical students. Seminar 1 hour. MARGARET, LEEB. A weekly case discussion conference at which students will generate a differential diagnosis, examine gross 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. McKewThe 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, immunopathology, immune deficiency diseases, tolerance, and autoimmune diseases. PATHOLOGY

170.11. Problems of Medical Delivery in White Androcentric Society. (1) W. Seminar 1 hour. Stern Frontier reading: 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 decolonizing patient dialogue intersects with medical care. PATHOLOGY

180.01. General Pathology. (3) F. Prerequisite: Anatomy 118. Lecture 3 hours. Stern This course is identical to the lecture portion of Pathology 126. Elective in the dental hygiene curriculum. PATHOLOGY

198. Supervised Study. (1-5) F, 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 chairman of the department. PATHOLOGY

199. Laboratory Project. (1-5) 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. PATHOLOGY

209. Applied Pathology. (2) W. Prerequisite: Microbiology 122A. B and Pathology 126 or equivalent.

J. Greenman Weekly seminars are designed to provide students with an understanding of the basic principles of pathology. Emphasis is placed on research, students will critically review current literature in the field, under faculty supervision. PATHOLOGY

211. Laboratory Rotations. (3) F, W, Sp. Prerequisite: Consent of instructor. Lab 5 hours. Parlow A laboratory rotation course, to familiarize students with various approaches to experimental pathology and research in the basic medical sciences, particularly in relation to human disease processes. Intended primarily for first-year graduate students. PATHOLOGY

225. Connective Tissue Research Sem. (4) F, W, Sp. Seminar 3 hours. 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

236. Experimental Pathology Seminar. (2) F, W, Sp. Prerequisite: Permission of the graduate advisor.

of the department. Lecture 1 hour. Seminar 1 hour. Parlow 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. A designated reading in this lecture will be assigned before class. There will be formulation of take-home hypotheses and discussion of an experimental design led by a student leader at each session. PATHOLOGY

240. Concepts in Parasitic Diseases. (4) W. Lecture 2 hours. Seminar 2 hours. Babatola, Sakamoto, Therriault This course is for students interested in learning current issues 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. PATHOLOGY


270. Molecular Biology of Human Disease. (3) J. Prerequisite: Open to graduate students, house staff, and MSTP students. Lecture 1 hour, seminar 2 hours. McKew The course is designed to provide students with an up-to-date survey of our knowledge of molecularists with particular emphasis on applications of techniques of molecular and cell biology to understand both the pathogenesis and genetics of the disease. PATHOLOGY

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

Staff For graduate students engaged in writing the thesis for the master's degree. PATHOLOGY

290. 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. PATHOLOGY

301. Teaching Practicum. (0) F, W, Sp. Prerequisite: Consent of instructor. Lecture 3 hours. Lab 2 hours. Forrest 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. PATHOLOGY

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 (Units to be arranged): Su, F, W, Sp. Interns and residents.

Staff
A 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 pathologic findings. PATHOLOGY


Staff
Students, under supervision, pursue original investigation in pathology and allied subjects. Investigations review the literature, make observations, and correlate pathological with pathological concepts. PATHOLOGY

405. Dermatopathology. (2) F, W, Sp. Prerequisite: Pathology 101 or equivalent by consent of instructor. Lab 2 hours. Seminar 1 hour.

Sagehill
Survey of inflammatory and neoplastic skin diseases by study of histopathological changes and discussion with emphasis on clinical-pathological correlations. PATHOLOGY


Staff
The theory and methodology of pathologic anatomy, interpretation and correlation of data, and study of histology. PATHOLOGY

455. Electron Microscopy Seminar. (1) W. Prerequisite: Medicine 110 and Surgery 110 and consent of instructor. Lecture 1 hour. Elective for interns 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 & CHMC. (5-6) Su, W, F, Sp. Prerequisite: Four-year standing and satisfactory completion of Preventive Dentistry 130C. Clinic 6 hours per week.
Brahman, and Staff
Oral examination, treatment planning, treatment of children, including behavioral management. Time will be spent at Pediatric Dental Clinics at UCSCF and Children's Hospital Medical Center, Oakland. Course will involve clinic, seminar, and treatment in hospital operating room with general anesthesia. GR, DEVEL

170D-E. Intro to Ped Dent. (2-2) SS1, SS2. Prerequisite: Enrollment in postdoctoral pediatric dentistry program or consent of instructor. Lecture 2 hours.
Lawson and Staff
Course is offered to the incoming postdoctoral student as an introduction to the philosophies and techniques of rendering dental care to patients in pediatric dentistry. GR, DEVEL

171A-C. D-C-D-E. Advanced Ped Dent Sem. (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.
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) SS1, SS1. Prerequisite: Enrollment in postdoctoral pediatric dentistry program or consent of instructor. Lecture 1 hour.
Rotnham
Course is designed to provide knowledge of clinical pediatrics. This includes pediatric and clinical examination in history-taking and physical diagnosis. GR, DEVEL

172A. B-C-D-C. Pediatric Medicine. (1-1) F, W, Sp. Prerequisite: Enrollment in postdoctoral pediatric dentistry program or consent of instructor. Lecture 1 hour.
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

172C. Clinical Uses of Fluorides. (2) Sp. Prerequisite: Enrollment in postdoctoral pediatric dentistry program or consent of instructor. Lecture 1 hour.
Seminar 1 hour.
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

173B-C. Dentistry for the Disabled. (1-1) W, Sp, SS1, SS2. Prerequisite: Enrollment in postdoctoral pediatric dentistry program or consent of instructor.
Morris and Staff
Course covers 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. Lith 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.
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 pediatric dentistry for the child patient. GR, DEVEL

176A-B-C-D-E. Practice Teaching. (1.5-1.5-1.5-1.5-1.5) F, W, Sp, SS1, SS2. Prerequisite: Enrollment in postdoctoral pediatric dentistry program or consent of instructor. Seminar 1 hour. Clinic 1.5 hours.
Morris and Staff
Course is designed for the junior and senior dental students in the pediatric dental clinics. In addition, the student will teach selected topics in a seminar format. GR, DEVEL

177B-C. C-D-B-C. Hospital Dentistry. (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.
Morris and Staff
Course is specifically designed to provide the student with a working knowledge of dental rehabilitation procedures in a hospital operating room under general anesthesia and the associated hospital protocol. GR, DEVEL

177A-B-C-D-E. Conscious Sedation. (1-1.5-1.5-1.5-1.5-1.5) 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 the instructor. The student will administrate the medications and monitor the patients before, during, and after the procedure. GR, DEVEL

178A-B-C-D-E. Research Seminars. (2-2-2-2-2) F, W, Sp, SS1, SS2. Prerequisite: Enrollment in postdoctoral pediatric dentistry or orthodontic program or consent of instructor. Lab 2.5 hour. 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 proposal and completion of a research project. GR, DEVEL

179A-B-C-D-E. Advanced Clinical Ped Dent. (1-10) 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 dental diagnosis and treatment. Students must demonstrate clinical competence in care for the special child. GR, DEVEL

179B-C-D-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.
Rotnham 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

180A-B-C-D-E. Pediatric Hospital Dent. (0-3) F, W, Sp, SS1, SS2. Prerequisite: Enrollment in postdoctoral pediatric dentistry or orthodontic program or consent of instructor. Clinical 3-6 hours per week in Hospital O.R. Brahman

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 orthodontic management cases, using a general anesthetic. GR, DEVEL

Ramos
Seminar on advanced pediatric dentistry, covering behavior and behavioral management techniques, advances in pediatric dental restorative techniques and materials, dental management of the special patient, preventive orthodontics. Emphasis on literature reviews. Course is of particular interest for students.
Pediatrics

140.01A. Ambulatory Pediatrics–UC (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

140.01B. Ambulatory Pediatrics–SPGH–CHCM (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

140.01C. Pediatric Critical Care–UC (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Consent of instructor.

140.01D. Outpatient Pediatric Clinic–CHCM (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Consent of instructor.

140.01E. Inpatient Pediatric Clinic–SPGH-CHCM (1.5 per week) Su, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

140.01F. Outpatient Pediatric Clinic–KP (1.5 per week) Su, T, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Consent of instructor.

Students are assigned patients under supervision of attending and resident staff. They present patients on wards, assist with procedures, and attend specialty conferences when their patients are being discussed, as well as all daily formal teaching conferences. PEDIATRICS.

140.01G. Inpatient Pediatric Clinic–KP (1.5 per week) Su, T, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

140.01H. Ambulatory Pediatrics–NRMC (1.5 per week) F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. One student per rotation.

140.01I. Intensive Care Nursery–UC (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

140.01J. Neonatology–SPGH–CHCM (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

140.01K. Neurourology–SPGH–CHCM (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

140.01L. Pediatric Dermatology–CHCM (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. One student per rotation.

140.01M. Pediatric Critical Care–UC (1.5 per week) Su, T, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. One student per rotation.

140.27. Episodic Pediatric—KP. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

140.28. Sooner. Within the country’s largest prepaid health care program, students will participate in office visits, urgent ambulatory care, education, and support. They will work with staff and resident physicians, nurses, practitioners and health educators. PEDIATRICS.

140.29. Inpatient Pediatrics—VCM. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110, Pediatrics 110 and consent of instructor.


140.31. Pediatric Critical Care—VCM. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

140.32. Neonatal Care—C. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Consent of instructor.

140.33. Pediatric Immunology/Rheumatology. (1.5 per week) Su, F, W, Sp. Prerequisite: Pediatrics 110 and Medicine 110, and consent of instructor.

140.34. Medical Genetics. (1.5 per week) Su, F, W, Sp. Prerequisite: 4th-year standing.

140.35. Infectious Diseases—UC & SFHG. (1.5 per week) Su, F, W, Sp. Prerequisite: Pediatrics 110.

140.36. Advanced Elective Adolescent Medicine—ORMC. (1.5 per week) F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. One student per rotation.

140.37. Clinical Clerkship in Adolescent Medicine. (1.5 per week) Su, F, W, Sp. Prerequisite: Completion of basic clinical clerkship. Open to fourth-year medical students only.


140.39. Summer: Students are included in all phases of a comprehensive evaluation for a child with school and learning problems. Physical, neurological, psychological, speech and language, and educational assessment as well as child and family interviews provide a solid biopsychosocial perspective. PEDIATRICS.


Student research projects under guidance of faculty members. Programs must be approved by instructors.

Pediatrics
Students may initiate or continue research programs under supervision of faculty members. PEDIATRICS.

160.01. Clinical Correlation in Peds—UC. (2) Su, F, W, Sp. Prerequisite: Consent of instructor.

160.02. Primary School Health Education. (1-2) F, W, Sp. Prerequisite: Consent of instructor. Amends of initial orientation by the curriculum department of the San Francisco Unified School District, scheduled at the end of the session. Field week 3 hour plus class participation. Topic paper optional with consent of instructor for 2 units.

170.01. Health Professional and Nuclear Wastewater. (2) Summer 2 hours.

170.02. Seminar on Nuclear Weapons Effects, Technology and Strategy, and the Implications of These for Health Professors. PEDIATRICS.

180.01. Behavioral Genetic: (1.5) W, Sp. Prerequisite: Pediatrics 110 or equivalent. Seminar 1 hour.


Irwin
A four-quarter course covering the psychologic, physiologic, social and cognitive development of children. Also included is material on sexuality, nutrition, family interaction, cultural differences, legal issues, school behavior, substance abuse and psychiatric problems, and common medical problems. PEDIATRICS.
198. Supervised Study. (1-5) F, W, Sp. Prerequisite: Consent of instructor.
Grumbach and Staff
Library research and directed reading under supervision of a member of the faculty with the approval of the chairman 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 chairman of the department. PEDIATRICS

400. Staff Conference. (1.5) Sa, Su, W, Sp. Interns and residents.
UC Rudolph
Meetings are held during the year to discuss a variety of special topics and developments, as well as to enhance understanding of the health sciences. PEDIATRICS

UC Rudolph
A group of consultants in the health sciences is available to all members of the staff. PEDIATRICS

UC Rudolph
A weekly seminar is held to discuss selected cases of clinical interest. PEDIATRICS

Baum and Staff
Seminars include lectures, seminars, and clinic supervision. PEDIATRICS

Boyce 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: Post-3rd year student or graduate teaching assistant and consent of instructor. Seminar 6 hours.
P. Kaiser and Staff
Lectures and discussion of child development theory, clinically relevant research, and related common behavioral issues. Emphasis is on understanding the impact of behavior on child development. PEDIATRICS

463. Clinical Primary Care. (1.5 per week) Su, F, W, Sp.
Rudolph
Residends in the Primary Care Track of Pediatrics are responsible for patient care in a multiprogram primary care clinic. Other rotations include those common to the regular Pediatrics Residency Program as well as related clinical services such as dermatology, ophthalmology, and pediatrics. PEDIATRICS

464. Clinical Primary Care. (1.5 per week) Su, F, W, Sp.
Rudolph
Residends in the Primary Care Track of Pediatrics are responsible for patient care in a multiprogram primary care clinic. Other rotations include those common to the regular Pediatrics Residency Program as well as related clinical services such as dermatology, ophthalmology, and pediatrics. PEDIATRICS

M. Groesser
Interns rotate through newborn nursery, pediatric wards, and clinic, communicable disease ward, and emergency room. They are responsible for the care of patients under the direction of the attending staff, including history-taking, physical examination, laboratory tests, and consultation. PEDIATRICS

UC Grumbach
Interns, under supervision, are responsible for patient care in the wards and outpatient clinic, including history-taking, physical examination, laboratory tests, and diagnosis. PEDIATRICS

Periodontology
Levine
Introduction to the periodontal disease process. PEDIATRICS

Levine
Diagnosis and treatment of periodontal diseases, including acute lesions, less common disease of the periodontium, and moderate to advanced periodontitis. PEDIATRICS

178A-B-C. Histopathology of Periodontium. (2-2-2) F, W, Sp. Lecture 1 hour; Lab 3 hours.
Dietlein (F. W), Ryder (Sp)
Histopathology and its role in the periodontal diseases. STOMATOL

Raszt
Study in depth with literature review and seminar discussions on surgical techniques used to treat lesions involving the hard and soft tissues of the periodontium. STOMATOL

180. Periodontics in General Practice. (1) W. Lecture 1 hour.
Nadash
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. Aze
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 132 and consent of instructor. Seminar 2 hour. Aze
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. Aze
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. Levine
Surgical techniques are presented which may be used to treat lesions occurring in the hard and soft tissues of the periodontium. STOMATOL

182. Multidisciplinary Case Management. (3) W. Prerequisite: Periodontics 132. 2 hours/week over 5 sessions. Engert, Pasquini
An introduction to the concepts of comprehensive dental care through the integration of the clinical disciplines. The relationship between periodontics, orthodontics, and restorative dentistry will be emphasized. Predictable long-term results are the therapeutic objective of this approach. STOMATOL

A continuation of clinical experience beyond the level of Periodontics 199. STOMATOL

199. Laboratory Project. (1-5) So, F, W, Sp. Armitage
A laboratory research project under direction of a member of the faculty with the approval of the chairman of the department. STOMATOL

Elements of experimental design, statistical inference, and methods of laboratory and clinical research. STOMATOL

202A-B. Molec & Biochem Basis of Disease. (2-2) F, W, Sp. Prerequisite: Biochemistry 100A-B or equivalent introduction to biochemistry. Lecture 2 hours. Seminar 1 hour. Bhattacharjy

Course reexamines students to the principles of biochemistry and molecular biology in relation to current concepts in the molecular basis of major disease entities including cancer, metabolic disorders, fibrotic and degenerative disorders of connective tissues, inflammation, and wound healing. STOMATOL

209. Literature Review. (2) F, W, Sp. Seminar 2 hours. Staff
Seminar designed to correlate basic sciences with problems in periodontology and evaluate concepts in the direction of research, clinical application, and teaching. Selected papers in the literature are reviewed and evaluated. Other instructors are invited to participate. STOMATOL

401. Examination & Treatment Planning. (1) F. Prerequisite: Enrollment in postgraduate specialty program or consent of instructor. Taggart
Lectures on examination and treatment planning. STOMATOL

401.01 Structure and Physiology of the Periodontium. (2) F. Prerequisite: Enrollment in postgraduate specialty program. Lecture 2 hours. Ryder
Advanced study in the oral tissues, with emphasis on their histopathological aspects. STOMATOL

Course covers anatomy as it relates to anesthesia and periodontal surgery. STOMATOL

406.01. Hospital Anesthesiology. (4) Sp. Prerequisite: Consent of instructor. Seminar 1 hour. Clinic 16 hours. Bhattacharjy
Practical course in operating room anesthesia. Instruction in hospital administration, physical and preanesthesia evaluation of the patient, monitoring of vital signs, administration of intravenous anesthesia, general anesthesia, and handling of resultant medical emergencies. Clinical instruction is supplemented by seminars. STOMATOL

406.02. Hospital Periodontics. (4) Sp. Prerequisite: Perio 419.01. Lecture 4 hours. Taggart
Clinical periodontology integrated into the regular medical and rehabilitative activities of the hospital. Course provides students with quality dental care, appreciation for preventive dentistry, and concept of total health care. Students are exposed to various medical conditions. STOMATOL

406.03. Hospital Periodontics. (4) W. Prerequisite: Perio 419.02. Lecture 4 hours. Bhattacharjy
Clinical periodontology integrated into the regular medical and rehabilitative activities of the hospital. Course provides patients with quality dental care, appreciation for preventive dentistry, and concept of total health care. Students are exposed to various medical conditions. STOMATOL

406.04. Hospital Periodontics. (4) W. Prerequisite: Perio 419.03. Lecture 4 hours. Bhattacharjy
Clinical periodontology integrated into the regular medical and rehabilitative activities of the hospital. Course provides patients with quality dental care, appreciation for preventive dentistry, and concept of total health care. Students are exposed to various medical conditions. STOMATOL

413.01. Treatment Planning & Surgery. (1) F. Seminar 1 hour. Bhattacharjy
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 plans and therapeutic procedure based on relevant literature and clinical experience. STOMATOL

413.02. Treatment Planning & Surgery. (1) W. Seminar 1 hour Taggart
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 plans and therapeutic procedure based on relevant literature and clinical experience. STOMATOL

413.03. Treatment Planning & Surgery. (1) Sp. Seminar 1 hour. Bhattacharjy
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 plans and therapeutic procedure based on relevant literature and clinical experience. STOMATOL

413.04. Treatment Planning & Surgery. (1) SS1. Seminar 1 hour. Bhattacharjy
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 plans and therapeutic procedure based on relevant literature and clinical experience. STOMATOL

414.01. Original Investigation. (1-5) F. Prerequisite: Enrollment in postgraduate specialty program or consent of instructor. Lab 3-15 hours. Armitage
Original research under the supervision of a mentor. STOMATOL

416.02. Original Investigation. (1-5) W. Prerequisite: Enrollment in postgraduate specialty program or consent of instructor. Lab 3-15 hours. Armitage
Original research under the supervision of a mentor. STOMATOL

Armitage
Original research under the supervision of a mentor. STOMATOL

416.03. Original Investigation. (1-5) Sp. Prerequisite: Enrollment in postgraduate specialty program or consent of instructor. Lab 3-15 hours. Armitage
Original research under the supervision of a mentor. STOMATOL

419.01. Clinical Periodontics. (5) F. Prerequisite: Enrollment in postgraduate specialty program. Clinic 15 hours. Taggart
Clinical procedures in periodontology. STOMATOL

419.02. Clinical Periodontics. (5) W. Prerequisite: Enrollment in postgraduate specialty program. Clinic 15 hours. Bhattacharjy
Clinical procedures in periodontology. STOMATOL

419.03. Clinical Periodontics. (5) F. Prerequisite: Enrollment in postgraduate specialty program. Clinic 15 hours. Bhattacharjy
Clinical procedures in periodontology. STOMATOL

419.04. Clinical Periodontics. (5) SS1. Prerequisite: Enrollment in postgraduate specialty program. Clinic 15 hours. Bhattacharjy
Clinical procedures in periodontology. STOMATOL

423.01. Adv Treatment Planning & Surgery. (1) F. Seminar 1 hour. Taggart
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 plans and therapeutic procedure based on relevant literature and clinical experience. STOMATOL

423.02. Adv Treatment Planning & Surgery. (1) W. Seminar 1 hour. Taggart
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 plans and therapeutic procedure based on relevant literature and clinical experience. STOMATOL

423.03. Adv Treatment Planning & Surgery. (1) Sp. Seminar 1 hour. Bhattacharjy
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 plans and therapeutic procedures based on relevant literature and clinical experience. STOMATOL
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. (5) F. Prerequisite: Pharmacological Chemistry 120. Lecture 3 hours.
Gilbain 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: Pharmacological 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. Radiobiology in Biol/Med/Pharm. (3) F. Prerequisite: Consent of Instructor. Lecture 2 hours.
Pung Discussion on radionuclides in frequent use in biology and medicine including radionuclides used in pharmacological studies, with emphasis on dosage form design, quality control, clinical application, and other related aspects. PHARM CHEM.

157. Bioanalytical Theory & Techniques. (3) W. Lecture 2 hours. Lab 3 hours.
B. Lian Analytical theory and techniques for determining drugs and metabolites in biological fluids. PHARM CHEM.

176. Group Studies. (1-4) F. W. Prerequisite: Consent of instructor and advisor.
Abagnal Group studies of selected topics in pharmaceutical chemistry. PHARM CHEM.

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

Luban research directed toward supervision of a member of the faculty with the approval of the chairperson of the department. PHARM CHEM.

199. Laboratory Project. (1-3) F. W. Staff

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

201A. Basic Principles of Medicinal Chemistry. (3) F. Lecture 3 hours.
Burkman Introduction to basic principles of medicinal chemistry, with focus on physicochemical aspects of drug-target interactions, structure and biology of drug receptors, drug metabolism, bioconversion, and pharmacokinetics and drug targeting. PHARM CHEM.

201B. Medicinal Chemistry & Pharmacology of Major Drug Classes. (2) W. Lecture 2 hours.
Sandra A review of major drug classes with application of the basic principles of medicinal chemistry and pharmacology. PHARM CHEM.

202A. Topos in Protein Structure. (2) F. W. Prerequisite: Consent of instructor. Offered in alternate years (alternate with 202B). Offered 1992-93. Lecture 2 hours.
Shafer, Shearer, James Principles and recent advances in protein structure, including experimental and theoretical approaches. PHARM CHEM.

202B. Topics in Nucleic Acid Structure. (2) F. W. Prerequisite: Consent of instructor. Offered in alternate years (alternate with 202A). Not offered 1992-93. Lecture 2 hours.
Shafir Principles and recent advances in nucleic acid structure, including experimental and theoretical approaches. PHARM CHEM.

204. Introduction to Computer Programming. (3) F. W. Prerequisite: Consent of Instructor. Lecture 3 hours.
Pettit An introduction to computer programming using the C language and the UNIX operating system. During the course, students learn to write, test, and debug programs of increasing complexity. Emphasis is on the basic principles in writing well-structured and modular code. PHARM CHEM.

205. Molecular Biochemistry. (3) F. Lecture 3 hours.
Crank The emphasis of the course will be on modern principles concerning structure and functional aspects of nucleic acid and protein; molecular biotechnical methodologies that focus on topics of pharmacological interest; basic theories of molecular biology, plasmids, bacteriophages, nucleic acid and protein characterizations, site-directed mutagenesis, hybridization and automated micromethods for protein and nucleic acid sequence determination. PHARM CHEM.

206. Laboratory Rotation in Pharmaceutical Chemistry. (1-3) F. W. Prerequisite: Consent of instructor. Lab 2-5 hours.
Staff A laboratory rotation course to familiarize new departmental graduate students with various approaches to research in the pharmaceutical sciences. PHARM CHEM.


Ona A basic study of the concentration-time course of drugs in the body, methods of pharmacokinetic analysis and modeling, and discussion of pharmacokinetic/physiologic interactions. Opportunities to attend workshops emphasize problem-solving in pharmacokinetics. PHARM CHEM.

214. Adv Kinetics of Absorption & Disposition. (3) F. W. Prerequisite: Pharmaceutical Chemistry 213 and Biochemistry 202 or equivalent. Lecture 2 hours. Lab 1 hour.
Benet Advanced consideration of pharmacokinetics including multicompartment models, assessment of kinetic 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. (3) F. W. Prerequisite: One quarter of physical chemistry, kinetics and pharmacology, or consent of instructor.
Hunt The physical, chemical, biotechnological, 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.

220. Research Conf In Pharmacokinetics. (1) F. W. Lecture 1 hour.
Brookly, Hoist 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. 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.

222. Physical Chemistry Seminar. (1) F. W. Prerequisite: Consent of instructor. Lecture 1 hour.
Kutsie and Staff Topics of current research interest in physical and biophysical chemistry. PHARM CHEM.

225-A-B. Graduate Research Opportunities. (1-5) F. W. Prerequisite: Graduate standing in the Department of Pharmaceutical Chemistry. Lecture 1 hour.
Peng, Hawkes 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 interests of several groups. PHARM CHEM.
Pharmaceutical Chemistry/Pharmacology

the Department of Pharmaceutical Chemistry.

Kuntz

The theory and application of molecular electronic and vibrational spectroscopy; optical rotation dispersion and circular dichroism. PHARM CHEM

230A. Spectroscopy. (3) S. Prerequisite: Chemistry 162 or equivalent. Lecture 3 hours.

Kuntz

Theory and application of molecular electronic and vibrational spectroscopy; optical rotation dispersion and circular dichroism. PHARM CHEM

230B. Spectroscopy. (3) F W or W S. Lecture 3 hours. Offered in alternate years. Not offered 1992-93.

T. James

Theory and application of nuclear magnetic resonance and electron-spin resonance. PHARM CHEM

230C. Spectroscopy. (2) W. Lecture 3 hours. Lab 2 hours.

Banos

Laboratory work in nuclear magnetic resonance. PHARM CHEM

231. Nuclear Magnetic Resonance. (3-4) W. Prerequisite: undergraduate physics or physical chemistry. Chemistry 262 is recommended. Lecture 2-4 hours.

T. James

Theory and application of nuclear magnetic resonance. Following a basic core of lectures, lecture modules may be selected covering high-resolution two-dimensional NMR, magnetic resonance imaging, and in vivo magnetic resonance spectroscopy. PHARM CHEM

235. Mass Spectrometry in Life Sci. (2) F. Prerequisite: Consent of instructor. Lecture 2 hours.

Burke

Mass spectrometry of molecule structure, characterization of structure, and quantitative measurements. Presentation of basic tools, concepts, and strategies in the complementary usage of currently available techniques in general biochemical and biomedical research. PHARM CHEM

236. Transport & Resection Processes. (3) Sp. Prerequisite: Chemistry 260. Lecture 3 hours.

Guy, Siegel

Basic principles applicable to transport and resection processes in model membrane and biological systems. PHARM CHEM


Soska, Guy

Biophysical consideration of membrane structure; passive and active transport mechanisms and implications for targeted and controlled drug delivery. PHARM CHEM


Siegel

Chemistry and physics of polymers relevant to the design and function of programmable drug delivery systems. PHARM CHEM

Pharmacology

101A-B, Medical Pharmacology. (4-4) W, Sp. Prerequisite: Biochemistry 100A-B or equivalent; Physiology 120 and 125 or equivalent. Lecture 3 hours. Conference 2 hours.

Katz

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 Pharmaceutical Chemistry 121. Lecture 1 hour.

Burke

Systematic survey of action and uses of drugs with emphasis on steroids, hormones, and drugs for metabolic disorders. PHARMACOL

122. Pharmacology & Toxicology. (4) Sp. Prerequisite: Biochemistry 100A-B and Physiology 120 and 125. Lecture 3 hours. Conference 2 hours.

Burlaker

Systematic survey of action and uses of drugs acting on autonomic nervous and cardiovascular systems and the kidneys. PHARMACOL


Trevor

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

130. Clinical Toxicology. (2) Sp. Prerequisite: Pharmacology 125 and 136. Lecture 2 hours.

Burkholder

The occurrence, mode of action, recognition, and treatment of poisoning by environmental chemicals and therapeutic agents. PHARMACOL

134. Pharmacology. (2) W. Prerequisite: Concurrent enrollment in Pharmaceutical Chemistry 134. Lecture 2 hours.

Burkholder

Systemic survey of action and uses of anti-inflammatory and anti-tumor drugs. PHARMACOL

136. Pharmacology & Toxicology. (4) F. Prerequisite: Pharmacology 125. Lecture 3 hours. Conference 2 hours.

Burkholder

Systematic survey of action and use of drugs acting on the central nervous system. PHARMACOL

150. Pharmacology Research. (3 per week) Sp, F, W, Sp. Prerequisite: Consent of instructor. Lecture and lab to be arranged.

Staff

Students perform individual research in a field of their choice under the guidance and supervision of a member of the faculty. PHARMACOL


Staff

Group studies of selected topics in pharmacology. PHARMACOL

198. Supervised Study. (1-5) F, W, F. Sp. Prerequisite: Admission 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. (8) F, W. Prerequisite: Advancement to candidacy and permission of the graduate adviser.

Staff

For graduate students engaged in writing the thesis for the Ph.D. degree. PHARMACOL

300A-B-C, Teaching Practicum. (1-3, 1-3, 1-3) F, W, Sp. Prerequisite: Admission to candidacy for the Ph.D. degree. Staff Opportunity is provided to participate in a formalized way in the teaching of pharmacology under the direction of the faculty. PHARMACOL

Pharmacy

111. Non-Prescription Products. (1) W. Conference 2 hours.

Lau, Yee

Evaluation and comparison of non-prescription

154
medications and appliance. Discussion on their pat-
terns of use in the community is included. Emphasis is on
oral communications. PHARMACY

112. Non-Prescription Drugs. (3) Sp. Prerequi-
tate: Pharmacy 111. Conference 2 hours.
Lenz, Yee
Continuation of Pharmacy 111. PHARMACY

114. Biopharmaceutics & Phys Pharm. (3) F. Prerequi-
tate: Concurrent enrollment in Chemistry 115. Lecture 3 hours.
Hooser
A study of the physical, chemical, and biological fac-
tors which interact and dominate the design of dosage
forms as drug delivery systems, including introduc-
tion to the analysis of clinical data. PHARMACY

115. Biopharmaceutics & Phys Pharm. (4) W. Prerequi-
tate: Pharmacy 114 and concurrent enroll-
ment in Chemistry 116. Lecture 3 hours. Lab 3 hours.
C. Hunt
Continuation of Pharmacy 114 with the addition of
laboratory preparatory of basic drug delivery systems. PHARMACY

116. Biopharmaceutics & Phys Pharm. (4) Sp. Prerequi-
tate: Pharmacy 115. Lecture 3 hours. Lab 3 hours.
Sokol, Guy
Continuation of Pharmacy 115. PHARMACY

121. Non-Prescription Drugs. (3) F. Prerequi-
tate: Pharmacy 112. Conference 2 hours.
Lenz, Yee
Continuation of Pharmacy 112. PHARMACY

127. Biopharmaceutics & Dispensing. (6) F. Prerequi-
tate: Pharmacy 116 and Pharmacy Admini-
stration 112. Lecture 2 hours. Lab 6 hours.
R. Day
Continuation of Pharmacy 116 with the addition of
training in the professional and dispensing aspects of
pharmacy. PHARMACY

128. Pharmacokinetics. (3.5) W. Prerequisite:
Pharmacy 116. Lecture 3 hours. Conference 1.5 hours.
Hooser
Course covers the pharmacokinetic basis of variability in
the therapeutic, pharmacologic, and toxicologic effects of drugs. PHARMACY

129. Pharmacokinetics. (3.5) Sp. Prerequisite:
Pharmacy 128. Lecture 3 hours. Conference 1.5 hours.
Lenz
Course is designed to train students for participation
in community health programs dealing with drug
abuse education and other drug-health related areas,
such as poison prevention, venereal disease, and birth
control. Course may be repeated for credit. PHARMACY

152. Special Topics in Pharmacology. (2) Sp.
Prerequisite: Pharmacy 116 or concurrent enroll-
ment. Lecture 2 hours.
Zolak
An intermediate course offering opportunity to
explore, in greater depth, special drug delivery sys-
tems and some fundamental relationships involved in
their design or action. PHARMACY

154. Percutaneous Absorption. (2) W. Prerequi-
tate: First-year standing. Lecture 2 hours.
Wester, Guy
Course presents material dealing with the penetration of
drugs and other chemicals across the skin. PHARMACY

165. External Drug Products. (3-4) W. Sp. Prer-
quiiate: Pharmacy 127. Lecture 2-3.5 hours. Lab 3-6 hours.
Blake
Discusses and laboratory exercises on the formulation
of products for external use, including drugs and
cosmetics. The course deals with the properties and
ingredients of such products. PHARMACY

166. Parenteral Products. (3) W. F. W. Sp. Prerequi-
tate: Pharmacy 127. Lecture 2 hours. Lab 3 hours.
Blake
Introduction to the formulation and technology of
parenteral preparations. Laboratory includes par-
ticipation in high-volume preparation of biological
materials and administration. PHARMACY

169. Selected Topics in Clinical Pharmacokin-
etics. (2) W. Prerequisite: Pharmacy 128 and 129. Lecture 2 hours.
Tozer
Selected topics in clinical pharmacokinetics. Depend-
ing on coverage in Pharmacy 128/129, topics may
include: Pharmacodynamic and pharmacokinetic
modelling, distribution kinetics, population pharma-
kineetics, turnover concepts, duality, drug interac-
tions, and metabolic kinetics. The course is intended as
an elective for third- and fourth-year students.
PHARMACY

164. Veterinary Products. (3) Sp. Prerequisite:
Microbiology 120, 127, Pathology 135, Pharmacology 136, and Pharmacy 116. Lecture 3 hours.
Hines
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 pharmacist,
veterinarian, and animal owner, and legal liabilities
on veterinary product dispensing. PHARMACY

165. Pharmaceutical Technology. (2) F. Prerequi-
tate: Pharmacy 116. Lecture 1 hour. Lab 6 hours.
Blake
An introduction to the technology of liquid and semi-
liquid pharmaceuticals. Special emphasis is given to the
problems encountered and the materials used in phar-
maceutical manufacturing. PHARMACY

166. Pharmaceutical Technology. (3) W. Prerequi-
tate: Pharmacy 165. Lecture 1 hour. Lab 6 hours.
Blake
An introduction to the technology of oral dosage
forms, especially tablets and capsules. Emphasis is
placed on problems encountered in preparation of
this type of medication. PHARMACY

167. Pharmaceutical Technology. (3) Sp. Prerequi-
tate: Pharmacy 166. Lecture 1 hour. Lab 6 hours.
Blake
An advanced study of the relationship of the art and
science of pharmaceutical technology to solid dosage
forms. PHARMACY

Prerequisite: Fourth-year standing or consent of in-
structor. Reports and conferences 6 hours. Enrollment
limited.
Tozer, Winter, Upton, Salazar
Discussion and review of the literature in the clinical
application of pharmacokinetic principles in drug
terapy. PHARMACY

168.02. Clinical Pharmacokinetics. UC. (2) F. W.
Sp. Prerequisite: Fourth-year standing or consent of in-
structor. Reports and seminar 3 hours. Enrollment
limited.
Skimsenas
Discussion and review of the literature on the clinical
application of pharmacokinetic principles in drug
terapy. PHARMACY

170. Group Studies. (1-4) F. W. Sp. Prerequisite:
 Consent of instructor. Staff
Group study of selected topics in pharmacy. PHARMACY

176.06. Molec & Cell Biology in Drug Devel. (2) Sp.
Prerequisite: Consent of instructor. Lecture 2 hours.
Sokol
Introduction to the role of cellular and molecular
biology in developing new drugs, hormones, or
therapeutic agents. PHARMACY

178. Communication Skills. (1.5) Sp. Prerequi-
tate: First-year standing. Lab 2 hours. Seminar 1 hour.
Enrollment limited.
Lenz
Aspects of communication which focus on skills per-
tinent to contemporary pharmacy practice. Discussion
of principles of communication and practice of spe-
cific techniques in simulated practice situations.
PHARMACY

179. Supervised Study. (1-5) F. W. Sp.
Staff
Library research and directed reading under supervi-
sion of a member of the faculty with the approval of
the chairperson of the department. PHARMACY
Physical Therapy

110. Ortho & Rehab Diet/Treatment. (3) F
Prerequisite: Completion of PT 200, 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 Diet/Treatment. (3) W
Prerequisite: completion of PT 200, Anatomy 103.01, and Pathology 125.01. Open only to students enrolled in the Curriculum, or by consent of program director. Lecture 2 hours.

122. Pediatrics: Diagnosis & Treatment. (1) W
Prerequisite: Upper division coursework in human development and Pathology 135.01. Open only to students enrolled in the Curriculum, or by consent of program director. Lecture 1 hour.

Prerequisite: Introduction to Biochemistry. Open only to students enrolled in the Curriculum, or by consent of program director. Lecture 2 hours. Lab 3 hours.

203. Advanced PT Practice & Theory I. (6) F
Prerequisite: PT 701 and PT 702 or equivalent 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 SFSU, 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 SFSU, or by consent of program director. Lecture 3 hours. Lab 6 hours.

205. Functional Anatomy Review. (1.5) Su
Prerequisite: PT 200 or equivalent. Open only to students enrolled in the graduate program in physical therapy. Lecture 1 hour. Lab 1.5 hours.

206. Diagnosis of Phys Dysfunction. (2) Su
Prerequisite: Enrolled in UCSF/SFSU Physical Therapy Program or by consent of program director. Seminar 2 hours.

210. Pharmacology & Radiology for PhTs. (3) Su
Prerequisite: Enrolled in UCSF/SFSU Physical Therapy Program or by consent of program director. Lecture 2 hours. Lab 2 hours.

211. Preventive Care & Ethics I. (3) F
Prerequisite: Introduction to Bioethics. Open only to students enrolled in the Curriculum, or by consent of program director. Lecture 3 hours.

212. Preventive Care & Ethics II. (3) W
Prerequisite: Completion of PT 701 and PT 702 or their equivalent 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 SFSU, or by consent of program director. Lecture 3 hours.

213. Preventive Care & Ethics III. (3) F
Prerequisite: Completion of PT 203 and PT 204 or their equivalent. Open only to students enrolled in the graduate program in physical therapy. Lecture 3 hours.

214. Preventive Care & Ethics IV. (3) W
Prerequisite: Completion of PT 205 or their equivalent. Open only to students enrolled in the graduate program in physical therapy. Lecture 3 hours.

215. Preventive Care & Ethics V. (3) F
Prerequisite: Completion of PT 210 and PT 211 or their equivalent. Open only to students enrolled in the graduate program in physical therapy. Lecture 3 hours.

216. Preventive Care & Ethics VI. (3) W
Prerequisite: Completion of PT 212 and PT 213 or their equivalent. Open only to students enrolled in the graduate program in physical therapy. Lecture 3 hours.

217. Preventive Care & Ethics VII. (3) F
Prerequisite: Completion of PT 214 and PT 215 or their equivalent. Open only to students enrolled in the graduate program in physical therapy. Lecture 3 hours.

218. Preventive Care & Ethics VIII. (3) W
Prerequisite: Completion of PT 216 and PT 217 or their equivalent. Open only to students enrolled in the graduate program in physical therapy. Lecture 3 hours.
140. Clinical Clerkship. (8) § 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.
S. Richards
Students observe and assist the physical therapy clinician in the performance of assessment, evaluation, and physical therapy treatment services in one practice setting, one day a week for 11 weeks. PHYS-Th.

141. Clinical Clerkship. (8) § W. Prerequisite: Enrolled in Graduate Program in Physical Therapy and satisfactory completion of academic coursework with overall B average to enter the clinical clerkships. Open only to students enrolled in the Curriculum, or by consent of program director. Clinic 1 day/week.
S. Richards
Students develop their physical therapy assessment skills and integrate their 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 provide physical therapy. PHYS-Th.

142. Clinical Clerkship. (8) § W. 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.
S. Richards
Students provide assessment, evaluation, and physical therapy treatment under the direct supervision of a physical therapist. Students must demonstrate successful completion of this clerkship before progressing to the next clerkship. PHYS-Th.

143. Clinical Clerkship. (8) § W. 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.
S. Richards
Students provide patient care under supervision in a clinical facility affiliated with UCSF. Students must successfully complete this clerkship prior to taking PT 414. PHYS-Th.

145. Clinical Clerkship. (8) § S53. Prerequisite: Enrolled in UCSF/SSF Physical Therapy Program and satisfactory completion of PT 412 and 413.
S. Richards
Students provide physical therapy patient care for 40 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.

148. Advanced Clinical Clerkship. (8) § W. Prerequisite: Enrolled in UCSF/SSF Physical Therapy Program. This advanced clinical clerkship is specifically designed 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.

100. Organ System Physiology. (8) § W. Prerequisite: Anatomy 100 and foundational science studies 100 and concurrent enrollment in biochemistry 100 or by consent of instructor. Lecture 4 hours. Lab 4 hours. Conference 2 hours.
Wife
Normal function of the cardiovascular, respiratory, and renal systems and the metabolic functions of the body as a whole are studied in lectures, conferences, laboratory exercises, demonstrations, and clinical illustrations. PHYS-Th.

101. Endocrinology & Gastrointestinal Physiology. (5) § W. Prerequisite: Anatomy 100A-B, Biochemistry 100, Physiology 100, Interdepartmental Studies 100, or consent of instructor. Lecture 1 hour. Conference 4 hours.
Lingappa
Within the framework of endocrine and gastrointestinal physiology, the course will strive to teach the information necessary to achieve an understanding of key physiological principles. PHYS-Th.

110. Integrative & Nutrative Systems. (6) § W. 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 that oral functions and disease involve exactly the same processes as other human functions and disease. Help prepare skills necessary to understand and evaluate clinical literature. PHYS-Th.

120. Mammary Physiology. (2.5) § W. Prerequisite: Physiology 125 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.
Reid and Staff
Study of the integrative systems of the mammary organism, particularly the gastrointestinal and endocrine systems. PHYS-Th.

120. Mammary Physiology. (2.5) § W. Prerequisite: Physiology 125 required for students in Curriculum in Physical Therapy. Open only to students enrolled in the Curriculum in Physical Therapy, or by consent of instructor. Lecture 2 hours.

190. Laboratory Project. (1.5) § 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.

201. Advanced Integrative Physiology. (4) § W. Prerequisite: Physiology 100 or equivalent. Lecture 2 hours.
Reid and Staff
This 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.

203. Adv Topics in Cell Physiology. (4) § W. Seminar 4 hours.
Korenblatt, Varken
Study of cellular and molecular mechanisms of membrane transport. Course will be based on lectures and discussions of current literature on both active and passive transport of electrolytes and non-electrolytes across biological cell membranes. PHYS-Th.

204. Topics in Physiology. (2-3) § W. Prerequisite: A minimum of one of introductory physiology. Lecture 2 hours. Optional term paper for additional credit.
Redman
This seminar discusses selected topics in cellular and integrative physiology. Topics are drawn from primary and secondary sources. PHYS-Th.

221. Molecular & Cellular Approaches to Cardiovascular Disease. (1.5) § W. Prerequisite: Physiology 100 or equivalent. Lecture 1 hour. Conference 0.5 hour.
Coughlin, Williams
Lectures will combine approaches to understanding mechanisms of disease at the molecular level. Focus will be on vascular biology and pathophysiology, and on molecular targets for therapy. PHYS-Th.

223. Physiology Research Seminar. (1) § W. Prerequisite: Consent of instructor. Lecture 1 hour. Conference 1 hour. Hall
Seminar presentations by guest speakers, alternating with discussions by PhysicTh staff members of their current research. Each quarter, a different topic of physical interest is the subject of guest presentations. Students may enroll for any number of quarters. PHYS-Th.

224. Molecular Biology of Lipid Metabolism. (2) § W. Prerequisite: Consent of instructor. Lecture 2 hours. Offered in alternate years. Offered 1992-93.
Taylor, Fielding
The structure and regulation of the genes and proteins that control lipid metabolism, including plasma lipoproteins, receptors, and enzymes. Molecular and cellular biology of mammalian lipid transport systems.
277. The Scientific Method. (2) W. Prerequisite: Graduate or professional education in at least two of the following: biochemistry, microbiology, anatomy, histology, physiology, biophysics, systems physiology, microbiology, or equivalent, or by permission of instructor. Seminar 2 hours. Rothsman

Focus on the evaluation of modern research in the biological sciences, in terms of the convergence of particular experimental efforts with the historical and philosophic bases of scientific investigation. STOMATOLOGY

288. Secrecy. (2) W. Lecture 1 hour. Rothsman

Origin and experimental basis of venereal and non-venerable theorems for the secrecy of organic cell products. Goodness of fit of data to theoretical models and the role of scientific test in evaluating hypothetical constructs will be emphasized. STOMATOLOGY

250. Research. (1-2) S, F, W. Sp. Prerequisite: Consent of instructor. Lab variable. Staff

PHYSIOLOGY

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

For graduate students engaged in writing the thesis for the master's degree. PHYSIOLOGY

300. Teaching Practicum. (0) S, F, W. Prerequisite: Previous training in physiology and consent of instructor. Lecture and lab variable. Staff

Practicum 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's stage of development. PHYSIOLOGY

301. Scientific Writing. (6) S, W. Prerequisite: Consent of instructor. Seminar 4 hours. Corderidge, Zaiger

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, concisely, convincingly, as briefly, so that others may understand. PHYSIOLOGY

302. Teaching Techniques. (6) S, W. Prerequisite: Consent of instructor. Lecture 3.5 hours. Enrollment limited. Rothsman

A course in teaching techniques. Students present short lectures, and videotape of their presentations are evaluated by self- and group critique. PHYSIOLOGY

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 the patient's identity as a physician also begins emerging in the process.

PGY 1 Courses—The Department of Psychiatry is currently developing new core courses for PGY 1 residents. Please refer to the quarterly Schedule of Classes for a listing of these courses in the 600 series.

100A. Patients and Doctors II. (2) W. Prerequisite: Psychiatry 100A. Two hours per week total will vary with lectures, panels, and seminars. Kalbreider, F. Cohen

Introduction to psychological principles influencing health behaviors and the physician-patient relationship. The life cycle and cross-cultural factors are explored. PSYCHIATRY

100B. Patients and Doctors II. (2) W. Prerequisite: Psychiatry 100A. Two hours per week total will vary with lectures, panels, and seminars. Kalbreider, F. Cohen

The response to the stress of illness with emphasis on defense and coping, character style, and the flying process. Role-taking behavior and preventive interventions are explored. PSYCHIATRY

110. Psychiatry Core Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisites: Mentin 131A-B-C, Psychiatry 100A, 100B and 131A-B. Open to UCSP students only. Kalbreider

Six-week assignment to a psychiatric service at UC, SGH, VAMC, MZL, 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


Introduction to clinical psychiatry with particular emphasis upon knowledge important to general medical practitioners. Course materials include lectures, small group teaching, interviewing patients, syllabus reading, and the use of clinical videocases. PSYCHIATRY

140.01. Advanced Psychiatry Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Psychiatry 110 and consent of instructor. Marlin

Participation in psychiatric assessment and treatment, with supervision of attending and resident staff. Options include consultation-liaison service, or support adult or child service. Other special focus experiences such as outpatient, AIDS, geriatrics, may be arranged with instructor. PSYCHIATRY

140.02. Off-Campus Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of Department of Psychiatry. Marlin

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—VAF. (1.5 per week) Su, F, W, Sp. Prerequisite: Psychiatry 110. Leigh, Januar, Huenkel

A 6-8 week elective rotation at the Behavioral Medicine Center and the Psychiatric Consult Service. Students gain opportunity for comprehensive patient evaluation using the biopsychosocial treatment plan: participation in psychopharmacologic research, work with interdisciplinary teams. Housing provided by UCPs. PSYCHIATRY

140.07. Advanced Adult Inpatient Forensic Psychiatry—VAF. (1.5 per week) Su, F, W, Sp. Prerequisite: Completion of core curriculum in Psychiatry and approval of Dean's Office. Restrictions: Must be prior arrangement only. Make arrangements with Department of Psychiatry, UCSP Fresno, 2615 E. Clinton, Fresno, CA 93702, Lecture 3 hours. Seminar 2 hours. Library research 8 hours. Sanders, Kirsch, Slater

A 6-8 week rotation at a local hospital. Students will observe admissions, evaluations, interviews of patients with a wide spectrum of psychopathology. Will participate in inpatient planning and forensic seminars. Emphasis on legal aspects of psychiatry. Room and board provided through Ascanier State Hospital. PSYCHIATRY

140.08. Consultation Clerkship—VAF. (1.5-5/6) Su, F, W, Sp. Prerequisite: Psychiatry 110 and consent of Department of Psychiatry. Able

Supervised evaluation and treatment of patients on the Psychiatry Consultation Service, Lionsville Unit, Psychopharmacologic, Clinical, and Emergency Room. Learning opportunities include teaching rounds, consultation, seminar, biopsychosocial rounds, and consultation- liaison. PSYCHIATRY

150.01. Psychiatric Research. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of Department of Psychiatry. Kalbreider, Jonas

Participation according to students' level of experience in experimental work in areas such as neuro-pharmacology, operant conditioning, psychopharmacology, immunoneurochemistry, and nonclinical communication. All work is under the close supervision of members of the faculty. PSYCHIATRY

170.01. Intro to Study of Suicide. (2) S, F, W, or Sp. Prerequisite: Consent of Department of Psychiatry. Lecture 2 hours. Motto

Suicide is surveyed from a multidisciplinary approach in seminars led by persons working in the field. PSYCHIATRY

170.02. Alcoholism. (1) F. Lecture 1 hour. Stewart

General issues in substance abuse as well as the pharmacologic, medical, and neurologic aspects of 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


Explores focal 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 devised according to faculty/student interests. PSYCHIATRY


Explores focal 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 devised according to faculty/student interests. PSYCHIATRY

170.1C. Issues in Psychiatry. (1-3) F, W, Sp. Prerequisite: Consent of Department of Psychiatry. Seminar 1-3 hours. Kalbreider

Explores focal 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 devised according to faculty/student interests. PSYCHIATRY

170.16. Psychotherapy Research. (3) S. Prerequisite: Consent of instructor and consent of Department of Psychiatry. Horowitz

Participation in research activities at the Center for the Study of Neuroses. Lecture, laboratory, individual guidance to readings, and patient observation are included. PSYCHIATRY
Lee Introduction to the values and beliefs of various mi-
nority cultures regarding health and illness, with an em-
phasis 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
the health of minority populations. PSYCHIATRY

170.20. Topics in the Psychology of Women: Feminist Perpet. (1) F, W, or Sp. Prerequisite: Open to medical
students and graduate nursing students. Seminar: 1 hour.
Garrett, Johnson In this seminar, there are small-group discussions
based on readings from feminist perspectives on the
following topics: women's moral development; dominance/subordination; eating disorders/body image; multiple discriminations against women. PSY-
CHIATRY

180. Sexual Issues in Medical Practice. (2) W. Seminar: 2 hours.
Alperstein, Bullard Social, behavioral, and clinical aspects of human sexuality
are covered in a series of lectures and seminars. Lectures present didactic material and seminars focus on
clinical and social issues related to sex and medical
techniques. PSYCHIATRY

198. Supervised Study. (1-5) F, W, Sp. Prerequisite: Consent of Department of Psychiatry. N. Kaltreider and Staff. Library research and directed reading under super-
vision of a member of the faculty with the approval of the
chairperson of the department. PSYCHIATRY

214. Practice of Clinical Social Work. (1.5) F, W, Sp. Prerequisite: 1 year of
clinical social work. Restricted to internships in clinical social work. Lecturing: 1.5 hours.
H. Roth This course aims at integrating developmental and
diagnostic theories with clinical social work practice
with children, adolescent, and family therapy.

406. Gen Mental Health System. (1) Su, W. Re-
quired for first-year resident in Psychiatry. Seminar: 1 hour.
Surber Focus is on special treatment issues involved in the
care of the chronically disabled patient and of patients
of various ethnic and minority backgrounds. PSY-
CHIATRY

410. Intro to Clinical Interviewing. (1) S, W, Prerequisite: Required for first-year resident in Psy-
chiatry. Seminar: 1 hour.
Jacobs, Goldfinger Course teaches the fundamentals of interviewing psychi-
atriac inpatients. PSYCHIATRY

402. Introduction to Psychopathology. (1) Su, W. Re-
quired for first-year residents in Psychiatry. Seminar: 1 hour.
Lone Course provides a grounding in phenomenology and
descriptive diagnostic features of the major psychopa-
thologies, including the following types of disorders:
schizophrenic, affective, organic mental, severe per-
sonality, and substance abuse. PSYCHIATRY

410. Intro to Psychopharmacology. (1) Su, W. Re-
quired for first-year residents in Psychiatry. Seminar:
1 hour.
Bzitzi 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. PSYCHIATRY

410. Intro to Child Development. (1) Su, W. Re-
quired for first-year residents in Psychiatry. Seminar:
1 hour.
Hasson An introduction to developmental framework, with
emphasis on ages 0-3 years. PSYCHIATRY

411. Forensic Psychiatry. (1.5) S. Required for
second-year residents in Psychiatry. Seminar: 1.5 hours.
Tserv An elective seminar discussing the major aspects of
forensic psychiatry relative to the practice of the
discipline. Topics covered include competency, com-
mentation, and criminal responsibility. PSYCHIATRY

413. Psychol Aspects of Psych. (1) F. Prerequi-
tite: Required for second-year residents in Psy-
chiatry. Seminar: 1 hour.
Marmor Examinations of neurotic and character disorders found
in a psychodynamic perspective. PSYCHIATRY

415. Intro to Clinical Research. (1) W. Prerequi-
tite: Psychiatry Resident II standing. Seminar: 1 hour.
Zegars, Tenenboim Course will introduce residents to clinical research as
an essential body of knowledge and skills which can be
integrated into present and future clinical work.
Consideration of research within broad para-
digms: intrapsychic, psycho-cultural, behavioral psycho-
logical, and psychobiological. PSYCHIATRY

417. Child Psychopath/Psychotherapy. (1) Su, F, Prerequisite: Required for second-year residents in
Psychiatry. Seminar: 1 hour.
Binger, Phillips Seminar covers the theory and implementation of the
technique of psychopathology with children. Emphasis
is placed on play therapy. The seminar will also cover
psychopathology as manifested in children, including
descriptions and possible meanings. PSYCHIATRY

Required for third-year residents in Psychiatry. Seminar:
1 hour.
Aminti, Bambachar

Focus is on personality theories other than Freudian,
such as Fruge, Skinner, and Rogers. Course includes
an examination, study, and discussion of contempo-
rary personality theories, their concepts, systematic
application to the behavioral sciences, and research
potentials. Parallel reading is required. PSYCHIA-
TRY

422. Social Psychiatry. (1.5) F, W, Sp. Prerequisite: Required for third-year residents in Psychiatry, or
counselor of instructor. Seminar: 1.5 hours.
F. A. Johnson, Peaull Course introduces residents on various as-
spects of social and community psychiatry. Topics include social
psychiatry prior to 1950, development of community mental
health programs in the U.S., related social sciences, and
current developments in the field. PSYCHIATRY

423. Group Therapy. (1) F, W, Sp. Required for third-
year residents in Psychiatry. Seminar: 1 hour.
Zelin Course provides a didactic introduction to the prac-
tice of outpatient group psychotherapy. PSYCHIA-
TRY

431. Neurology. (1) W. Prerequisite: Required for fourth-year residents in Psychiatry. Lecture: 1 hour.
Pulatuse Review of clinical neurology with emphasis on neurological
diseases that may have psychiatric implica-
tions. PSYCHIATRY

Lecture: 1.5 hours.
Oswald Members of the Department of Psychiatry and distin-
guished guests make clinicadly centered presentations
reflecting diverse areas of the field. PSYCHIATRY

Prerequisite: Graduate standing in Psychology or
PCG 2-5 in Psychiatry Residency. Minimum
commitment of one year, except to some medical students
for a one-quarter commitment. Seminar: 1.5 hours.
Hanowitz, Marmor, Weiss Guided research using an apprentice model invol-
ving recorded information from psychotherapy, research in inpatients, and experimental procedures
using cognitive science methods. Systematic readings
in the literature on measuring structures and defensive
processes, including sixes of motivation, attention,
learning, and emotion. PSYCHIATRY

459. Evaluation of Psychotherapies. (1.5) F, W,
Sp. Prerequisite: Resident in Department of Psy-
chiatry or consent of instructor. Seminar: 1.5 hours.
Marmor Course provides framework for residents which will
enable them to take an objective and critical approach
towards evaluation of various psychotherapies, in-
cluding a method of summarizing the conceptual consis-
tency and validity of a given approach. PSYCHIA-
TRY

460. Theories of Personality. (1) F. Prerequi-
tite: Resident standing in Department of Psychiatry or
consent of instructor. Seminar: 1 hour.
B. Burke Course explores the application of psychoanalytic
to psychiatry. PSYCHIATRY

462. Psychol Aspects Medication Usage. (1) F, W,
Prerequisite: Consent of instructor. Seminar: 1 hour.
Navis Course explores the psychological implications of
prescribing medications. PSYCHIATRY

Prerequisite: Consent of instructor. Lecture: 2-5 hours.
Oswald 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. Stu-
dents will be encouraged to select individual subjects
for research. PSYCHIATRY

466. Behavioral Sciences Research. (1.5) Su, F,
W, Sp. Prerequisite: Consent of instructor. Lab: 4.5 hours.
Callaway, Haliday, and Staff Course consists of supervised clinical and basic re-
search 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. Prerequisite: Required for first-year child psychiatry fellows, or
consent of instructor. Field work: 1.5 hours.
Rase Participate and observe at UCSF Child Care
Center. Experience is to be discussed with
supervisor. Experience is to be limited to include ob-
servations at elementary and junior high school. PSY-
CHIATRY

485. Growth & Development Seminar. (1) F, W,
Sp. Prerequisite: Required for first-year child psychiatry
fellows, or consent of instructor. Seminar: 1 hour.
Metcalfe Provides theoretical understanding of normal growth
and development. Format is primarily presentations
and group discussions. PSYCHIATRY

Prerequisite: Required for first-year child psychiatry
fellows, or consent of instructor. Seminar: 1 hour.
I. Phillips Discussion of philosophy and practice of clinical work
with patients. Includes theory, principles, and meth-
ods of child psychiatry as well as all stages of child

164

165
psychiatry fellows, or consent of instructor. Seminar 1 hour.

D. Morrison
Review of basic of experimental methods and methodology such as safety and viability of measuring techniques, statistical inference, control group design, and pre- and post-test designs. Clinical research with children provides a focus for discussion of relevant issues. PSYCHIATRY

499. Child and Adolescent Forensic Seminar. (1-6) SS2, Prerequisite: Required for second-year child psychiatry fellows. Seminar 2 hours.

Tice
A seminar discussing the major aspects of forensic child and adolescent psychiatry relevant to the practice of child psychiatry. Topics covered include children's exposure to sexual abuse, trauma, court evaluations, and custody issues. Required for Child Psychiatry Fellows. PSYCHIATRY

Psychology

180.05 Stress among Fifth Professionals. (2) SF Seminar 2 hours.
Garfield
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, or equivalent. Required 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 bow-to-know. Topics include clinical studies, microscopic anatomy, neuroendocrinology, neurochemistry, psychopharmacology, autonomic psychopharmacology, scalp electroencephalography, behavioral genetics, neuropsychological assessment. PSYCHIATRY

180.09 Neurophysiology of Dissociation. (3) F Prerequisite: Prior consent of instructor. Seminar 3 hours.
Galin
Topics in Neurophysiological Dismantling and Psychoanalytic 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 include split-brain syndromes, hypnosis, and multiple personality disorder. PSYCHIATRY

181.62 Cerebral Hemispheric Specialization. (2) Sp Prerequisite: Background in neuropsychology, anatomy, cognitive psychology, intended for advanced students. Requires prior consent of instructor. Seminar 2 hours.
Galin
Group discussions of readings in seminal forms of neuropsychological analysis. Specialization and integration; developmental, psychiatric, and educational implications. Evaluation of data from study of brain lesions, electroencephalographic recordings, and behavioral testing. PSYCHIATRY


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

202A-B. Computer Simulation of Human Interaction. (3-3) W, Sp. Prerequisite: Psychology 257 or equivalent. Lecture 1 hour. Lab 6 hours.
Graykast
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) Sp 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 pre-social behavior, aggression, and social and moral development. PSYCHIATRY

212. Psychological Stress Coping. (4) Sp Prerequisite: Consent of instructor. Seminar 4 hours. Offered in alternate years. Offered 1992-93. 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

223. 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. F. 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) Sp Prerequisite: Graduate standing in Health Psychology program or consent of instructor. Lecture 4 hours. Offered in alternate years. Offered 1992-93. Natishek
An overview of major organ systems of the human body stressing psychological impacts on tissue functioning and psychological consequences of abnormality. Course will prepare students for reading medical
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.

Radiotherapy

140.01. Radiation Oncology Clerkship—LCB. (1.5 per week) Su, F, W. Sp. Prerequisite: Medicine 131A-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.

Radiotherapy

140.03. Radiation Oncology Clerkship—LUB. (1.5 per week) Su, F, W. Sp. Prerequisite: Medicine 131A-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.

Radiotherapy

140.06. Radiation Oncology Clerkship—MZ. (1.5 per week) Su, F, W. Sp. Prerequisite: Medicine 131A-B-C.
Margolis, Meyer
Participation in examination of cancer patients under treatment in the Claire Zellerbach Semin Tumor Institute at MZ. Students participate in rounds, conferences, and clinics, and see demonstrations on the use of newer radiotherapeutic techniques.

Radiotherapy

T. Phillips
Rounds include presentation of problem cases with discussions of diagnosis and treatment as well as biologic implications. Frequently guest lecturers are used to cover important aspects of oncology.

Radiotherapy

T. Phillips
Seminars include discussion of the diagnosis, treatment, and results of speciality oncology problems, including head and neck, gynecologic, otolaryngologic, pediatric, dermatologic, lymphomatous, and general malignancies.

Radiotherapy

V. Smith
A workshop course to provide residents in therapeutic radiology with the elements of treatment planning and dose distributions.

Radiotherapy

Weaver
A lecture-seminar course with practical sessions to provide the resident with a basic knowledge of radiologic physics with special reference to those aspects relating to therapeutic radiology.

Radiotherapy

454. Clinical Therapeutic Radiology. (1.5 per week) Su, F, W. Sp. T. Phillips
Residents, under supervision, are responsible for diagnosis, treatment, and follow-up of patients referred to radiation therapy from the wards and outpatient clinics. Radiation therapy rounds include discussion of newly referred patients, chart rounds include the discussion of patients under treatment.

Perez-Menendez
Introduction to the physics of radioactivity, nuclear instrumentation and gamma-ray imaging techniques. RADIOLOGY

170.09. Introduction to Nuclear Medicine. (3.5) Su, W, Sp. Prerequisite: Given concurrently with Radiology 170.08. Lecture 3 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, Laing
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, blunt and penetrating chest trauma, blunt and penetrating abdominal trauma, trauma to genito-urinary system, management of contrast reactions; indications for, and interpretation of, special radiologic procedures. RADIOLOGY


J. LaBerge
Library research and directed reading under supervision of a member of the faculty with the approval of the chairman of the department. RADIOLOGY


J. LaBerge
A laboratory research project under a member of the faculty with the approval of the chairman of the department. RADIOLOGY

220. Radiol Physics for Physicists. (2) F, W, Sp. Prerequisite: Bachelor's or higher degree in the physical sciences.

Staff
Seminar provides student with in-depth knowledge of the radiological physics. RADIOLOGY


Thomson
Faculty from 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


Thomson
Films of interesting cases from the daily work are presented and reviewed. Roentgenograms of surgically and pathologically proved cases are correlated with the gross and microscopic pathologic findings. RADIOLOGY

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, disease of the gastrointestinal tract, and orthopedics. RADIOLOGY


Minagi
Role of radiologist as a consultant in the emergency room; head injuries, fractures, dislocations, blunt and penetrating chest trauma, blunt and penetrating abdominal trauma, trauma to genito-urinary system, management of contrast reactions; indications for, and interpretation of, special radiologic procedures. RADIOLOGY


J. LaBerge
Numerous research projects are conducted in the department and facilities are available for new ones. Residents are encouraged to take advantage of these opportunities. RADIOLOGY


Minagi
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, clinical-pathological 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, clinical pathological, chest, medical X-ray, radiology, surgery, and neurological surgery conferences, consultation tumor board, and surgical and orthopedic grand rounds. RADIOLOGY

410. Radiation Effects on Genes & Chrom. (2) W. Prerequisite: Consent of instructor. Lecture 2 hours.

S. Wolff
Concepts and mathematics of target theory related to damage of genetic apparatus. Biophysical and biochemical studies on induction of mutagenic and antigenic mutations that give insight into the structure of chromosomes and interaction of radiation with biological material. RADIOLOGY


VA Hineheifl
Course includes review of surgical pathologic material and attendence at autopsy rounds. RADIOLOGY

414. Physical/Diagnostic Radiology. (2,5) W. 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 ultrasonic physics are discussed. RADIOLOGY

415. Growth Kinetics-Cells & Tumors. (2) Sp. Prerequisite: Consent of instructor. Lecture 2 hours.

Cleaver, Patt
An analysis of cell population growth in tissues, tumors, and cultures. Emphasis is given to radioactive tracers such as thymidine and its biokinetics, and experimental methods for studying cell proliferation in vivo and in vivo. RADIOLOGY


Hattner and Staff
Rotating assignments of topics for discussion by residents in nuclear medicine training programs at all affiliated hospitals. Critical review of available information in limited areas are used to provide a broad review of nuclear medicine for all trainees. RADIOLOGY


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


J. LaBerge
Residents, under supervision, carry out radiological examination and interpretation of X-rays of patients referred from wards and outpatient clinics. The chief resident has certain administrative chores relative to the resident training program. RADIOLOGY


VA Akin
Residents, under supervision, are responsible for the diagnostic activities of the department, including diagnostic consultations and reports, history-taking, and physical examinations. In addition, the chief...
Removable Prosthodontics


Zlotolow

Course is designed to acquaint residents with mul-
tidisciplinary aspects of maxillofacial prostheses. Lect-
rers will be given on maxillofacial prosthetic tech-
niques, oncology, head and neck surgery, plastic sur-
ery, oral surgery, therapeutic radiology, psychology and
related oral biology. RSTOR, DENT

489.01. Clinical Maxillofacial Prosthod. (1-4) F, W, Sy, Lab variable.

Zlotolow

Residents and advanced prosthodontic students will
observe and perform maxillofacial prosthodontic services.
These lectures are aimed at the Maxillofacial Clinic.
A detailed case history will be required each quarter.
Attendance at related cancer board conferences and
field trips to other therapy centers. RSTOR, DENT

Restorative Dentistry

110A. Intro to Restorative Dentistry. (2) F, Prereq: Consent enrollment in RD 115A. Lecture 2 hours.

Reazl and Staff

An introductory lecture course including tooth mor-
phology, development and form of primary and per-
molar dentition, biochemical effects on cavity
preparation, and theory of cavity design and prepara-
tion. RSTOR, DENT


Brady

Continuation of introductory lecture course. Topics
include the application of individual teeth and arch
forms to interarch relationships and the instrumen-
tation and procedures in cutting tooth structure.
RSTOR, DENT


D. O. Green

Lectures on the fundamentals of preparing teeth to
receive amalgam and gold inlay restorations with
emphasis on the placement of amalgam restorations.
RSTOR, DENT

113B. Occlusion. (1) W. Prereq: RD 110A, RD 115A. Lecture 1 hour.

C. McNeill

Introduction to occlusion. Topics include the ap-
plication of individual teeth and arch forms to interarch relationships. RSTOR, DENT

113C. Occlusion. (1) Sy. Prereq: RD 113B. Lecture 1 hour.

C. McNeill

Continuation of introductory lectures on the topic of
the application of individual teeth and arch forms to
interarch relationships. RSTOR, DENT

114B. Dental Morphology. (0-5) F, W, Concurrent enrollment in RD 110A (F) and RD 110B (Winter) required. Lab 6 hours Fall, 9 hours Winter.

Harmsgeld

Laboratory course to study tooth morphology, occlu-
ion, and the relationship of tooth form and function.
Students will complete a series of wax-ups on casts
mounted on the Dentar articulator. RSTOR, DENT

120A. Procedures in General Restor Dent. (4) Pre-F. Prereq: RD 111C, RD 112C, RD 113C. RD 115, 10C. Concurrent enrollment in RD 125A required. Lecture 6 hours/week for 4 weeks Pre-F, 2 hours/week for 10 weeks F.

Kahl, Mendes

Laboratory course on the materials and procedures
used in the dental cutting process and how to use the
cutting process to fabricate high quality cast restora-
tions. Additional lectures will provide information on
the materials and procedures for tooth-colored restora-
tions. RSTOR, DENT

120B. Procedures in General Restor Dent. (1) W. Prereq: RD 120A, RD 125A. Concurrent enrollment in RD 125B. Lecture 1 hour.

Kahl, Mendes

Lectures on the indications for and considerations in
the use of partial veneer crowns as retainers for fixed
partial dentures and as single restorations. Lectures
will also be presented on the design, material selec-
tion, and construction of pontics for fixed partial
dentures. RSTOR, DENT

120C. Procedures in General Restor Dent. (3) Prereq: RD 120B, 122B. Concurrent enrollment in RD 125C. Lecture 1 hour.

Kahl, Mendes

Lectures on the composition, physical properties, and
appropriate selection of porcelain used in PFM re-
stitutions, the basis for shade selection and control
when using PFM porcelain, and esthetic alternatives
in PFM restorations. RSTOR, DENT


Trawask

Lectures introduce the second-year dental student to
the theory and clinical rationale of complete denture
prosthodontics and prepare the student for the clinical
practice phase of dentistry. RSTOR, DENT

121B. Intro to Removable Prosthodontics. (1) W. Prereq: RD 121A. Concurrent enrollment in RD 125, 10B required. Lecture 1 hour.

J. Holmes

Introduction to advanced removable prosthodontics.
Students will become familiar with alternative mod-
ologies of treatment for the partially edentulous pa-
cient as well as identifying and managing special situa-
tions in complete denture construction and repair.
RSTOR, DENT

121C. Intro to Removable Prosthodontics. (2) Sp. Prereq: RD 121B. Concurrent enrollment in RD 125, 10C required. Lecture 2 hours.

Trawask

Continuation of introductory lectures on the theory
and clinical rationale of complete denture prosthodon-
tics. RSTOR, DENT

122B. Intro to Endodontics. (1) W. Prereq: RD 120A, 125A. Lecture 1 hour.

Gooda

Introductory lectures on non-surgical endodontics,
the rationale of endodontic treatment, antimicro-
bial, and clinical techniques. RSTOR, DENT


Brady

Course is designed to provide the information
and laboratory experience necessary to select and
provide appropriate treatment for the build-up of
missing tooth structure in vital and pulps teeth, iden-
tifying and removing caries from infected teeth, and
select and appropriately use bases, liners, and interna-
tion restorations. RSTOR, DENT


McNeill

Course is to gain knowledge of the field of trans-
portable mandibular disorders, and the current state
of the art of occlusion and TMJ. RSTOR, DENT

125A. Techniques in General Restor Dent. (5) Pre-F, Prereq: RD 111C, 112C, 113C, 115, 10C. Concurrent enrollment in RD 120A re-
quired. Lab 18 hours/week for 4 weeks Pre-F. 9 hours/week for 10 weeks F.

Brady, Kahl, Graham, Davis

Laboratory instruction on preparing teeth for single
unit partial and full metal crowns; design and fabri-
cation of metal pontics; techniques in assembly and
soldering of the components of fixed partial dentures;
preparation and placement of tooth-colored restora-
tions. RSTOR, DENT

125C. Techniques in General Restor Dent. (4) W. Sp. Prereq: RD 120A and 125A. Concurrent enrollment in RD 120B (Winter) and RD 120C
(5) Sp. Lab 15 hours.

Kahl, Mendes

Laboratory instruction on preparation for and con-
struction of mandibular posterior PFM and a provisional
bridge; preparing anterior teeth for partial crowns;
casting metal coping for porcelain bonding; applying
porcelain to metal coping. RSTOR, DENT

125.10A. Complete Denture Prosthodontics Lab. (2) Sp. Prereq: RD 111C, 112C, 113C, 115, 10C. Concurrent enrollment in RD 121A re-
quired. Lab 6 hours.

Trawask

Laboratory course introduces second-year dental
students to the clinical rationale and laboratory pro-
dcedures of complete denture prosthodontics and pre-
pare the student for the clinical practice of this phase
of dentistry. RSTOR, DENT

125.10B. Removable Partial Denture Prosthodontics Lab. (2) W. Sp. Prereq: RD 121A, 125.10A. Concurrent enrollment in RD 121B re-
quired. Lab 6 hours.

J. Holmes

Laboratory course introduces second-year dental
students to the clinical rationale and laboratory pro-
duced of removable partial denture prosthodontics and
prepare the student for the clinical practice of this phase
of dentistry. RSTOR, DENT

125.10C. Removable Prosthodontics Lab. Complete Dentures Lab. (2) Sp. Prereq: RD 121B, 125.10B. Concurrent enrollment in RD 121C re-
quired. Lab 6 hours.

Trawask

Continuation of introductory laboratory instruction
on the fabrication and repair of complete dentures.
RSTOR, DENT

125.20B. Endodontics Lab. (1) W. Prereq: RD 120A, RD 125A. Concurrent enrollment in RD 122B required. Lab 3 hours.

Gooda

Laboratory course introduces second-year dental
students to the science and clinical techniques
of non-surgical endodontics. RSTOR, DENT


Brady

Course is designed to provide the information
and laboratory experience to select and provide appro-
priate treatment for the build-up of missing tooth
structure in vital and pulps teeth, indentify and remove
caries from infected teeth, and select and appropri-
ately use bases, liners, and interim restorations.
RSTOR, DENT

126A-B. Comprehensive Clinical Care/Pri-
Restorative Dentistry

Maxwell and Staff
Comprehensive care workup 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

130.01. Clinical Procedures in General Restorative Dentist. (1) S5, S5. Prerequisite: RD 120C, 121C, 125, and 126C. Lecture 1 hour.

Peltzer
Lecture and concurrent work with RD 139 intended to supplement the beginning dentist's knowledge of materials, techniques, and management of the situations most frequently encountered early in the student's clinical experience.

RESTOR DENT

130.02. Clinical Procedures in General Restorative Dentist. (1) F. Prerequisite: RD 130.01, 130.02. Lecture 1 hour.

J. White
Course is designed to provide clinically relevant material in conjunction with clinical practice. Major topics include the biological and mechanical basis of operative dentistry, preparation design, clinical considerations in selecting restorative materials, recurrent caries, and bonding to tooth structure, and clinical considerations in using dental amalgam.

RESTOR DENT

130.03. Clinical Procedures in General Restorative Dentist. (1) W. Prerequisite: RD 130.02. Lecture 1 hour.

Kablo
Lecture covers the basic procedures and materials used for single-tooth restorations using direct filling gold and cast gold. RESTOR DENT

130.04. Clinical Procedures in General Restorative Dentist. (1) S. Prerequisite: RD 130.03. Lecture 1 hour.

Lacy
Survey of new dental materials and clinical techniques in aesthetic restorative dentistry, i.e., esthetic posterior restorations, anterior veneers, bonded bridges, and an impression procedure to determine the size and shape of the dental structure. Discussion includes advantages, disadvantages, indications, and contraindications of treatment options presented. RESTOR DENT

131. Bimaterials Science. (1) F. Prerequisite: RD 130.01. Lecture 1 hour.

Lacy
Lecture will emphasize clinical application and behavior of dental materials presented in first and second years. Students are expected to develop a working knowledge of specific products by name, type, and application. RESTOR DENT

131.01. Clinical Procedures in Removable Prosthodontics. (1) S5, S52. Prerequisite: RD 121C and 125. Lecture 1 hour.

Finzen
Course begins exposure to the clinical procedures of complete denture, diagnosis, treatment planning, and fabrication. It draws background information from concepts presented in the second year preclinical courses, but the emphasis is on the clinical management of edentulous patients. RESTOR DENT

131.02. Clinical Procedures in Removable Prosthodontics. (1) F. Prerequisite: RD 131.01. Lecture 1 hour.

Finzen
Course continues topics presented in complete denture fabrication that were started in RD 131.01. It also begins exposure to the clinical procedures for the diagnosis, treatment planning, and design of removable partial dentures. RESTOR DENT

131.03. Clinical Procedures in Removable Prosthodontics. (1) W. Prerequisite: RD 131.02. Lecture 1 hour.

Finzen
Course describes the clinical procedures involved in removable partial denture fabrication. It reviews and reinforces design concepts previously given during the second and third years.

RESTOR DENT

131.04. Clinical Procedures in Removable Prosthodontics. (1) S. Prerequisite: RD 131.03. Lecture 1 hour.

Finzen
Course presents various topics in the field of prosthodontics. Areas pertinent to removable partial dentures are covered along with the subject of dental implants, maxillofacial, and geriatric prosthodontics.

RESTOR DENT

132.01. Endodontics: Theory. (1) F. Prerequisite: RD 130.01. Lecture 1 hour.

Goods
Course is designed to teach the third-year dental student proper diagnostic procedures for non-surgical endodontic cases and to instruct in proper methods of emergency treatment. Course includes didactic and laboratory material and relates these entities with diagnostic methods.

RESTOR DENT

132.02. Endodontics: Theory. (1) S. Prerequisite: RD 132.01. Lecture 1 hour.

Goods
Course is designed to expose third-year dental students to adjuvant endodontic procedures necessary to supplement their knowledge of endodontic procedures.

RESTOR DENT

133.01. Clinical Procedures in Fixed Prosthodontics. (1) F. Prerequisite: RD 130.01, 131.01. Lecture 1 hour.

Tschirky
Lecture series designed to assist the students in the clinical management of patients undergoing fixed prosthodontic treatment. The lectures will emphasize the clinical and laboratory aspects of shade selection, impression, fabrication, provisional restorations, and cast articulation. RESTOR DENT

133.02. Clinical Procedures in Fixed Prosthodontics. (1) W. Prerequisite: RD 133.01. Lecture 1 hour.

Tschirky
Course of lecture series to assist the student in the clinical management of newer and more complex fixed prosthodontic techniques. The traditional will be compared to the contemporary and the rationale for specific treatments in specific situations will be discussed.

RESTOR DENT


Goods
Clinical instruction and practice in the discipline of endodontics. Students are expected to pass a qualifying clinical examination by the end of spring quarter of the third year.

RESTOR DENT


Goods
Clinical instruction and practice in the discipline of prosthodontics. Students are expected to pass a clinical qualifying examination by the end of spring quarter of the third year.

RESTOR DENT


Palmer
Clinical instruction and practice in oral diagnosis and treatment planning, and restorative dentistry. Students are required to pass a series of qualifying examinations by the end of spring quarter of the third year.

RESTOR DENT


Goods
Continuation of clinical instruction and practice in the discipline of endodontics. Students are expected to pass a clinical qualifying examination by the end of spring quarter of the fourth year.

RESTOR DENT


Finzen
Course comprises clinical instruction and practice in the discipline of prosthodontics. Students are expected to pass a clinical qualifying examination by the end of spring quarter of the fourth year.

RESTOR DENT


Lacy
Continuation of clinical instruction and practice in oral diagnosis, treatment planning, and restorative dentistry. Students are required to pass a series of qualifying examinations by the end of spring quarter of the fourth year.

RESTOR DENT


Finzen
Current and past prosthodontic literature will be studied and discussed. Students will learn to distinguish between appropriate, controversial, and inappropriate prosthodontics literature.

RESTOR DENT


Finzen
A treatment plan will be discussed and developed for each patient after all diagnostic aids have been gathered. Students will be responsible for establishing an initial treatment plan prior to the seminar and for justifying it before the group.

RESTOR DENT


Finzen
Staff and program consultants will present lectures on various aspects of fixed and removable prosthodontics and related subjects on a graduate level. RESTOR DENT


M. Wilde
Course will emphasize the dietary requirements for the geriatric prosthodontic patient. A dietary analysis of the student and a prosthodontic patient currently under treatment will be required. RESTOR DENT

175B-C. Biomaterials Science. (2-2) W, Sp. Prerequisite: D.D.S. degree. Open to dental residents, postdoctoral and graduate students only. Seminar 2 hours.

Jendresen
Course covers biomaterials science as applied to clinical restorative dentistry with emphasis on restorative material selection and use, based on acceptable physi-
176. Craniofacial Pain—TMJ Seminar. (0-4) Su, F. W. Sp. Prerequisite: Emboldened posts to dental students. Fourth-year dental students may take this course as an elective with permission of the instructor. Semester 2. Muennell

T. Curtis

Various types of removable prostheses will be fabric­ated using different techniques and treatment phil­osophies. Rester Dent.

Noble

Fixed prostodontics clinical procedures will be per­formed using a variety of treatment philosophies and articulating instruments. Rester Dent.

179.03. Temporomandibular Joint Clinic. (0-4) Su, F, W. Sp. Prerequisite: D.D.S. degree. With consent of instructor, fourth-year students may take this course as an elective. Clinic 3 hours per week.

Muennell Participation in the Temporomandibular Joint Clinic applying knowledge of history-taking and differential diagnosis and utilizing such diagnostic techniques. Rester Dent.

180. New Apply in Rester Dent: Materials & Techniques. (1) W. Sp. Prerequisite: Four-year standing. Lecture 1 hour. Lacy

Survey of new materials and clinical techniques used in contemporary dental practice with particular emphasis on cosmetic dentistry. Topics may include, but are not limited to, dentin bonding systems, etched porcelain restorations, methods of internal repair of fixed restorations, aesthetic posterior restorations, alternative designs for fixed bridgework, and newly introduced products. Rester Dent.

180.04. Advanced Operative Therapy. (1) F. Prereq­uisite: Completion of R.D. 130.04. Lecture 1 hour. Birrell

Lectures and telerevised demonstrations covering quan­titative dentistry, waxed field tech­nic, cosmetic restorations, analysis of related research, and clinical applications of the various restorative procedures. Rester Dent.

180.05. Prosthodontic Procedures. (1) W, Sp. Lecture 1 hour. Birrell

An elective course offering instruction in procedures and materials other than those normally used in the clinic. Rester Dent.

181. Scientific Writing in Dentistry. (2) W. Pre­requisite: Registered dental student in good standing. Limited to 20 students. Conference 2 hours. White

Students will produce student research journal contain­ing literature reviews and overviews of research done by dental and dental hygiene students. Topics include writing review articles, word processing tech­niques, communication skills, and the steps involved in the production of a journal. Rester Dent.

181.02. Advanced Endodontics Concepts. (1) W. Lecture 1 hour. Goodis

Diagnosis, case selection, and management of pain and infection in endodontically-involved teeth; ad­vanced techniques for treating difficult root canal system anatomy, refinements in obturation of the root canal system. Rester Dent.

181.03. Fixed Prosthesis Selection Topics. (1) Sp. Enroll­ment limited. Seminar 1 hour. Lums

Individual staff members will offer seminar-type in­struction on selected topics related to fixed prosthod­ontics. Rester Dent.

181.04. Advanced Operative Therapy. (1) W. Prerequisite: R.D. 180.04 (formerly Operative Dent­istry 180). Lecture 1 hour. Birrell

Continuation of Restorative Dentistry 180.04. Rester Dent.


Smith

An elective lecture course on the restorative aspects of dental implantology. Topics include the types of dental implants, diagnostic evaluation, placement tech­niques, and treatment applicable to the various types of dental implants. Rester Dent.

182.03. Senior Restorative Elective. (1) F. Prereq­uisite: Fourth-year standing. Lecture 1 hour. Mall

Advanced clinical restorative elective. Lecture de­scribes the restorative general practice. Topics include office layout, laboratory techniques, treatment limita­tions, financial arrangements, scheduling, and treat­ment failures. Rester Dent.


Continuation of Restorative Dentistry 181.04. Or­ganization of the material is planned in relationship to progress of students enrolling in the 180 series. Rester 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. F. Menon

Finnell and Staff

Seminar to discuss current concepts of removable partial denture design. The emphasis will be on de­signing RPDs for routine situations, but more com­plex designs will also be presented. Students will be assigned casts to design and articles to review. Rester Dent.

183. Laser in Dentistry. (1) S1, S2. Prerequisite: Third- or fourth-year standing and satisfactory progress in all required Restorative Dentistry courses. Lecture 1 hour or lab 3 hours. J. White, Goodis

Course will provide an understanding of laser physics, tissue interaction, safety considerations, clinical re­search methodology, and applications of the Nd:YAG laser for introral hard and soft tissue. Laboratory exercises provide hands-on experience. Rester Dent.

183.05. Advanced Complete Prosthodontics. (1) F. Prerequisite: Fourth-year standing. Seminar 1 hour. F. Menon

Finnell

Seminar to discuss concepts of complete denture fabrication and maintenance of regular and partial prosthodontics. Review of prosthodontic procedures normally used in the clinic, and the selection of the appropriate alternate procedures where indicated. Rester Dent.

186. CAD/CAM: Application to Dentistry. (1) Sp. Prerequisite: Second-, third-, or fourth-year dental student. Limited to 20 students. Lecture 2 hours for 4 weeks, Lab 1 hour for 3 weeks. Fett, Setcos

Course will concentrate on adhesive bonded ceramic inlays in posterior teeth. Topics include indica­tions for bonded restorations, tooth preparation, operation of a CAD/CAM system, bonding procedures, finishing, and polishing techniques. A literature review will give the students a perspective of the indications of computer-aided dentistry to date. Rester Dent.

186.04. Restorative Materials Procedures. (1) F, W. 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 I and V direct gold restorations. Students learn to use various materials such as fiberglass, gold and gold alloy and electrolysis. Rester Dent.

187. Implant Prosthodontics Clinic. (0-5-3.0) Su, B, F, W. Sp. Prerequisite: Fourth-year standing. Must be taken concurrently with RD 182 and the Oral & Maxillofacial Surgery Clerkship (OMS 189.04). Lab 1-3 hours, Clinic 1-6 hours. F. Menon, R. Smith

An elective course that provides clinical and labora­tory experiences in the restorative aspects of dental implantology. Rester Dent.

187.04. Avd Clinical Operative Dentistry. (0-4) Sp. Clinic 6-12 hours. Early

Advanced instruction in the field of clinical operative dentistry, utilizing procedures such as quadrants and partials. Rester Dent.

188.02. Advanced Clinical Endodontics. (0-4) Sp. Prerequisite: Fourth-year standing. Clinic variable. Barshoarod

Advanced instruction in the field of clinical endodontics. Rester Dent.

199.01. Biomaterials Laboratory Project. (1-5) F, W. Sp. Prerequisite: Consent of instructor and ap­proval of the chairperson of the department. Lab 3-15 hours.

G. W. Marshall, S. Marshall, Lacy

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

199.02. Endodontics Laboratory Project. (1-5) S1, W, Sp. Prerequisite: Consent of instructor and approval of the chairperson of the department. Lab 3-15 hours.

G. McPhail, Barshoarod, Zeilman

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

199.03. Fixed Prosthodontics Laboratory Project. (1-5) F, W. Sp. Prerequisite: Consent of instructor and approval of the chairperson of the department. Lab 3-15 hours.

Tuiller, Davis

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

199.04. Oper Dent Laboratory Project. (1-5) F, W. Sp. Prerequisite: Consent of instructor and approval of the chairperson of the department. Lab 3-15 hours.

White, Lacy

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

199.05. Removable Prosthodontics Laboratory Project. (1-5) F, W. Sp. Prerequisite: Consent of instructor and approval of the chairperson of the department. Lab 3-15 hours.

Ffini, Husson

A laboratory research project under direction of a member of the faculty with the approval of the chair­person of the department. Rester Dent.
Sociology

198. Supervised Study. (1-5) S, F, W. Sp. Staff
Library research and directed reading under supervision of a member of the faculty with the approval of the department. SOC BEH SC

203. Social Psychology of Chronic Illness. (2-3) S. Prerequisite: Consent of instructor. Seminar 2 hours. Field work 0.3 hours. G. Bedard
Course provides discussion of problems faced by chronically ill persons and their families including: origin management, hospitalization, role, personal relationships, social isolation, stress and quality of life. Emphasis is on interpersonal relationships. SOC BEH SC

205. Health Professions, Occupations, and Work. (3) W. Lecture 2 hours. Lab 3 hours. C. Hartzog
Course examines the nature of occupations and professions; their regulation by hospital regulations, and other social controls, the medical division of labor, specialties and specialties, profession, and occupational ideologies, the sociology of work relationships, career. SOC BEH SC

207. Sociology of Health & Medicine. (3) S, Sp. Seminar 2 hours. Lab 3 hours. C. Ebert
Course introduces the student to classical 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 sociolog. SOC BEH SC

208. Social Psychol of Hlth & Illness. (3) F, S. Prerequisite: Required for doctoral students in sociolog. Restrictions: Doctoral-level students in nursing require permission. Lecture 2 hours. Lab 3 hours. V. Olesen
Course examines the relationship of social class, ethnic identity, group membership, family structure, occupation, and life style to health and illness, and the therapeutic interaction of lay persons and health professionals. SOC BEH SC

Course surveys the classical and contemporary sociological issues in theoretical and empirical work on the power structure. Emphasis is on understanding and analyzing social and political processes. SOC BEH SC

212A. Sociological Theory. (3) F. Lecture 2 hours. Field work 3 hours. Staff
Course examines and evaluates classical and contemporary contributions to sociological theory. The main objective is the generation of a critical capacity with respect to received theories as both in formal and substantive sociological theory. SOC BEH SC

212B. Sociological Theory. (2) W. Lecture 2 hours. Field work 3 hours. Required for graduate students in sociology. A. Clarke
Course examines and evaluates classical and contemporary contributions to sociological theory. The main objective is the generation of a critical capacity with respect to received theories as both in formal and substantive sociological theory. SOC BEH SC

212C. Sociological Theory: Contemporary. (4) F, S. Prerequisite: S212A and S212B or consent of instructor. Lecture 2 hours. Lab 2 hours. C. Estes
Course examines and evaluates contemporary contributions to sociological theory. The main objective is the generation of a critical capacity with respect to received theories as both in formal and substantive sociological theory. SOC BEH SC

214A. Field Research. (3) F, S. Prerequisite: Doctoral level. Lecture 2 hours. Field work 9 hours. L. Schuman, P. Olsen, A. Clarke
Course offers sociological perspectives on the dimensions and properties of research in natural social setting. Focus is upon developing skills in selecting, observing, interviewing, listening, and recording of data. Emphasis is upon developing conceptual schemes in preparation for analysis. SOC BEH SC

214B. Qualitative Analysis. (3) W. Prerequisite: Doctoral level. Sociology 214A. Lecture 2 hours. Field work 9 hours. L. Schuman, V. Olsen
Course examines modes of analysis applicable to qualitative data. Emphasis is on the dimensions and properties exhibited in student-presented data. SOC BEH 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-presented data and their concepts and qualifications. SOC BEH SC

215. Organizational Research. (2-4) F, W, Sp. Prerequisite: Sociology 216 or permission of instructor. Lecture 2.5 hours. Conference 1 hour. E. Luria
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 valued to organizations outside academic settings. SOC BEH SC

216. Coop Org: National & Intl Persp. (3) F. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours. Staff
Course is a comparative review of contributions to the sociology of formal organizations. A variety of organizational forms will be considered with special emphasis on national and international health care organizations. SOC BEH SC

Course explores changing gender, ethnic, social classes, and marital, and family patterns in the United States. Discussion of feminist models of family life as influenced by structural forces. Special emphasis given to changing social roles as affecting male-female relationships. SOC BEH SC

218. Adv Topics in the Socio-Analysis of Aging. (2-4) W. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 0.6 hours. C. Estes
Course is designed for doctoral students investigating advanced research issues preparatory to qualifying exams. 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 BEH SC

219. Social Policy & Aging. (2-4) W. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 0.6 hours. C. Estes
Course will provide a critical analysis of major social, economic, and political issues of growing old in the United States. Emphasis is on social policy in the public and private sector including education, social security, and health care. Special emphasis provided for social change and political movements. SOC BEH SC

220. Sociology Seminar. (2-4) F, W, Sp. Prerequisite: Consent of instructor. Required for graduate students in Sociology. Seminar 2 hours. Lab 2 hours. C. Estes
Course is a seminar leading to the development of a body of knowledge and a critical capacity in the field of sociology. SOC BEH SC

Qualifying examinations for graduate students in sociology are given in three areas: sociological theory, medical sociology, and social policy. The course will provide for preparation in each area. SOC BEH SC

223. Perspectives on Public Policy. (3) F, W. Sp. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours. A. Benjamin
Course offers an overview of public policy in American government-in policy, dynamics, and conceptual and practical dilemmas. Students will become acquainted with major issues involved in formulating, financing, implementing, and assessing patterns of decision (i.e., policy) established by government. SOC BEH SC

225. Policy & Hlth Care Institutions. (3) F, W, Sp. Prerequisite: N287A or consent of instructor. Lecture 2 hours. Lab 3 hours. R. V. Newcomb
Course examines the changing social and medical environments of health care institutions in the United States. Special emphasis given to changing social roles as affecting male-female relationships. SOC BEH SC

226. Families of the Third World. (3) S, F, W. Lecture 2 hours. Lab 3 hours. R. Staples
Course examines family structures and dynamics among Third World peoples. Families to be discussed include African-American, Afro-Amer, Asian, Native American, and Latin American. Emphasis is on the development of family life in their native land and the United States. SOC BEH SC

230. Social-cultural Issues in AIDS. (3) S, W. Lecture 2 hours. Lab 3 hours. C. Hartzog
Course examines the history and social psychology of AIDS in relation to health, illness, disease, and death. Includes demographic trends, the cost burden, and social problems of minorities, women, and caregivers, along with policy issues. SOC BEH SC

232. Adv Problems in Soc Psychology. (2-4) F, W. Prerequisite: Consent of instructor. Seminar 2 hours. Field work 0.6 hours. 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 BEH SC
R. Fox
Course review of theories of aging including a review of theories of aging, current and historical trends in aging, factors related to aging, aging effects on people on individual and family and formal and informal service systems for an aging population. SOC BEH SC

234. Health & Aging. (3-2-3) § W. Sp. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 0-3 hours.
G. Becker
Course examines the health status of the aged in the United States related to biological, behavioral, socio-cultural, and environmental factors. Social, cultural, and economic factors affecting organizations, finances, and delivery of health care to the aging population will be examined. SOC BEH 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, nicotine, psychological problems, and the relationship of marital status to morbidity and mortality. SOC BEH SC

236. Race/Class Factors in Health 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 BEH SC

237. History of Sociological Thought. (3) § F. W. Prerequisite: Consent of instructor. Graduate standing. Lecture 2 hours. Field work 3 hours.
Staff
Graduate introduction to history of sociological thought. Provides perspective and vocabulary for examining major schools of thought which constitute sociological analysis. Emphasis on conceptual paradigms and their relationship to theory will provide understanding of sociological work. SOC BEH SC

V. Oleson
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 BEH SC

239. Evaluation Research Methods. (3) § F. W. Sp. Prerequisite: Sociology 214 A and 214 B. Non-doctoral students may enroll upon approval of instructor. Lecture 2 hours. Lab 3 hours.
R. Newcomer, L. Schusterman
Course analyzes field work as evaluation method as applied to health care settings and programs, contrasting this approach with quantitative methods predicated on analysis of outcomes. Conduct of such evaluation research, and relationship with audiences such as policymakers, analyzed. SOC BEH SC

240. Old Women and Their Health. (2-4) § F. Seminar 2 hours. Optional project for additional units.
V. Oleson, J. Zonies
Course analyzes postmenopausal women's changing social roles and the interaction of actual and perceived role with health. Topics include demographic issues, economic trends, individual and social health status, policy implications for individuals and society. SOC BEH SC

241. Women, Work & Health. (2-4) § F. Seminar 2 hours. Optional project for additional units.
V. Oleson
How sociocultural systems place women in work roles, the implications for their health, their part in illness prevention and care of the sick. Analysis "hidden careers," work and health in developing societies, relationship between work and mobility-morbidity patterns. SOC BEH SC

242. Women's Health Res. (2-4) § Prerequisite: One or more women's health courses and one survey course in social research methods or social epidemiology. Seminar 2 hours. Optional project for additional units.
V. Oleson, J. Zonies
An advanced survey of quantitative research methods in analysis of women's health issues. Will focus on data sources, design type, evaluation methods, data analysis, and proposal and representation. Exploration of current research controversies. SOC BEH SC

243. Qualitative Research in Women's Health. (2-4) § W. 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. Oleson
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 modes to ensure credibility, reliability. 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 science, epidemiological problems, and feminist perspectives. Focus is in impact of gender on scientific work and includes scientific constructions of gender and women's careers in science. SOC BEH SC

247. Policy Issues & Political Processes. (3) § Prerequisite: S219, or S260, or equivalent and/or consent of instructor. Lecture 2 hours. Field work 3 hours.
C. Harrington, C. Estes
Course analyzes issues and trends in legislation and policies of health and examines health professional roles 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 problem 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

249. Special Studies. (1-8) § F, W. Prerequisite: Consent of instructor. Seminar 1-8 hours.
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

250. Minority Health and Aging. (2-3) § F. Sp. Prerequisite: Consent of instructor. Lab 6-8 hours. Lecture 2 hours. Field work 3 hours.
V. LaBrie
Course explores the diversity of racial and ethnic variation and examines the health and aging experience of minority elderly within the context of family, community, and the nation. SOC BEH SC

C. Harrington
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

252. 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

253. Leadership in Long-Term Care. (3) § W. Sp. Prerequisite: Consent of instructor. Seminar 2 hours. Lab 3 hours.
C. Harrington
Seminar examines leadership and administration in long-term care settings. Focuses on organizational budgeting, program planning, management, educational programs, and service delivery with emphasis on creative approaches and testing new models and theories. SOC BEH SC

Consideration of factors in the emergence of issues in women's health and related policy. Perspectives on women as policymakers and the implementation of policy on women's health, participation in care and healing systems and access to training. SOC BEH SC

L. Green
Course analyzes social, psychological, and biological perspectives about environmental influences on health. Reviews institutionalization, housing, and potential sources of environmental stress and their effects on adaptation across the life cycle. SOC BEH SC

256. Introduction to Survey Research. (3) § Sp. Prerequisite: Biostatistics 183 and 185AB or equivalent. Restriction: Doctoral level; non-doctoral students may enroll upon consent of instructor. Lecture 2 hours. Lab 3 hours.
R. Newcomer
Course introduces sample theory, simple developments, and methods of survey research. Course provides rudimentary skills for those conducting their own research and large field surveys. SOC BEH SC

257. Minority Health and Aging. (2-3) § F. Prerequisite: Consent of instructor. Lab 6-8 hours. Lecture 2 hours. Field work 3 hours.
V. LaBrie
Course explores the diversity of racial and ethnic variation and examines the health and aging experience of minority elderly within the context of family, community, and the nation. SOC BEH SC

C. Harrington
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

262. 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) § W. Sp. Prerequisite: Consent of instructor. Seminar 2 hours. Lab 3 hours.
C. Harrington
Seminar examines leadership and administration in long-term care settings. Focuses on organizational budgeting, program planning, management, educational programs, and service delivery with emphasis on creative approaches and testing new models and theories. SOC BEH SC
Sociology

270A. Quantitative Methods I. (3) F. Restriction: 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, specifications of constructs, and selection of indices. SOC BEH SC.

270B. Quantitative Methods II. (3) W. Prerequisite: 270A (Quantitative Methods I). Restriction: 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-ante-facto, and correlational research, as well as survey and evaluation methods. SOC BEH SC.

270C. Research Methods Seminar. (3) S. Prerequisite: 270A and 270B (Quantitative Methods in Sociological Inquiry I & II). Restriction: Doctoral students in Sociology or consent of instructor. Seminar 3 hours.
Staff
Advanced seminar in research methods. Students will be assigned literature on the complexity of issues and challenges of integrating qualitative and quantitative research traditions through discussion and exercises with an emphasis toward alternate research approaches. SOC BEH SC.

271. Professional Issues Seminar. (2) F. W. Prerequisite: 270A. Restriction: Doctoral students in Sociology or consent of instructor. Seminar 2 hours.
Staff
Seminar addresses professional and career issues for sociologists, including teaching, research, writing for publication, and presentation of papers at professional meetings. Issues on career and educational planning, resume development, interviews, memberships, and job interviews. SOC BEH SC.

272. Dissertation Research Seminar. (3) F, W. Prerequisite: 270A. Restriction: Doctoral students in Sociology or consent of instructor. Seminar 2 hours. Lab 3 hours.
Staff
Course addresses ideas, 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.

273. Demography of Health and Aging. (3) W. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours.
M. LaPlante
Course provides an overview of demographic studies of morbidity, disability, and mortality.

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.

274. Sociology of Human Sexual Behavior. (3) F. W. Prerequisite: Doctoral students in Sociology or consent of instructor. Seminar 2 hours. Lab 3 hours.
R. Staples
Course examines contemporary sexual problems from a sociological perspective, their relationship to social structure and culture. Topics will include sexually transmitted diseases, average pregnancy, sexual violence, sexual harassment, and incest. SOC BEH SC.

275. Mental Illness and the Elderly. (2-3) F, W. Prerequisite: Consent of instructor. Seminar 2 hours.
E. Lorie, A. Hassan
Course covers 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.

276. Multidisciplinary Geriatric Assessment. (1-3) F. W. Prerequisite: Lab 3-9 hours.
G. Becker
Course provides a clinical experience in multidisciplinary assessment for sociologists, nurses, physicians, and other clinicians. Course involves application of social, psychological, economic, and ethnosexological, interactional, functionalist, critical, and inter-Maxist perspectives. Focuses on laboratory, community, and institutional, and research and statistical traditions and organization and funding. SOC BEH SC.

277. Sociology of Disability. (3) F. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours.
M. LaPlante
Course covers sociological models and theories of disability and handicap. Areas to be covered include definitions, utility of role theory, models of identification and categorization, and sociological perspectives on handicap. SOC BEH SC.

278. Sociology of Alcohol and Drugs. (2-3) F. Prerequisite: Lab 0-3 hours. Seminar 2 hours. Offered in alternate years. Offered 1992-93.
R. Fillmore
Course examines alcohol and drug use from multiple theoretical perspectives in various historical and cultural contexts. Emphasizes the distribution of alcohol and drug use across and within societies and variables policies towards drug control and their consequences for the control and management of these problems. SOC BEH SC.

279. Nutrition and Chronic Illness. (2-3) F. Lab 0-3 hours. Seminar 2 hours. Offered in alternate years.
R. Johnstone
Course introduces social and biological perspectives on nutrition and chronic illness. Emphasis on interactions among nutritional factors, chronic illness, the aging process, alcohol and substance abuse, and other health practices among diverse groups in the United States, with implications for nursing practice. SOC BEH SC.

280. Meta-Analysis in Health Research. (3) F. Prerequisite: Basic research statistics and Research Methods (257AB or 257BC). Lab 3 hours. Seminar 2 hours, Offered in alternate years. Offered 1992-93.
R. Johnstone
Course introduces meta-analysis techniques and applications in health research, including research design, sampling and data collection, and analytical techniques for software. Uses examples from drug and alcohol studies, and other health care evaluation studies. SOC BEH SC.

E. Hartka
Course examines how health care, a scarce resource, is distributed 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 BEH SC.

282. Sociology of Science/Technology. (2-4) W. Lab 0-6 hours. Seminar 2 hours. Offered in alternate years. Offered 1993-95.
A. Clarke
Course examines early functionalist and Marxist theories of science, sociology of science, and science and technology, and sociological perspectives on sociology of science. SOC BEH SC.

283. Selected Topics/Health Economics. (2-3) F. Prerequisite: 2562 (Health Care Economics). Lab 0-3 hours. Seminar 2 hours.
R. Miller
Course examines selected topics in health care economic theory and policy and demand for health care services and health insurance. Includes national health insurance proposals and the Canadian health care system. SOC BEH SC.

A. E. Benjamin, A. Clarke, V. Olesen
Course examines research in social and behavioral aspects of AIDS. Includes medical illnesses and critiques of methodologies, data collection, and analyses of the research as well as the theoretical bases for the work. SOC BEH SC.

285. Sociocultural Variations in Health. (3) F. Lecture 2 hours. Field work 3 hours.
R. Staples
Course addresses variations in health attitudes and
222. Auditory Psychophysics & Physiology. (3) F, S. Lecture 3 hours.

Staff
A coordinated coverage of basic auditory function. The physiology of the peripheral auditory system and basic perceptual correlates. Physics of sound, cochlear mechanics and microphonics. WILL serve physiology, threshold, masking, pitch, loudness, temporal adaptation, frequency analysis, binaural perception, and psychoacoustics.


Jenkins
Reading and discussion selected papers on modern behavioral methods for obtaining information on the sensory capacities of animals. Students will have access to equipment and a microcomputer so that one or more behavioral methods can be implemented.

225. Inner Ear Form and Function. (2) F, Sp. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours.

Leake
This course will consider the gross morphogenesis, histology, ultrastructure and functions of the mammalian cochlea and vestibular sensory organs. Instruction will include lectures, demonstrations, discussions, and student presentations.

226. Special Studies. (1-5) F, W, Sp. Prerequisite: Consent of instructor.

Staff
Directed reading and laboratory work in the auditory process and its disorders.

249. Independent Study. (1-5) F, W, Sp. Prerequisite: Consent of instructor.

Staff
Directed reading and laboratory work in the auditory process and its disorders.


Staff
Students participate in ongoing research or initiate independent research projects under guidance of supervising instructor. Assignments include literature review, design of research, execution of research, data reduction and analysis, and reporting.

231. Electrophysiology & Audiology. (3) F. Prerequisite: Consent of instructor. Lecture 3 hours. Lab 3 hours.

Gard and Staff
Review of the development of electrophysiological approaches to studying auditory functions with particular emphasis on auditory-evoked response measurements. Lectures and laboratory exercises will stress equipment design and calibration, data collection, analysis, and interpretation.

110. Clinical Clerkship in General Surgery. (1.5 per week) Su, F, W. Prerequisite: Core curriculum in basic sciences; third-year standing.

Goodson
A basic clerkship in surgery designed to cover those aspects of surgery which should be familiar to all practitioners. Students are assigned to work with ward teams and also to participate in teaching seminars.

111. Advanced Surgery Core Clerkship. (1.5 per week) Su, F, W. Prerequisite: Medicine 110 and Surgery 110.

Reilly
Students are senior clerks on wards, in operating rooms, and during clerkships in surgical specialties. Preceptorship in at least one additional specialty may be arranged for clerkships in surgical specialties.

112. Advanced Surgery Clerkship. (1.5 per week) Su, F, W. Prerequisite: Surgery 110.

Rall, McCalder
Senior clerks participate in clinic, ward, and operating room with direct involvement in post- and pre-operative care.

113. Advanced Surgery Clerkship. (1.5 per week) Su, F, W. Prerequisite: Surgery 110, Medicine 110.

Reilly, MacCalder
Senior clerks participate in clinic, ward, and operating room with direct involvement in post- and pre-operative care.

114. Advanced Surgery Clerkship. (1.5 per week) Su, F, W. Prerequisite: Surgery 110, Medicine 110.

Reilly, Schneck
Senior clerks participate in clinic, ward, and operating room with direct involvement in post- and pre-operative care.

115. Advanced Surgery Clerkship. (1.5 per week) Su, F, W. Prerequisite: Surgery 110, Medicine 110.

Reilly, Lewis
Senior clerks participate in clinic, ward, and operating room with direct involvement in post- and pre-operative care.

116. Advanced Surgery Clerkship. (1.5 per week) Su, F, W. Prerequisite: Surgery 110, Medicine 110.

Reilly, Lewis
Senior clerks participate in clinic, ward, and operating room with direct involvement in post- and pre-operative care.

117. Advanced Surgery Clerkship. (1.5 per week) Su, F, W. Prerequisite: Surgery 110, Medicine 110.

Sippenzer, O. Clark, R. Allen
Senior clerks participate in clinic, ward, and operating room with direct involvement in post- and pre-operative care.

118. Off-Campus Clerkship. (1.5 per week) Su, F, W. Prerequisite: Core curriculum in basic sciences and Medicine 110 or Surgery 110 and 111.

Dobbs
Clinical clerkship in approved hospitals in other universities by special arrangement and approval of the chairman of the department and the dean.

140. General Surgery—PMB. (1.5 per week) Su, F, W. Prerequisite: Surgery 110.

Russell
Students serve as acting internists on general surgical services; participate in preoperative and postoperative care of patients; participate in outpatient clinics as well as selected surgical services; office visits in daily ward rounds and teaching conferences.

140.4. Vascular Surgery Clerkship. (1.5 per week) Su, F, W. Prerequisite: Medicine 110, Surgery 110 and 111.

Goldstone
Students serve as acting internists on the vascular surgery team, participating in preoperative, intraoperative, and postoperative management of patients, as well as in clinics, rounds, and conferences.

140.05. Operable Heart Disease. (1.5 per week) Su, F, W. Prerequisite: Core curriculum in basic sciences and Medicine 110 or Surgery 110 and 111.

Rankin
Ward rounds and conferences on patients with operable cardiac, or congenital, or acquired aortic problems. Details of diagnosis, differential diagnosis, and results of surgery are discussed.

140.06. Emergency Medicine—SFCH. (1.5 per week) Su, F, W. Prerequisite: Medicine 110 or Surgery 110 and 111.

Hand
Ward rounds and conferences on patients with operable conditions, congenital, or acquired aortic problems. Details of diagnosis, differential diagnosis, and results of surgery are discussed.

140.07. Shock & Trauma Research. (1.5 per week) Su, F, W. Prerequisite: Core curriculum in basic sciences and Medicine 110 or Surgery 110 and 111.

F. Lewis
Course involves clinical and laboratory investigations and a detailed study of specific patterns with trauma and shock.

140.08. General Surgery—C. (1.5 per week) Su, F, W. Prerequisite: Surgery 110 and Medicine 110.

V. Richards
Students work as interns on Surgical Service; they supervise general surgical patients preoperatively, work with patients as operating room nurses, assume graduate student responsibilities in postgraduate management, and contribute to the general experience; interaction with staff in patient care emphasized.

185
140.09. Trauma Surgery—SFGH. (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 SFGH. The student will work at interne-cadet level as an integral part of the service. SURGERY

140.10. Cardiothoracic Surgery. (1.5 per week) Su, F, W, Sp. Prerequisite: Surgery 110 and 111.

Rankin

As an integral member of the cardiothoracic team, the student directly and actively shares in preoperative evaluation, operative procedures, and postoperative care. Cardiothoracic and thoracic conference and daily ward rounds provide the didactic teaching. SURGERY

140.11. Burn Care—SFGH. (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 studied. Students act as integral members of the team and participate directly in patient care. SURGERY


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


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 with practicing surgeons in selected community settings in the central San Joaquin Valley. Balance between VAF and community assignments is individually arranged according to students' interests. SURGERY


Parks

Clerkship offers an "organ systems" approach to critical surgical illness with experience in invasive and

noninvasive monitoring and appropriate therapeutic interventions. Course 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 student only.

Parks

Provides a clinical spectrum in critical-care medicine: burn wound infection control, relative 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—SFGH. (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 nutritional/bacterial problems. Students will perform nutritional assignments 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 40.

Harrison

The student works at acting intern on a busy pediatric surgical service specializing 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) S, F, W, Sp. Prerequisite: Medicine 110, Surgery 110.

Ascher and Staff

Students will participate in evaluation of potential liver recipients (including HLA typing, crosmatch, immunoelectroimmunoassay), observe the liver transplant procedure, participate in postoperative care (including immunosuppressive management and mechanisms of graft rejection). Student will attend periodic conferences, clinics, and daily rounds. SURGERY


Parks, Ghidini

Senior clerkship responsibilities include participation as member of busy patient care team, with emphasis on pre- and postoperative care, supervised clinic and operating room assignments, and participation in departmental conferences. The aim is to provide exposure to a spectrum of elective and emergency surgical problems. SURGERY

140.20. Clinical Trauma Service—VMC. (1.5 per week) S, F, W, Sp. Prerequisite: Surgery 110 and 111.

S. Parks, J. Davis

Subintern responsibilities include participation on a busy patient care trauma service emphasizing resuscitation, evaluation of injury, operating room participation, postoperative follow-up. There is also experience with non-operative management of trauma. The student will participate in departmental conferences. SURGERY

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. Student by arrangement with the instructor. SURGERY

160.05. Advanced Surgery Reading. (2) S, F, W, Sp. Prerequisite: Surgery 110 and consent of instructor. Lecture 3 hours. Lab 6 hours.

Hickey

Course emphasizes nutritional and metabolic requirement of injured, ill, and malnourished patients. Clinical rotation involves methods of preparation, administration, and assessment of patients receiving caloric protein or amino acid support as part of specific therapy. SURGERY

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

Dobbs 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.

Dobbs and Staff

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


Conferees include presentation of case studies with reference to present text, review of case records, laboratory tests, and special studies. Faculty and occasional guest lecturers discuss surgical problems. Death and complications are reviewed weekly. SURGERY


McKearney

Pathology case file is reviewed with emphasis on the currently available gross and microscopic pathological material from the operating rooms and pathology laboratories. SURGERY


Dobbs, SFGH Lewis, UC Debbs, VA L Way

Seminar is held in the surgical wards with discussion of current problems concerning the diagnosis and management of general surgical patients. SURGERY


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. Some residents have certain additional administrative, teaching, and clinical responsibilities. SURGERY

452. Experimental Surgery Laboratory. (1.5 per week) Su, F, W. Sp. Restrictions: Surgery 450 and 452 may not be taken concurrently.

Dobbs and Staff

Course includes experimental investigations of general surgical problems and the development of technical and laboratory methods or be applied in general surgery. SURGERY


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

490. Clinical Surgery—SFGH. (1.5 per week) Su, F, W, Sp. 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


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. SURGERY

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 teaching by the individual student of an actual microcourse, teaching a single skill. GEN DENT
Teaching Methodology / Toxicology / Urology

Staff
Practical teaching experience in selected courses under the supervision of members of the staff. GEN DENT
186. O.A. Practice Teaching. (0-3, 0-3, 0-3) F, W, Sp. Lab 3 hours.
Staff
Practical teaching experience in selected courses under the supervision of senior members of the staff. GEN DENT

Toxicology
200A. Introduction to Biochemical Toxicology. (6) F, Sp. Prequisite: PC 203 or co-requisite. Lecture 4 hours.
Meelham
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. PHARM

Urology
Core Clerkship-Surgery 110 includes clinical clerkships in the outpatient clinics and hospitals, exposure to operations, and participation in residents' seminars.

Tanagho
Students work at intern on the Urology Service at UC. They also attend rounds and scheduled seminars with residents and visiting staff. UROLOGY

140.02. OSF-Campus Urology. (1.5 per week) Su, F, W, Sp. Prequisite: Surgery 110.
Tanagho
Clinical clerkship in off-campus hospitals approved by the chairperson of the department and the dean. UROLOGY

140.03. Advanced Urology Clerkship-VA. (1.5 per week) Su, F, W, Sp. Prequisite: Surgery 110.
R. D. Williams
Students work at intern on the Urology Service at VA. They attend rounds and scheduled seminars with residents and visiting staff. UROLOGY

McAninch
Students work as interns on the Urology Service at SFGH. They also attend rounds and scheduled seminars with residents and visiting staff. UROLOGY

158.01. Research in Urology. (1.5 per week) Su, F, W, Sp. Prequisite: Must be third- or fourth-year medical student. Must have approval of chair, dean, and involved research faculty.
Carroll
Research project under the direction of a member of the Department of Urology. UROLOGY

Tanagho and Staff
Seminar and library research. UROLOGY

Tanagho and Staff
A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. UROLOGY

Tanagho
Seminar includes study of the basic sciences and urologic research with members of the attending staff. UROLOGY

Tanagho
Course includes experimental investigations in urologic problems. UROLOGY

Tanagho
Seminar includes discussion of diagnosis and treatment of patients in the urology wards with the attending staff. UROLOGY

Tanagho
Conference includes presentation and discussion of urologic problems by the house staff and faculty. UROLOGY

UC, Tanagho, SFGH, McAninch, VA R.D. Williams
Five-year resident care for patients in the wards and outpatient clinics. Second- and third-year resident, under supervision, perform instrumental examinations on clinic patients. Senior resident, under supervision, perform instrumental and surgical procedures and have administrative, clinical, and teaching responsibilities. UROLOGY

McAninch
Interns rotate through urologic 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

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Bill Honig
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Carl Storzy
Vice President of the Alumni Associations of the University of California
Paul Hall
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David Pierpoint Gardner

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Regents-Designate
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6. Appointed by the Governor for terms of 12 years. Term of Regents appointed by the Governor expire March 1 of the year shown in parentheses.
7. Secretary and Treasurer of the Alumni Association of the University of California are Regents-Designate (non-voting). The Student Regent and Alumni Regent serve for one year beginning July 1 and ending June 30 of the year shown in parentheses.