


NONPROFIT ORG.
U.S. POSTAGE
PAID
UNIV. OF CALIF.
SAN FRANCISCO

University of California San Francisco
A Health Sciences Campus
San Francisco, CA 94143-0462

HILBERRY UNION BOOKSTORE
UCSF
159
GENERAL CATALOG 95
NR SYL



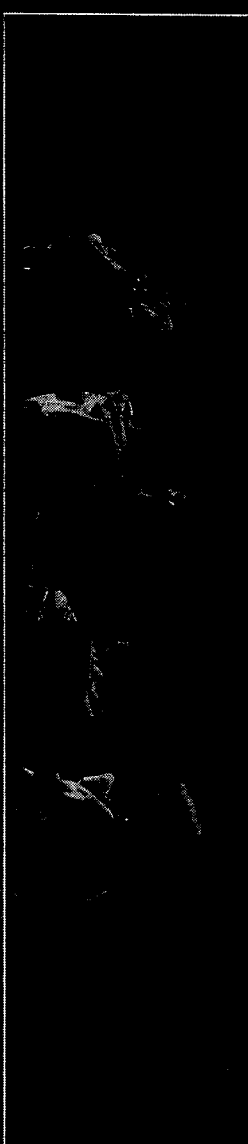
9 780000 026637

\$2.95

The
University of California
San Francisco

091
UNIVERSITY OF CALIFORNIA SAN FRANCISCO
OFFICE OF THE REGISTRAR
500 PARNASSUS AVENUE, MU 200W
SAN FRANCISCO, CA 94143-0294

1995-96 GENERAL
CATALOG



FILE COPY
Please do not remove.

Contents

Admission	1
Admission with a Bachelor's Degree	1
Admission without a Bachelor's Degree	1
Courses	1
Departments and Other Instructional Units	1
Hospitals	1
Anatomy	2
Anesthesia	2
Anthropology	2
Biochemistry	3
Bioengineering	3
Biomathematics	4
Biomedical Sciences	4
Biophysics	4
Biostatistics	4
Cell Biology	4
Chemistry	4
Clinical Pharmacy	4
Comprehensive Dental Care	8
Craniofacial Anomalies	8
Dental Health Education	8
Dental Hygiene	8
Dental Public Health and Hygiene	9
Dermatology	9
Endocrinology	9
Epidemiology	9
Family and Community Medicine	10
Genetics	11
Growth and Development	11
Health Sciences Education	11
History of Health Sciences	11
Human Development & Aging	11
Human Sexuality	11
Interdepartmental Studies	11
Laboratory Medicine	12
Medicine	12
Microbiology and Immunology	14
Neurological Surgery	14
Neurology	14
Neuroscience	15
Nursing	15
Nutrition	19
Obstetrics, Gynecology and Reproductive Sciences	19
Ophthalmology	19
Oral Biology	19
Oral Diagnosis	20
Oral & Maxillofacial Surgery	20
Oral Medicine	20
Oral Pathology	20
Oral Radiology	20
Orthodontics	21
Orthopaedic Surgery	21
Otolaryngology	21
Parasitology	22
Pathology	22
Pediatric Dentistry	22
Pediatrics	23
Periodontology	24
Pharmaceutical Chemistry	25
Pharmacology	25
Pharmacy	25
Pharmacy Administration	26
Physical Therapy	26
Physiology	27
Psychiatry	27
Psychology	28
Radiation Oncology	28
Radiology	29
Removable Prosthodontics	29
Restorative Dentistry	29
Sociology	31
Speech and Hearing Science	32
Stomatology	32
Surgery	32
Teaching Methodology	33
Toxicology	33
Urology	33
Addresses	34
Map	35

Admission

Admissibility to the University of California is a condition for admission to a professional school or curriculum, but does not guarantee a place in the class. The University's admission requirements are summarized briefly below. For further information, consult the *Introducing the University* bulletin available at the Admissions Office on any UC campus.

Admission with a Bachelor's Degree

Students entering the University in any professional curriculum with a bachelor's degree or higher degree from an approved institution must have attained a minimum grade-point average of 2.0 (2.8 if a nonresident) in all academic work attempted. The program of studies leading to the bachelor's degree must be substantially equivalent in academic subjects to the bachelor's degrees awarded by the University of California.

Admission without a Bachelor's Degree

Applicants for admission to any professional school on the San Francisco campus must have some college preparation. Applicants must have attained a minimum grade-point average of 2.4 (2.8 if a nonresident), unless an applicant has attended a University of California campus as a full-time student or was UC eligible from high school. If so, a minimum 2.0 grade-point average is required.

Applicants without a baccalaureate degree who are unable to provide proof of having successfully completed four years of high school English or equivalent will be required to fulfill this general University of California admission requirement by taking English courses in addition to those required for admission. They must also satisfy the American History and Institutions and Subject A requirements.

For more information, write to the Admission Office of the particular school (see page 34).

Courses

This 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 Anesthesia, School of Medicine
- BIOCHEM
Department of Biochemistry and Biophysics, School of Medicine
- CL PHARM
Division of Clinical Pharmacy, School of Pharmacy
- DENT PUB HLTH
Department of Dental Public Health and Hygiene, School of Dentistry
- DERMATOL
Department of Dermatology, School of Medicine
- EPID & BIostat
Department of Epidemiology and Biostatistics, School of Medicine
- FAM CM MED
Division of Family and Community Medicine, School of Medicine
- FAM HLTH
Department of Family Health Care Nursing, School of Nursing
- GR DEVEL
Department of Growth and Development, School of Dentistry
- HIST HL SC
Department of History of Health Sciences, School of Medicine
- LAB MED
Department of Laboratory Medicine, School of Medicine
- MEDICINE
Department of Medicine, School of Medicine
- MENT HLTH COMADM
Department of Mental Health, Community, and Administrative Nursing, School of Nursing
- MICROBIOL
Department of Microbiology and Immunology, School of Medicine
- NEURO SURG
Department of Neurological Surgery, School of Medicine
- NEUROLOGY
Department of Neurology, School of Medicine
- OB GYN R S
Department of Obstetrics, Gynecology and Reproductive Sciences, School of Medicine
- OPHTHALMOL
Department of Ophthalmology, School of Medicine
- ORAL & MAX SURG
Department of Oral and Maxillofacial Surgery, School of Dentistry
- 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
- STOMATOL
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
- KHDV
Kaweah Delta District Hospital, Visalia
- KP
Kaiser Foundation Hospital, Oakland
- KS
Kaiser Foundation Hospital, Sacramento
- KSSF
Kaiser Foundation Hospital, South San Francisco
- KWC
Kaiser Foundation Hospital, Walnut Creek
- L
Letterman Army Medical Center, San Francisco
- LBL
Lawrence Berkeley Laboratory, Berkeley
- LH
Laguna Honda Hospital and Rehabilitation Center, San Francisco
- LPPI
Langley Porter Psychiatric Hospitals and Clinics, San Francisco
- MC
Maricopa Medical Center, Phoenix
- MG
Marin General Hospital, Greenbrae
- MHLB
Memorial Medical Center, Long Beach
- MZ
Mount Zion Medical Center of UCSF, San Francisco
- NAT
Natividad Medical Center, Salinas
- NRMHC
Naval Hospital, Oakland
- NS
Napa State Hospital, Napa
- OC
O'Connor Hospital, San Jose
- PH
Mills-Peninsula Hospitals, Burlingame
- PMC
California Pacific Medical Center-Pacific campus, San Francisco
- Q
Queen's Medical Center, Honolulu
- RLA
LAC-Rancho Los Amigos Hospital, Downey
- S
Stanford University Hospital, Stanford
- SCC
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
- SH
Shriners Hospital for Crippled Children, Honolulu
- SJ
San Joaquin General Hospital, Stockton

Anatomy

SM
Samuel Merritt Hospital, Oakland

SMC
Seton Medical Center, Daly City

SRM
Santa Rosa Memorial Hospital, Santa Rosa

SS
Sonoma Developmental Center, Eldridge

SSF
Shriners Hospital for Crippled Children, San Francisco

STA
St. Agnes' Medical Center, Fresno

STF
St. Francis Memorial Hospital, San Francisco

STL
St. Luke's Hospital, San Francisco

STM
St. Mary's Hospital and Medical Center, San Francisco

SUM
Summit Medical Center, Oakland

SVH
Sierra Vista Hospital, Sacramento

T
Tripler Army Medical Center, Honolulu

UC
UCSF Medical Center, San Francisco (includes Moffitt, Long, and Ambulatory Care Center)

UCD
University of California Davis Medical Center, Sacramento

UCI
University of California Irvine Medical Center, Orange

UCLA
University of California Los Angeles Medical Center, Los Angeles

UCSD
University of California San Diego Medical Center, San Diego

VA
Veterans Affairs Medical Center, San Francisco

VAF
Veterans Affairs Medical Center, Fresno

VAL
Veterans Affairs Medical Center, Livermore

VAM
Veterans Affairs Medical Center, Martinez

VAP
Veterans Affairs Medical Center, Phoenix

VAPA
Veterans Affairs Medical Center, Palo Alto

VASD
Veterans Affairs Medical Center, San Diego

VCF
Valley Children's Hospital, Fresno

VMC
Valley Medical Center of Fresno, Fresno

Anatomy

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

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

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

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

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

116. Gross Anatomy. (3) § Sp. 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) F Prerequisite: First-year dental standing. Lecture 5 hours. Lab 15 hours.
S. Fisher
The gross structure and developmental anatomy of the thorax and abdominal regions are studied by means of lectures, laboratory exercises, and demonstrations. The functional significance of the structures is emphasized. STOMATOL

117.02. Head & Neck Anatomy. (4) F Prerequisite: First-year Dentistry standing. Lecture 2 hours. Lab 6 hours.
S. Fisher
The gross anatomy of the head and neck is studied by lectures and dissection. Clinical applications and functions of importance to the dentist are emphasized. STOMATOL

118. General Histology. (4.5) § F Lecture 4 hours. Lab 2 hours.
R.H. Kramer
The microscopic structure of tissues and organs of the body are studied with histophysiological considerations. STOMATOL

150.01. Gross & Regional Anatomy. (1.5/week) § Su, F, W, Sp. Prerequisite: Program must be approved by department and adviser during quarter previous to enrollment.
H. Patterson
Individual/group dissection. Advanced review of gross anatomy. Intended as a block elective course for advanced medical or graduate students. ANATOMY

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

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

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

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

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

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

201. Radiation Effects on Genes & 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 intragenic and intergenic mutations that give insight into the structure of chromosomes and the interaction of radiation with biological material. ANATOMY

204. Cytogenetic Techniques. (3) § Sp. Prerequisite: Consent of instructor. Lab 6 hours.
S. Wolff
Course covers instruction in various methods of chromosome banding as well as cell cycle analysis by autoradiography. ANATOMY

207. Neuroscience. (5) § SS3. Prerequisite: Basic Human Anatomy and Physiology or consent of instructor. Lecture 4 hours. Lab 3 hours.

Melnick
The structural organization and function of the physiology of the central nervous system with an emphasis on the physiology of striated muscle and peripheral nerve relative to control mechanisms within the nervous system is presented. Emphasis is on clinical functional correlations of motor control. ANATOMY

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

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

225. Experimental Neuroanatomy. (4) § SS1, SS2. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 6 hours. Lecture and lab full time for 2 weeks. Offered in alternate years. Offered 1995-96.
M. LaVail, Ralston, J. LaVail, Basbaum
Lectures and laboratory projects on the principles and experimental methods of analyzing the neural organization of the central and peripheral nervous systems. Topics include neurocytology, axon transport, neural degeneration, immunocytochemistry, autoradiography, electron microscopy, quantitative data acquisition methods, and photomicrography. ANATOMY

233. Mammalian Chimeras & Mosaics. (2) § Sp. Prerequisite: Consent of instructor. Lecture 2 hours. Offered in alternate years. Not offered 1995-96.

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

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

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

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

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

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

300. Practicum in Teaching. (1-4) § F, W, Sp. Prerequisite: Consent of instructor.
Staff
Training in teaching in a course offered by the Department of Anatomy under the supervision of instructor in charge. Laboratory teaching, presentation 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, Sp. Prerequisite: Open to housestaff members of UC hospitals. Lecture 1 hour. Lab 3 hours.

Patterson
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-C, MZ. (1.5/week) Su, F, W, Sp. Prerequisite: Third-year standing.
Magorian
The course consists of instruction and experience in operating room anesthesia including preoperative and postoperative evaluation and care. Cardiopulmonary resuscitation and care of the unconscious patient are stressed. ANESTHESIA

111. Advanced Cardiac Life Support (1) Sp. Prerequisite: Basic cardiac life support (BLS or CPR) and Anesthesia 110. Restriction: 4th year medical students, UCSF. Lecture 8 hours. Workshop 12 hours.

Carlisle, Cassorla
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 Clinical Clerkship-UC, MZ, SFGH. (1.5 per week) Su, F, W, Sp. Prerequisite: Anesthesia 110.

Magorian
Four-week clerkship offering: Two weeks OR experience at Moffitt/Long providing anesthesia for pediatric, neuro, cardiac, and vascular surgery, one week evenings at SFGH in emergency surgery for trauma, one week of postoperative pain management. ANESTHESIA

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

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

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

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

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

Cohen
The student will participate in the care of critically ill adults with a variety of medical and surgical conditions. The clerkship will integrate an understanding of respiratory, cardiovascular, cerebral and renal pathophysiology with diagnostic and therapeutic techniques required to care for patients with multisystem failure. ANESTHESIA

140.06. Pain Management. (1.5 per week) Su, F, W, Sp. Prerequisite: Anesthesia 110.

Magorian, Allen
The student will learn diagnosis and treatment of acute and chronic pain. Rotation includes the Postoperative Pain Service (managing epidural infusions and PCA) and the Multidisciplinary Pain Center (managing all aspects of chronic pain, including diagnostic and therapeutic nerve blocks). ANESTHESIA

140.07. Advanced Anesthesia. (1.5 per week) F, W, Sp. Seminar 3 hours. Conference 1 hour. Patient contact 35 hours.

Rosen, Pogrel
This is a 12-week advanced elective in general anesthesia for participants in Oral & Maxillofacial Surgery who are in the medical school phase of their integrated training program. It fulfills partial requirements for accreditation in Oral & Maxillofacial Surgery. ANESTHESIA

150.01. Research in Anesthesia. (1.5 per week) Su, F, W, Sp. Prerequisite: Anesthesia 110. Consent of the Dean and Department of Anesthesia.

Staff
Students conduct research projects under guidance of faculty member. Projects must be approved by instructor involved in supervising student. Students may initiate or become involved in established research programs under faculty guidance. ANESTHESIA

160.01. Basic Life Support. (0.5) F, W, Sp. Restriction: 1st-year medical students only. Lecture 1 hour. Lab 3 hours.

Cohen, Cahalan, Strong
Course trains students in professional rescuer life support skills: cardiac compression and ventilation, management of airway obstruction, and assessment of need to initiate or terminate CPR. Successful completion of this course results in AHA or ARC certification in CPR. ANESTHESIA

178. General Anesthesiology. (6) Sp. Prerequisite: Interns and residents. Clinic.

Miller and Staff
Course covers the systemic effects of the various muscle relaxants, sedatives, and stimulants and the administration of general anesthetic agents. ANESTHESIA

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

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

450. Anesthesia Clinical Work. (1.5 per week) Su, F, W, Sp. Required during first year of residency, and during either second or third year.

R.D. Miller
Residents are responsible for anesthetic care and management of patients in the operating rooms and outpatient departments, under immediate supervision of the staff. Preoperative and postoperative evaluation of patients, oxygen therapy, and resuscitation are covered. ANESTHESIA

460. Special Assignment. (1.5 per week) Su, F, W, Sp. Elective for residents during either second or third year.

UC Gregory, Calahan
Assignments include instruction in anesthesia for children, problems related to open heart surgery, cardiology, and opportunity for research in related fields. ANESTHESIA

470. Molecular Biology Techniques for Anesthesia Research. (0) Sp. Restriction: For staff, fellows, and research assistants in Department of Anesthesia only. Lab: 16 hours.

UC Yost, Forsayeth
Practical beginning laboratory course in molecular biology techniques. Participants will be instructed in current techniques employing plasmids, restriction endonucleases, and microbiological methods for the amplification and manipulation of cloned DNA. ANESTHESIA

Anthropology

The Medical Anthropology program is a division of the Department of Epidemiology and Biostatistics.

200. Off-Campus Study. (0) § F, W, Sp. Prerequisite: Approval of the graduate adviser. Open only to students enrolled in the graduate program in Medical Anthropology.

Staff
Full-time graduate study in the Medical Anthropology program through the intercampus exchange or consortium program. EPID & BIostat

205A-B. Intro to Sociocultural Aspects. (3-4, 3-4) § F, W. Prerequisite: Intended primarily for doctoral students in medical anthropology, and others at graduate standing with consent of instructor. Lecture 3 hours, plus 3 hours independent study for 4 units. Required for and open only to first-year students in the UCSF Ph.D. Program in Medical Anthropology. Two-quarter course.

Barker, 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 Biocultural Anthropology. (3-4, 3-4) § Sp, W. Prerequisite: Consent of instructor. Lecture 3 hours, plus 3 hours independent study for 4 units. Open only to first-year students in the intercampus Program in Medical Anthropology. Required for students in the UCSF Ph.D. Program in Medical Anthropology. Not offered 1995-96. Offered 1996-97.

Beyene
Survey of the biocultural areas of medical anthropology; anthropology in relationship to biomedicine and human biology. EPID & BIostat

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

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

212A-B-C. Research Apprenticeship. (2-5, 2-5, 2-5) § F, W, Sp. 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

215. Life History Methods. (2-3) § F, W, Sp. Seminar 2-3 hours.

Ablon
Review of theoretical and methodological literature on anthropological life histories and the uses 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, Sp. Lecture 2 hours. Lab 3 hours.
Mittness
 Introduction to statistical methods for the social sciences: 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) § Sp. Lecture 3 hours. Lab 0-3 hours.
Staff
 An introduction to data processing methods most commonly used by medical anthropologists. Topics covered in lecture and laboratory demonstrations include: how a computer works, data form design, keypunching, use of SPSS and HMD program packages and interpretation of computer output. EPID & BIOSTAT

220. Departmental Seminar. (0) § F,W, Sp. Prerequisite: Consent of instructor. Lecture 1 hour.
Mittness
 Students, staff, or guest lecturers present selected topics based on their current work. EPID & BIOSTAT

221A-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

225. Contemporary Issues. (2-4) § F,W, Sp. Prerequisite: Consent of instructor. Lecture 2 hours, plus 3 or 6 hours independent study for 3 or 4 units.
Lane
 Introduction to selected 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, praxis and the social scientist. EPID & BIOSTAT

226. Stigmatized Health Conditions. (2-3) § F,W, or Sp. Lecture 2-3 hours.
Ablon
 Examination of social attributes of stigma to such conditions as deafness, alcoholism, obesity, dwarfism, mental and physical disabilities. Self-help groups organized around such conditions will be examined. Guest speakers who have experienced these conditions will contribute to the course. EPID & BIOSTAT

227. Community Resources for Health & Mental Health. (3-4) § Sp. Seminar 2-3 hours. Variable field observations.
Ablon
 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. (2-3) § F Prerequisite: Consent of instructor. Lecture 2 hours, plus 3 hours independent study for 3 units.
Kiefer
 Exploration of the relationship between culturally conditioned ways of perceiving, thinking, and communicating, and individual behavior and personality development. Application of cultural and personality findings in medical and nursing settings. EPID & BIOSTAT

231. Ethnopsychiatry. (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 disorder including folk healing, cross-cultural comparisons, research methods, and implications for community psychiatry. Students study local examples of folk healers or folk healing institutions. EPID & BIOSTAT

233. Anthropology of Aging. (2-3) § F,W, Sp. Prerequisite: Consent of instructor. Lecture 2 hours, plus research project for 3 units.
Kaufman, Fox
 Cross-cultural approaches to roles, statuses, and problems of aged populations. Cultural factors influencing the condition and adaptation of the aged in American society. Topics to be covered include cultural attitudes and values, social relationships, and health problems. EPID & BIOSTAT

234. Culture & Symbolic Systems. (2-3) § F 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 psychocultural 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 students in medicine, nursing and graduate departments. Lecture 2 hours, plus research paper.
Mittness, Barker
 Review of child development, child rearing and family dynamics in various non-Western cultures and in selected ethnic subcultures of the United States, from historical, psychological, and anthropological perspectives. EPID & BIOSTAT

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

245. Development in Late Adulthood. (3) § F Lecture 2 hours. Lab 3 hours.
Kayser-Jones
 Course covers developmental theory and research in aging. Emphasis is on anthropological, sociological, and psychological studies. Current issues in aging with emphasis on implications for health care are discussed. EPID & BIOSTAT

246. Comparative Medical Systems. (2-3) § Sp. Prerequisite: Consent of instructor. Lecture 2-3 hours.
Beyene
 Popular medicine in the Third World with emphasis on how people use indigenous and biomedical health care resources. Theories of health and disease, social and symbolic dimensions of healing, and relevance of traditional medicine for health maintenance and primary health care. EPID & BIOSTAT

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

248. Group Study. (1-5) § F,W, Sp. Prerequisite: Consent of instructor.
Staff
 Groups of two or more collaborate on special problems in anthropology under the direction of faculty. Students may select areas related to their long-term interest and future research program. EPID & BIOSTAT

249. Directed Reading. (1-5) § F,W, Sp. Prerequisite: Consent of instructor.
Staff
 Independent study. EPID & BIOSTAT

250. Research. (1-8) § F,W, Sp. Prerequisite: Consent of instructor.
Staff
 EPID & BIOSTAT

251. Social Gerontology. (2-4) § 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. EPID & BIOSTAT

252. Culture & Health Policy. (3) § F,W, Sp. Seminar 3 hours.
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. EPID & BIOSTAT

253. 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 care-giving and social support literature will be associated with social, cultural, and psychological theories on the family. EPID & 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.
Lane and Staff
 Individual or small group directed reading and discussion of epidemiological and medical ecological perspectives, methods, and findings relevant to the field of medical anthropology. EPID & BIOSTAT

261. Health and Human Survival. (2-4) § W. Seminar 2 hours. Field work 0-6 hours.
Kiefer
 Social and economic causes of ill health in international perspective. Focus on community-based efforts to provide primary health care in low-income and rural areas. Student involvement in course planning and leadership. Participation of health care workers from developing countries. EPID & BIOSTAT

262. Poverty and Health in the U.S. (2-4) § Sp. Seminar 2 hours. Conference 0-1 hour. Field work 0-3 hours.
Kiefer
 Social and economic basis of ill health among underserved populations in the United States. Focus on cooperation between health professionals and low-income clients to improve health conditions and care access in underserved areas. Student involvement in course planning and leadership. Participation of low-income clients in seminars. EPID & BIOSTAT

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

299. Dissertation. (0) § F,W, Sp. Prerequisite: Advancement to candidacy and permission of the graduate adviser.
Staff
 For graduate students engaged in writing the dissertation for the Ph.D. degree. EPID & BIOSTAT

Biochemistry

100. Human Metabolism. (5) W. Prerequisite: Interdepartmental Studies 100: Cell and Tissue Biology or consent of instructor. Lecture 4 hours. Conference 2 hours.
Colby, Musci
 Lectures and conferences in the metabolism of carbohydrates, lipids, amino acids, and nucleotides, with emphasis on physiologic regulation. Primarily for medical students. BIOCHEM

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

112A-B. Cellular Structure & Function: Human Metabolism. (4-4) § F,W. Lecture 4 hours.
Colby
 Lectures in biochemistry, including aspects of cell and molecular biology, cell physiology, and human metabolism. BIOCHEM

150.01. Research in Biochemistry. (1.5 per week) F,W, Sp. Prerequisite: Consent of instructor.
Staff
 Research in biochemistry. BIOCHEM

170.01. Molecular Biology of Cancer. (2) W. Seminar 2 hours. Project 2 hours. Library research 1 hour.
Colby
 Seminar on molecular and cell biological approaches to disease processes. BIOCHEM

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

198. Supervised Study. (1-5) § Su, F,W, Sp.
Colby
 Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. BIOCHEM

199. Laboratory Project. (1-5) § Su, 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. BIOCHEM

200A. Structure of Macromolecules. (3) § F Prerequisite: Calculus, physical chemistry, organic chemistry, and an advanced course in biology. Lecture 3 hours.
Mitchison and Staff
 Fundamental principles governing the behavior of, and modern techniques for, study of biological macromolecules. Topics covered are: thermodynamics (entropy, equilibrium, cooperative interactions); kinetics and catalysis; structure and function of macromolecules (DNA, membranes, proteins) by X-ray and electron optics; kinetics and structure of cooperative enzymes and systems of biological control. BIOCHEM

200C. Chromosome Structure & Function. (1.5) § Sp. Prerequisite: Calculus, physical chemistry, organic chemistry, and an advanced course in biology are recommended. Lecture 3 hours for one-half quarter.
Sedat
 Structure and function of chromosomes in eukaryotes will be discussed in depth, beginning with basic underlying experiments and leading to the most recent proposals for structure. Emphasizes both theoretical and experimental approaches to this area of cell and molecular biology. BIOCHEM

200E. Enzymology. (3) § F Prerequisite: Calculus, physical chemistry, organic chemistry, introductory biochemistry, and an advanced course in biology, or consent of instructor. Lecture 3 hours. Offered in alternate years. Not offered 1995-96.
Santi, Kenyon
 Biochemically important chemical transformations from the physical organic point of view, emphasizing catalytic mechanisms pertinent to enzyme reactions, and to the development of enzyme model systems. Inter-molecular forces and enzyme substrate interactions. Techniques of investigating enzyme mechanisms and kinetics. BIOCHEM

201A. Biological Regulatory Mechanisms. (4) § W. Prerequisite: Calculus, physical chemistry, organic chemistry, introductory biochemistry, an advanced course in biology, and Genetics 200A. Lecture 3 hours. Seminar 1 hour.
Johnson and Staff
 The discovery of principles forming the foundation of molecular biology and recent advances in rapidly developing areas of the field. Topics covered are: RNA transcription, protein translation, DNA replication, control mechanisms, and genome structure and organization. BIOCHEM

210. Special Topics. (0-5) § F,W, Sp. Prerequisite: Consent of instructor. Lecture 1-5 hours.
Staff
 Discussion of selected areas in biochemistry, biophysics, and biomathematics. BIOCHEM

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

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

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

242. Protein Crystallography. (3) § W. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours. Offered in alternate years. Not offered 1995-96.
Stroud
 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) § Sp. Prerequisite: Calculus, physical chemistry, organic chemistry, and an advanced course in biology are recommended. Lecture 3 hours.
C. Kenyon, G. Martin
 Modern aspects of cell biology and development with emphasis on structure-function relationships and multicellular organization. BIOCHEM

250. Research. (1-8) § F,W, Sp.
Staff
 BIOCHEM

297. Special Study. (1-3) § F,W, Sp.
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: Advancement to candidacy and permission of the graduate adviser.
Staff
 For graduate students engaged in writing the dissertation for the Ph.D. degree. BIOCHEM

Bioengineering

The Graduate Group in Bioengineering is an interdisciplinary group offering a Ph.D. in Bioengineering on the San Francisco and Berkeley campuses. Courses integrating biology and engineering may also be found under the course listings for Biomathematics, Biostatistics, Neuroscience, and Pharmaceutical Chemistry.

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

200. Off-Campus Study. (0) § F,W, Sp.
Hasegawa
 Full-time study in bioengineering at another location through the UCSF/UCB Graduate Group in Bioengineering.

210. Radioactivity Applications. (3) § Sp. Lecture 3 hours.
Perez-Mendez
 Basic physics of radioactivity and alpha, beta, gamma, and fission processes. Interactions of radiation with matter, basic radiation detectors for counting and determining energies of charged particles, neutrons, and gammas. 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. Orthopaedic 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 orthopaedics, and to discuss these uses with respect to joint mechanics and joint displacement.

230A. Physics of Medical X-ray Imaging. (3) § F Prerequisite: Baccalaureate degree in engineering or a physical science, differential equations, Fourier analysis, or consent of instructor. Lecture 3 hours.
Hasegawa, Cann, Gould
 Basic interactions of photons and particles with matter; detectors and detector electronics; radiation quantity and quality, contrast, spatial resolution, noise, and image perception; radiation protection.

230B. Physics of Medical X-ray Imaging. (3) § W. Prerequisite: First quarter course in Physics of Medical X-ray Imaging or equivalent, or consent of instructor.
Hasegawa, Cann, Gould
 X-ray production, x-ray scatter and scatter production, video imaging, image intensifiers, linear tomography, computed tomography, xeroradiography, digital subtraction angiography, photostimulable phosphor technology, dual-energy imaging techniques, bone-mineral densitometry, and quantitation of vascular flow.

230C. Physics of Medical Imaging. (3.5) § Sp. Prerequisite: Baccalaureate degree in engineering or a physical science, differential equations, Fourier analysis, or consent of instructor.
Hasegawa, Huang, Lou, Wong
 Digitization and sampling requirements of medical images; display and perception of electronic images; reversible and irreversible image compression techniques; picture archiving and communication systems; image registration, segmentation; 3-dimensional image rendering, medical imaging databases.

240. Principles of Nuclear Magnetic Resonance Imaging. (3) § Sp. Prerequisite: Baccalaureate degree in engineering or a physical science; knowledge of Fourier analysis, electromagnetic waves and radiation; or permission of instructor. Lecture 3 hours.
Hylton, Carlson, Crooks, Ortendahl, 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
 Advanced study in various subjects through seminars on topics to be selected each year, informal group studies of special problems, group participation in comprehensive design problems, or group research on complete problems for analysis and experimentation.

250. Research. (1-8) § F,W, Sp. Prerequisite: Graduate standing.
Staff
 BIOCHEM

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

297. Special Study. (1-8) § F,W, Sp.
Staff
 Reading and conferences for properly qualified students under the direction of a member of the staff.

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

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

Staff

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

Biomathematics

180. Algebra & Calculus for Biomed. (3) § Su. Prerequisite: Consent of instructor.

Licko

Mathematical concepts and processes for planning, representation, and analysis in biomedical research. Review of algebraic operations, equations, matrices, and graphs. Introduction to functions, sequences, convergence, derivatives, integrals, and infinite series. Applications to growth, binding, enzyme kinetics, tracer studies, population dynamics.

190. Biolog Modeling through Diff Eqn. (3) § F. Prerequisite: Biomathematics 180 or equivalent. Lecture 2 hours. Lab 3 hours.

Licko

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.

214. Endocrine Dynamics. (3) § W. Prerequisite: Biomathematics 193A-B-C or equivalents, or consent of instructor.

Licko

Review of relevant parts of compartmental and tracer analysis and control theory. Analysis of dynamics of secretory process, distribution, binding and metabolism of hormones, and hormonal control. Differential equations are utilized throughout the course.

Biomedical Sciences

210. Tissue Organization and Morphogenesis. (3) § Sp. Lecture 1.5 hours. Conference 1.5 hours.

Derynck, Ingraham, Werb

This course will cover basic concepts and elements of tissue growth and differentiation and selected examples of tissue organization and organogenesis. Emphasis is on vertebrate systems and development.

225. Human Biology. (3.5) F,W. Prerequisite: Admission to UCSF graduate program or permission of instructor. Lecture 3 hours. Lab 1.5 hours.

McKerrow, Ingraham, Weiner

An integrative graduate-level course on human cell and molecular biology. Focus on tissue biology and organ system function. Lab includes introduction to human histology.

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 intercampus exchange or consortium program.

201. Cellular Biophysics. (3) § W. Prerequisite: Biochemistry 200A. Lecture 3 hours.

Cooke, Papahadjopoulos

Topics covered: membrane structure and dynamics; transport and permeability; cellular motion and muscle contraction; cell energetics; DNA replication and information transfer; cell cycles.

203. Mending Human Genes. (2) § W. Prerequisite: Consent of instructor. Lecture 2 hours.

Cleaver

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.

205. Mammalian Genomic Rearrangement. (1.5) § Sp. Lecture 1.5 hours.

Morgan, Murnane

This course will focus on the mechanisms of recombination, specific DNA rearrangements and how they are manifested cytogenetically, factors influencing the rate of DNA rearrangements, and the consequences of DNA rearrangements in mammalian cells.

207A. Image Cytometry: Theory, Methods & Applications. (2) § Sp. Prerequisite: Consent of instructor. Lecture 2 hours.

Mayall, Chew

Introduction to quantitative microscopy, electronic imaging; digital image processing; feature extraction; measurement of individual objects; statistical analysis and validation of data; research and clinical applications of image cytometry.

207B. Image Cytometry: Theory, Methods & Applications. (3) § Sp. Prerequisite: Successful completion of 207A. Lab.

Mayall, Chew

One-week practicum to introduce image cytometric systems of Laboratory for Cell Analysis (CAS 100, TAS Plus, QUIPS). Students will complete a small project in which they apply image cytometry to a problem of biological or clinical relevance.

209. Cancer Genetics. (3) § Sp. Lecture 3 hours.

Morgan, Gray, Waldman

Beginning with an overview of cancer, the course will focus on genetic changes leading to cancer progression, the biological processes that are disrupted by these changes, and methods used to identify the genes involved.

210. Radiation Biophysics. (3) § F. Prerequisite: Consent of instructor. Lecture 3 hours.

Fike, Morgan

Interaction of electromagnetic radiation with matter; radiation chemistry; molecular lesions induced by radiation; damage and repair in mammalian cells; interaction of radiation and other agents in mammalian cells and tissue.

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

Deen

Current topics in radiation physics, radiation chemistry, and radiation biology. Lecturers will be mainly scientists from the Bay Area with ongoing research programs. Lecturers will assume student familiarity with information covered in Biophysics 210.

215. Laboratory Rotation. (3) § F,W,Sp. Prerequisite: Consent of instructor. Lab 9 hours.

Deen

A laboratory rotation course to acquaint first-year Biophysics students with the various approaches to biophysical research. Students will rotate through 3-4 labs.

220. Biophysics Seminar. (1) § F,W,Sp. Lecture 1.5 hours weekly.

Mendelson

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

250. Research. (1-8) § F,W,Sp.

Staff

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

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

Staff

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

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

Biostatistics

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

183. Intro to Statistical Methods. (4) § Su, F. Lecture 4 hours.

Glanz, Hoffman

Course stresses application of methods, including analysis of variance, linear regression, chi-square, non-parametric, and power analyses. Intended for those who may need to use statistics in their work. EPID & BIOSTAT

185A. Intro Probability & Statistics. (4) § W. Prerequisite: Working knowledge of algebra. Lecture 3 hours. Lab 3 hours. Offered in alternate years: Not offered 1995-96.

Chambers

Course stresses application of methods, including analysis of variance, linear regression, chi-square, non-parametric, and power analyses. Intended for those who may need to use statistics in their work. EPID & BIOSTAT

185B. Intro Probability & Statistics. (4) § Sp. Prerequisite: Biostatistics 185A. Lecture 3 hours. Lab 3 hours. Offered in alternate years: Not offered 1995-96.

Chambers

Continuation of Biostatistics 185A. Course covers one- and two-way analysis of variance (ANOVA), one-factor repeated-measures ANOVA, analysis of frequency data (chi-squared tests), nonparametric statistics, and the basics of power analysis and sample size determination. EPID & BIOSTAT

187. Intro Stat Theory & Practice. (5) § Sp. Prerequisite: Previous course in introductory statistics. Lecture 4 hours. Lab 2 hours.

Paul

Review of basic statistical theory, sampling, descriptive statistics, and probability. Presentation of confidence intervals, hypothesis testing, one- and two-factor analysis of variance, correlation, simple linear regression, and chi-square tests. A preparation for more advanced work. EPID & BIOSTAT

191. Clinical Trials & Life Tables. (3) § Sp. Prerequisite: Biostatistics 183 or equivalent or permission of the instructor. Lecture 3 hours. Offered in alternate years: Not offered 1995-96.

Hilton

Will cover the design, operation, and analysis of clinical trials. Specific topics will include: basic trial designs, methods for treatment assignment, sample size determination, methods for the analysis of life tables. EPID & BIOSTAT

192. Introduction to Linear Models. (5) § F. Prerequisite: Biostatistics 183 or 185 A/B or 187 or equivalent or permission of instructor. Lecture 3 hours. Lab 2 hours.

Paul

This course begins with bivariate correlation and simple linear regression and then moves on to a presentation of multiple regression techniques and the analysis of variance under the general model. The focus is on the choice of technique and interpretation of results rather than on mathematical development of the methods. EPID & BIOSTAT

193. Categorical Data Analysis. (3) § W. Prerequisite: Biostatistics 185 A and B, Biostatistics 187 or consent of instructor. Lecture 3 hours.

Hilton

Statistical methods (asymptotic and exact) for studies in which summary statistics are rates/proportions: (1) observational and experimental study designs, (2) estimation of measures of association and testing, including methods for matched and stratified data, and (3) sample size/power calculations. Logistic models are introduced. EPID & BIOSTAT

197. Selected Topics. (2 or 3) § F,W,Sp. Lecture 2 or 3 hours. Lab 0 or 3 hours.

Staff

Course will cover topics such as nonparametric methods, regression, and analysis of variance, and analysis of discrete data. EPID & BIOSTAT

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

Staff

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

205. Multi Methods for Discrete Data. (3) § Sp. Prerequisite: Biostatistics 185A-B or Biostatistics 187 or permission of instructor; familiarity with chi-square tests and linear regression. Lecture 2 hours. Lab 3 hours.

Offered in alternate years: Offered 1995-96.

Neuhaus

Course covers multivariate methods for analysis of discrete data. The major topics will be logistic regression and log-linear analysis. Other topics such as models for ordinal data will be covered given sufficient time and interest. Emphasis will be on appropriate use of methods and interpretation of results. EPID & BIOSTAT

211. Experimental Design. (3) § W. Prerequisite: Biostatistics 192 or 210A or equivalent. Lecture 2 hours. Lab 3 hours. Offered in alternate years: Not offered 1995-96.

Staff

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

213. Multivariate Methods. (4) § W. Prerequisite: Biostatistics 210A and 210B or equivalent. Lecture 3 hours. Lab 3 hours. Offered in alternate years: Offered 1995-96.

Segal

This course commences with an introduction to both matrix algebra and multivariate distributions. We proceed to classical multivariate methods, especially principal components and discriminant analysis. Additional topics include factor analysis, clustering and multi-dimensional scaling as well as some contemporary approaches. Throughout, illustrative applications will be presented. (Note that repeated measures/MANOVA is covered in Biostatistics 216). EPID & BIOSTAT

216. Analysis of Repeated Measures. (4) § Sp. Prerequisite: Biostatistics 192 or 210A and 210B or equivalent. Lecture 3 hours. Lab 3 hours.

Neuhaus, Segal

This course will cover statistical methods for analyzing repeated measurement data. Methods to be presented include the classical ANOVA and MANOVA approaches, likelihood approaches using structured covariance methods and semi-parametric approaches. The course will focus on methods for unbalanced data. EPID & BIOSTAT

225. Selected Topics. (2-4) § F,W,Sp. Lecture 2-4 hours. Lab 0-3 hours.

Staff

Course will cover topics such as statistical methods for failure time data, time series, or repeated measures. EPID & BIOSTAT

250. Research. (1-8) § F,W,Sp.

Staff

Reading and conferences for qualified students under the direction of a member of the staff. EPID & BIOSTAT

Cell Biology

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

Staff

Selected 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

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

Julius

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. CELL BIOLOGY

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) § Sp. Prerequisite: Calculus, physical chemistry, organic chemistry, and an advanced course in biology are highly desirable. Lecture 3 hours.

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. (3) § F,W,Sp. Prerequisite: Cell Biology 245. Seminar 3 hours.

Staff

Topics in Cell Biology will be discussed: a seminar 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) § F,W,Sp. Prerequisite: Consent of instructor.

Staff

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

Chemistry

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

Kollman, Shafer

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.

Shetlar

Elementary physical chemistry with emphasis on chemical kinetics. PHARM CHEM

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

Kuntz

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

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

Kuntz

Laboratory exercises in spectroscopy. PHARM CHEM

165. Organic Chem-Analytical Meth. (4) § F. Prerequisite: Chemistry 113. Lecture 1 hour. Lab 9 hours.

Kahl

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

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

Staff

Group studies in selected topics in chemistry. PHARM CHEM

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

Staff

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

202. Advanced Organic Chemistry. (4) § F. Prerequisite: Consent of instructor. Lecture 4 hours.

Scanlan

The study of organic chemical reactions and functional group reactivities with an emphasis on reaction mechanisms. PHARM CHEM

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

J. Craig

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

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. Chemical Kinetics. (1) § F. Prerequisite: Chemistry 115 and 116 or consent of instructor. Lecture 3 hours for 3.5 weeks.

Kosen

Chemical Kinetics for graduate students. PHARM CHEM

262. Advanced Physical Chemistry. (4) § F. Prerequisite: Chemistry 151 or equivalent. Knowledge of differential equations recommended. Lecture 4 hours.

Kollman

Quantum mechanics and applications to molecular problems. PHARM CHEM

263. Biophysical Chemistry. (3) § Sp. Prerequisite: Chemistry 260 or consent of instructor. Lecture 3 hours.

Shafer

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) §. Sp. Prerequisite: Chemistry 260 or consent of instructor. Lecture 2 hours.

Dill

Advanced aspects of statistical mechanics and molecular mechanics; topics covered 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 to and participation in various settings where the pharmacist and patient interact. CL PHARM

111. Nonprescription Products. (2) W. Prerequisite: Successful completion of all required fall Pharmacy I courses or consent of instructor. Lecture 1 hour. Conference 2 hours.

Lem, Yee, and Staff

An introduction to selected topics on nonprescription drugs and products. Discussions on their indications and contraindications. Emphasis on oral communication skills with ambulatory patients. CL PHARM

112. Nonprescription Products. (2) Sp. Prerequisite: Successful completion of all required fall and winter Pharmacy I courses and CP 111 or consent of instructor. Lecture 1 hour. Conference 2 hours.

Lem, Yee, and Staff

A continuation of CP 111, introduction to selected topics on nonprescription drugs and products. Discussions on their indications and contraindications. Emphasis on oral communication skills with ambulatory patients. CL PHARM

115. Drug Product Preparation. (1) W. Prerequisite: Concurrent enrollment in Pharmacy 115. Lab 2 hours.

Day and Staff

Preparation of Drug Dosage forms, including compounding appropriate labeling. CL PHARM

116. Drug Product Preparation & Introductory Pharmacy Law. (1) Sp. Prerequisite: CP 115 and concurrent enrollment in Pharmacy 116. Lecture 1 hour. Lab 3 hours.

Day and Staff

Continuation of CP 115. CL PHARM

120. Introduction to Therapeutics. (3) Sp. Prerequisite: Successful completion of all required first- and fall and winter second-year courses or consent of instructor. Lecture 3 hours.

Flaherty

Introduction to clinical pharmacy and therapeutics, focusing on the interpretation of laboratory and other clinical data regarding hematology, fluid and electrolyte balance, renal and hepatic function. An emphasis is placed on problem solving and integration of previous course work. CL PHARM

121. Parenteral Products. (2) F. Prerequisite: Successful completion of Pharmacy 114 & 115, second-year standing and consent of instructor. Lecture 1 hour. Lab 3 hours.

122. Pharmacy Law & Ethics. (3) W. Prerequisite: Second-year standing. Lecture 3 hours.

McCart, Rice

Introduction to the scope and authority of various programs which relate to the legal and ethical practice of pharmacy. CL PHARM

130. Therapeutics. (5) F. Prerequisite: Successful completion of all required first- and second-year courses or consent of instructor. Lecture 4 hours. Conference 2 hours.

Koo, Wong

Continued 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. (5) W. Prerequisite: Successful completion of all first- and second-year required courses and Clinical Pharmacy 130, or consent of instructor. Lecture 4 hours. Conference 2 hours.

Dong, Guglielmo

Continuation of Clinical Pharmacy 130. CL PHARM

132. Therapeutics. (5) Sp. Prerequisite: Successful completion of all first- and second-year required courses and Clinical Pharmacy 130. Clinical Pharmacy 131 or consent of instructor. Lecture 4 hours. Conference 2 hours.

Aldredge, Frye

Continuation of Clinical Pharmacy 131. CL PHARM

133. Nutrition. (3) Sp. Prerequisite: Third-year standing. Lecture 3 hours.

Rodondi

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.

Kishi, Heard

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

135A. Pre-clerkship Orientation & Drug Information Analysis Service (DIAS) Rotation. (1.5) F,W, Sp. Prerequisite: Third-year standing. Concurrent or subsequent enrollment in Clinical Pharmacy 130, 131 or 132.

McCart

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) F,W, Sp. Prerequisite: Clinical Pharmacy 135A.

McCart

Continuation of Clinical Pharmacy 135A. CL PHARM

136. Health Policy. (3) W. Lecture 3 hours.

Lipton

An introductory course in health policy analysis with special emphasis on health care reform and its implications—and opportunities—for pharmacists. CL PHARM

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

Kayser and Staff

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

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

Adler and Staff

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

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

Adler and Staff

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

148.02A. Inpatient Clerkship—UCI & MHLB. (9) F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year courses and Clinical Pharmacy 130 series comprehensive examination.

Shimomura and Staff

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

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

Shimomura and Staff

Continuation of Clinical Pharmacy 148.02A. CL PHARM

148.03A. Inpatient Clinical Clerkship—UCD. (9) F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year course work and the comprehensive examination. Clinic 40 hours per week for 6 weeks.

Sauer and Staff

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

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

Sauer and Staff

A continuation of Clinical Pharmacy 148.03A. CL PHARM

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

A. Leeds 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.

Weibert 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

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

Shimomura 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

149.02B. Amb Externship/Clerkship—UCI & MHLB. (6.5) F, W, Sp. Prerequisite: Clinical Pharmacy 149.02A.

Shimomura and Staff

Continuation of Clinical Pharmacy 149.02A. CL PHARM

149.03A. Ambulatory Externship/Clerkship—UCD. (6.5) F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year required courses and the comprehensive examination. Clinic 39 hours per week for 6 weeks.

Sauer and Staff

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

149.03B. Ambulatory Externship/Clerkship—UCD. (6.5) F, W, Sp. Prerequisite: Clinical Pharmacy 149.03A. Clinic 39 hours per week for 6 weeks.

Sauer and Staff

A continuation of Clinical Pharmacy 149.03A. CL PHARM

155.40. Seminar in Intraprofessional Communications. (1) F. Prerequisite: Second-, third-, or fourth-year standing and consent of instructor. Lab 2-3 hours. Seminar 1 hour. Conference 1 hour.

Levin

Preceptorship for Clinical Pharmacy 110 conferences. One sophomore 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

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

Ignoffo

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

157.10. Pharmacy Services Admin—MHLB. (1-8) F, W, Sp. Prerequisite: Fourth-year standing and consent of instructor.

Shimomura, W.E. Smith

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

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

Staff

Group studies of selected topics in clinical pharmacy. CL PHARM

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

Lipton

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

170.02. Transplant Immunotherapeutics. (2) Su, F, W, Sp. Lecture 2 hours.

Hebert, Aweka

This course will introduce students to the specialty area of transplant immunotherapeutics. Students will be able to understand the rejection process and graft vs. host reactions. This course will also review the pharmacological and toxicological effects of immunosuppressant agents. CL PHARM

170.03. Journal Club. (1) Sp. Prerequisite: Completion of CP 135A. Third-year Pharmacy students only. Maximum of 40 students. Library research 1 hour. Workshop 2 hours.

Schroeder

This course is designed to teach students how to review and effectively apply medical literature to clinical situations. Rotating faculty members will assign the weekly articles and lead the journal club sessions. CL PHARM

170.04. Advanced Compounding Techniques—Walnut Creek. (1-2) Su, F, W, Sp. Lab 3-6 hours. Prerequisite: Pharmacy 116. Consent of instructor. Enrollment limited to two students.

Day, Horwitz

Advanced Compounding Techniques in a community pharmacy (including formulation and packaging) in Walnut Creek. CL PHARM

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

Kimble, Sauer

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

170.06. Pharmacoeconomics Elective. (1) SS1, SS2, Su, F, W, Sp. Lecture 1 hour.

Winter, Burchmore

Survey of basic economic principles in health care and the tools used to evaluate the cost-effectiveness and quality of health care delivery. CL PHARM

170.07. Addictionology & Substance Abuse Prevention. (1-2) W. Lecture 1 hour. Three community presentations (optional).

Kimble, Kopp, Inaba

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

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

Ignoffo

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

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

Zangwill, Premer

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

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

Aweka

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) Su, F, W, Sp. Prerequisite: grade of C or better in both Clinical Pharmacy 132 and Pharmacology 134 and consent of instructor.

Guglielmo

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

175.04. 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 includes reviewing drug levels, selecting patients to be monitored, preparation and presentation of reports, attendance at seminars, and experience in leading one. CL PHARM

175.07. Neonatal ICU—UC. (1-8) F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework. Consent of instructor.

A. Wong, D. Takahashi

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

175.21. Pediatrics—SFGH. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148A 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 afflict children from low income, overcrowded and substandard conditions. Activities include rounds, conferences and participation in special projects. CL PHARM

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

Winter

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

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

Winter, Bufalini

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

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

Winter, Korman and Staff

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

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

Kapusnik-Uner

Students round with SFGH Infectious Diseases Consultation Service; evaluate antibiotic selection and monitor patients' therapy for efficacy and toxicity; serve as drug consultants to the medical staff on the service. (A special project relating to some aspect of infectious diseases and its therapy will be completed.) CL PHARM

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

Winter, Olson, Kearney

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

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

Winter, Kondo

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

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

Dong

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

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

Winter, Raleigh

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

175.37. Inpatient Psychiatry—VA. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148A or 149. Consent of instructor.

Winter, Buffum and Staff

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

175.39. Oncology/Nutrition—STF. (1-8) F, W, Sp. 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 antibiotic therapy. Gain in-depth knowledge of role of clinical pharmacist in a private hospital oncology unit. CL PHARM

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

Winter, Lofholm

Students interview patients, maintain medication records, explain 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. Haight Heroin Detox Unit Clkshp. (1-8) F, W, Sp. Prerequisite: Consent of instructor.

Winter, Inaba, Hayner

Students work as co-therapists 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. Monteagle Pharmacy Clkshp. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 130, 131 and 132. Consent of instructor.

Winter

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 inservice education. CL PHARM

175.68. Senior Medication Education Prog. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 130, 131 and 132. Consent of instructor.

Winter, Katcher, Zola

Students provide patient education and consultation to seniors and senior 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 Clkshp. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148A or 149. Consent of instructor.

Winter, Nico, Feldman

Students gain experience in both the skilled nursing facility and Pharmaceutical Services Pharmacy. Activities include evaluating drug therapy and other consultant roles in skilled nursing facility service, participation in unit dose medication system, and researching drug information. Special project required. CL PHARM

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

McSweeney

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

- 175.82. IV Additives Clerkship—VA.** (1-8) F,W,Sp. Prerequisite: Clinical Pharmacy 130, 131 and 132. Consent of instructor.
Winter, Korman, Wong and Staff
An introduction to the administrative, professional and technical aspects of establishing and maintaining IV additive service. Students will participate in workshops and conferences. CL PHARM
- 175.83. IV Additives & Unit Dose—VAM.** (1-8) F,W,Sp. Prerequisite: Clinical Pharmacy 130, 131 and 132. Consent of instructor.
Winter, Erb, Carr, Lopez, J. Gee
Students participate in centralized IV admixture and unit dose systems of distribution, with involvement in the decentralized clinical activities, including patient profile reviews. CL PHARM
- 175.84. Drug Utilization Review—VAM.** (1-8) F,W,Sp. Prerequisite: Clinical Pharmacy 148A or 149A and 149B. Consent of instructor.
Winter, Erb, J. Gee
Students participate in establishing and presenting the protocol for a drug utilization review. Students will complete the study during the rotation, and present results to the physicians and other disciplines involved. CL PHARM
- 175.87. Drug Utilization Review—UC.** (1-8) F,W,Sp. Prerequisite: Clinical Pharmacy 130, 131, 132 and consent of instructor.
McCart
Students design a drug utilization review. After receiving introductory material about purpose and value of such studies, students gather, evaluate, and interpret data for a final written report suitable for publication. CL PHARM
- 175.90. Drug Information Clerkship—UC.** (1-8) F,W,Sp. Prerequisite: Clinical Pharmacy 130, 131 and 132. Consent of instructor.
McCart
Advanced experience in drug information retrieval and analysis. Activities include participation in conferences, seminars and selective teaching assignments in Clinical Pharmacy 135. Special projects assigned. CL PHARM
- 175.93. Cost Control & Qlty Assurance.** (1-8) F,W,Sp. Prerequisite: Clinical Pharmacy 130, 131 and 132. Consent of instructor.
Winter, Hirschman, Padelford
Students observe and participate in a business-professional environment to understand the role of such an organization in delivery of optimal, cost-effective health care. Special emphasis on delivery of pharmaceutical services. CL PHARM
- 175.94. Drug Information—S.** (1-8) F,W,Sp. Prerequisite: Clinical Pharmacy 130, 131, 132 and consent of instructor.
Winter, Tuomi
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.** (0) F,W,Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework and consent of instructor.
Winter
Supervised clinical pharmacy experience. Students develop and explore their roles in an interdisciplinary health care team, take medication histories, monitor drug therapy, provide patient drug education and research 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, Hemodialysis 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 routine review of patients' charts, monitoring patients' response to drug therapy, attendance at conferences, seminars and rounds, and participation in selected therapeutic consults. 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.
Weibert 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 patients' charts, monitoring patients' response to drug therapy, attendance at conferences, seminars, rounds and clinics, participation in therapeutic consultations and a special project. CL PHARM
- 176.42. Hypertension—UCSD.** (1-8) F,W,Sp. Prerequisite: Clinical Pharmacy 148.01A or 149.01.
Weibert and Staff
This hypertension clerkship 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
- 176.80. IV Additives & Fluid Ther—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
- 176.81. Poison Information—UCSD.** (1-8) F,W,Sp. Prerequisite: Clinical Pharmacy 148.01A or 149.01.
Manoguerra and Staff
Students participate in the services provided by the Poison Information Center for San Diego County, including receiving calls concerning ingestions and treatments, and seminars for the public and various school groups. CL PHARM
- 176.82. Anticoagulation—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
- 176.83. 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 receiving drug information requests, researching and writing formal responses. CL PHARM
- 178.69. Skilled Nurs Facility Consulting—Sacramento.** (1-8) Su, F,W,Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework and consent of instructor.
Sauer, Menet
The student will participate in the activities of a clinical pharmacist practicing as a consultant to skilled nursing facilities. Student will learn applicable federal and state regulations in the long-term care setting. Activities include performing drug regimen reviews. CL PHARM
- 185.05. Oncology—UC.** (1-8) SS1, SS2, F,W,Sp. Prerequisite: Clinical Pharmacy 130, 131 and 132. Consent of instructor.
Ignoffo
Students attend work rounds, housestaff management rounds and teaching conferences; learn techniques utilized in caring for patients with hematologic or solid tumors. Emphasis on acute care of cancer patient: anti-emetic and pain control; hyperalbuminemia; treatment of hypercalcemia and infections. Project. CL PHARM
- 185.06. Cardiothoracic Surgery—UC.** (1-8) SS1, SS2, F,W,Sp. Prerequisite: Fourth-year standing and consent of instructor.
Salazar
Students are responsible for patient interviewing, monitoring, rounds, and drug consultation. Patients are primarily pediatric with congenital heart defects and adults undergoing aorta-coronary bypass grafts and cardiac valve replacement. CL PHARM
- 185.08. Psychiatric Pharmacy—LPP1.** (1-8) F,W,Sp. Prerequisite: Successful completion of all required first-, second-, and third-year coursework and consent of instructor. Clinic 20-40 hours/week. Clerkship 20-40 hours/week.
Winter, Ajari
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 in the field of psychopharmacology are required. CL PHARM
- 185.09. Cardiology—UC.** (1-8) SS1, SS2, F,W,Sp. Prerequisite: Completion of all required first-, second-, and third-year coursework and consent of instructor.
Kayser
Inpatient rotation in adult cardiology. Patient activities include rounding with the cardiology team and electrophysiology team, monitoring patients on cardiovascular medications, interviewing appropriate patients, and attending conferences and seminars dealing with cardiology. Patients will be presented to the pharmacy preceptor during regularly scheduled rounds. CL PHARM
- 185.10. General Medicine/Oncology.** (1-8) F,W,Sp. Prerequisite: Completion of all required first-, second-, and third-year coursework and consent of instructor.
Winter
Students participate in the activities of the Infectious Diseases 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/HIV.** (1-8) F,W,Sp. Prerequisite: Completion of all required first-, second-, and third-year coursework and consent of instructor.
Winter
Students learn the basic principles of therapeutics 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
- 185.12. Critical Care Medicine—MZ.** (1-8) SS1, SS2, Su, F,W,Sp. Prerequisite: Successful completion of all required first-, second-, and third-year coursework and/or consent of instructor.
Winter, Quan, Devine
Students will participate in the activities of the adult intensive care unit (ICU) and coronary care unit (CCU). Activities include participation in daily rounds, patient-specific drug monitoring, critical analysis of drug information, and informal presentations to the ICU team. CL PHARM
- 185.13. Surgery and Surgical ICU—MZ.** (1-8) SS1, SS2, Su, F,W,Sp. Prerequisite: Fourth-year standing and completion of all required first-, second-, and third-year coursework and/or consent of instructor.
Winter, Lee, Devine
Surgery and Surgical ICE patient care clerkship includes patient monitoring, surgical team rounds, attendance at seminars and conferences, and providing patient-specific drug information and analysis. CL PHARM
- 185.20. Mental Health—Santa Clara.** (1-8) SS1, SS2, F,W,Sp. Prerequisite: Fourth-year standing and consent of instructor.
Winter, Viale, Uyeda
Students will be involved in both inpatient and outpatient pharmacy settings. They will participate in physician-client interviews, medication monitoring, quality assurance studies, drug therapy consultation, and will also consult at a skilled nursing facility. CL PHARM
- 185.21. Clinical Pharmacokinetics—VAM.** (1-8) F,W,Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework and consent of instructor.
Winter, Boro
The Clinical Pharmacokinetics elective will expose pharmacy students to the application of pharmacokinetics principles in the clinical setting. The students will provide pharmacokinetics consultations to pharmacy, medical, surgical, and nursing staff. CL PHARM
- 185.22. Psychiatric Care—STF.** (1-8) SS1, SS2, Su, F,W,Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework and/or consent of instructor.
Winter, Del Paggio
Teaching pharmaceutical care in the psychiatric setting, integrating multidisciplinary treatment planning, case analysis, and patient interaction to explore both etiology and treatment options. CL PHARM
- 185.23. Infectious Disease—VA.** (1-8) SS1, SS2, F,W,Sp. Prerequisite: Fourth-year standing and consent of instructor.
Winter, Maddix
Activities include monitoring the drug therapy of Infectious Diseases consult patients and serving as a drug information source for the I.D. Service. Students attend and participate in I.D. rounds and attend relevant I.D. and microbiology conferences. CL PHARM
- 185.24. Oncology—Bone Marrow Transplant.** (1-8) F,W,Sp. Prerequisite: Fourth-year standing (CP 130, 131, 132).
Winter, Warda
This rotation will enable students to participate in the acute management of patients on an oncology/bone marrow transplant unit in a community hospital. This includes involvement with daily team rounds, chemotherapy preparation, TPN ordering, antibiotic management, and hospice interdisciplinary conferences. CL PHARM
- 185.25. Infectious Disease—Brookside Hospital.** (1-8) SS1, SS2, F,W,Sp. Prerequisite: Fourth-year standing and consent of instructor.
Winter, Closson
The fourth-year student will participate in clinical services of the Department of Pharmacy relative to Infectious Disease. The service includes a computer program that links bacteriology reports with current antibiotic therapy. CL PHARM
- 185.26. Critical Care Medicine—SFGH.** (1-8) SS1, SS2, Su, F,W,Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework and consent of instructor.
Winter, Woods, Liu
Students will be active participants in Medical/Surgical (trauma) ICU patient care. Activities include patient monitoring, rounds, seminars, and conferences and provision of patient-specific drug information and analysis. CL PHARM
- 185.27. AIDS/Medicine Consult Service—SFGH.** (1-8) SS1, SS2, Su, F,W,Sp. Prerequisite: Completion of all first-, second- and third-year required coursework and consent of instructor.
Winter, Lor, Woods
Students will participate in the AIDS Consult Service including patient monitoring, providing consultation on drug therapy commonly used in treatment of AIDS patients. CL PHARM
- 185.28. Hospital Pharmacy—LH.** (1-8) SS1, SS2, Su, F,W,Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework and/or consent of instructor.
Kotabe
Pharmacy practice experience in long-term care. Activities include participation in drug regimen reviews, DUE, adverse drug reaction reporting, medication distribution, and interdisciplinary care planning. Geriatric emphasis with additional involvement in rehab, AIDS, and hospice care. CL PHARM
- 185.29. Clinical Care Pharmacy—S.** (1-8) SS1, SS2, Su, F,W,Sp. Prerequisite: Completion of all first-, second- and third-year required coursework and/or consent of instructor. Clinic 40-60 hours.
M. Winter, Gee-Witt, Choy
Student participates in the activities of the intensive care unit. Activities include attending rounds and ICU conferences, patient monitoring. Learning about drug therapy in common ICU disease states is emphasized. CL PHARM
- 185.30. Geriatrics—VA Yountville.** (4-8) SS1, SS2, Su, F,W,Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework and consent of instructor.
M. Winter, Carr-Lopez
Students participate in screening of patients over 70 years of age, biweekly multidisciplinary geriatric team conferences, attending rounds, and weekly geriatric outpatient clinic. Most common problems relate to polypharmacy, poor nutrition, chronic diseases, depression, syncope, dementia, and pneumonia. CL PHARM
- 185.31. Critical Care Medicine—PMC.** (1-8) 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, Louie
Students will participate in patient monitoring, teaching rounds, conferences, provision of drug information, inservice education, and the clinical management of selected critical care patients. CL PHARM
- 185.33. Drug Information Service—VAM.** (1-8) F,W,Sp. Prerequisite: Fourth-year standing.
Winter, Lopez, Gee
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-, second- and third-year required coursework and the comprehensive examination.
Winter, Witt, Fong
The student 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
- 185.35. Psychiatry—Q.** (1-8) F,W,Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework and the comprehensive examination.
Winter, Garich, Kudo
The student will be involved in the treatment and care of team-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
- 185.36. Critical Care Pharmacy—SFGH.** (1-8) SS1, SS2, Su, F,W,Sp. Prerequisite: Completion of all first-, second- and third-year required coursework and/or consent of instructor. Clinic 40 hours.
M. Winter, M. Jones
Participate in providing pharmaceutical care for patients in the medical/cardiac ICU, including attending medical ICU rounds, providing patient-specific drug information, pharmacokinetic monitoring, and attending weekly seminars. CL PHARM
- 185.37. Pain Management—Sequoia.** (1-8) SS1, SS2, F,W,Sp. Prerequisite: Fourth-year standing and consent of instructor.
Winter, Kudzia, Ferraresi
Students will participate in the clinical management of pain for ambulatory, hospitalized, and homecare patients. Activities include interviews and drug therapy evaluation, providing drug information to patients and health care professionals, participating in patient care conferences and homecare services. CL PHARM
- 185.38. Oncology/Hospice/AIDS—Sequoia.** (1-8) SS1, SS2, F,W,Sp. Prerequisite: Fourth-year standing and consent of instructor.
Winter, Kudzia, Fanning
Students will participate in clinical programs in the oncology, AIDS, and Hospice services in the Acute and Homecare and Hospice settings. Activities include participation in I.V. admixture of chemotherapy, patient profile reviews, patient teaching, interventions for pain control, and drug information. CL PHARM
- 185.60. Adult Day Health Centers—STM.** (1-8) SS1, SS2, F,W,Sp. Prerequisite: Fourth-year standing and consent of instructor. CP 148 &/or 149 preferred. Clinic: 20-40 hours
Winter, Bookwalter
Students will learn the interdisciplinary approach to providing health care by participating in and contributing to Intake and Assessment meetings at adult day health centers. Knowledge of special pharmacy services, legal requirements, drug formulary maintenance and drug utilization will be acquired. CL PHARM
- 185.65. Indian Health Service: Ambulatory Care.** (1-8) SS1, SS2, Su, F,W,Sp. Prerequisite: Fourth-year standing.
Winter, Watson
Students will participate in the provision of Ambulatory Pharmaceutical Care, including patient-medication counseling, screening for appropriateness of therapy, monitoring drug therapy, Continuous Quality Improvement activities, formulary development, providing drug information to health professionals, and physician consultation. CL PHARM
- 185.66. Women's Health Center.** (1-8) F,W,Sp. Prerequisite: Clinical Pharmacy 130, 131, 132 and consent of instructor.
Winter
Students participate in functions of family planning-gynecological clinic, including management and handling of pharmaceuticals, monitoring BCP users under NP supervision, and participating in special projects. CL PHARM
- 185.67. Operating Room Pharmacy—Sequoia.** (1-8) SS1, SS2, Su, F,W,Sp. Prerequisite: Fourth-year standing.
Winter, Shaieb
Students will gain an understanding of the pharmacist's role and medications used in the operating room. Students will participate in preparation and compounding of medications for surgeries, attend surgeries, provide drug information, provide inservices to pharmacy and/or OR staff, and counsel patients on discharge medications. CL PHARM
- 185.68. Intravenous Admixtures—Sequoia.** (1-8) SS1, SS2, Su, F,W,Sp. Prerequisite: Fourth-year standing.
Winter, Landers
Students will participate in a centralized intravenous admixture program. Activities will include compounding of intravenous admixtures, training in concepts of quality assurance and risk management with respect to sterile products and monitoring and adjustment of parenteral nutritional therapy. CL PHARM
- 185.69. Intensive Care Pharmacy—Sequoia.** (1-8) Su, F,W,Sp. Prerequisite: Fourth-year standing and completion of CP 148 or CP 149.
M. Winter, I. Ho
Students participate in daily activities of the Intensive Care Unit pharmacy satellite. They will work under direct supervision of satellite pharmacists. Activities include patient monitoring, dispensing and providing medication information and recommendations to physicians, physician assistants, and nurses. CL PHARM

185.70. Consultant Practice in Extended Care. (1-8) F,W,Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework and the comprehensive exam. Consent of the instructor.

Winter, Pratt, Henrietta
Students will participate in drug regimen and internal nutrition reviews, nursing inservices and medication distribution reviews, and conduct medication administration error audits and special projects. Students may also be involved with the development of laptop computer consulting and nutritional and pharmacokinetic consults. CL PHARM

185.71. Convalescent Pharmaceutical Services-MV. (1-8) SS1, SS2, Su, F,W,Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework and/or consent of instructor.

Winter, Owahi
Consultant pharmacy practice in the long-term care facility will be emphasized. Activities include drug regimen review, nursing inservice programs, and drug distribution and administration assessments. CL PHARM

185.72. Outpatient Forensic Psychiatric Service-CSP. (1-8) F,W,Sp. Prerequisite: Completion of Clinical Pharmacy 130, 131, 132 and consent of instructor.

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 inservice 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) F,W,Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework and consent of instructor.

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

185.74. California Infusion Services. (1-8) F,W,Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework and consent of instructor.

Winter, Whitney, Grobman, Carl
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 structure and marketing of home health services. CL PHARM

185.76. Home Care Mgmt of High-Risk Ob Patient. (1-8) 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 Tokos 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 Programs. (1-8) 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 formulary management, DUEs, cost containment strategies, and target drug implementation. CL PHARM

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

Winter, L. 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 P&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. IV Admixture, Automated Unit Dose. (1-8) 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 presentations. Optional computer and management training is available. CL PHARM

185.86. Pharmacy Quality Assurance/Drug Utilization Evaluation. (1-8) SS1, SS2, F,W,Sp. Prerequisite: Fourth-year standing and consent of instructor.

Winter, Johnson
This rotation teaches students the process of how to set up criteria for conducting drug utilization evaluation. Students will have an understanding of the limitations and applicability of data generated from DUEs. Additional experience will be obtained in other quality assurance projects. CL PHARM

185.95. Drug Use Evaluation-UC-S. (1-8) SS1, SS2, F,W,Sp. Prerequisite: Fourth-year standing and consent of instructor.

Winter, Krstenansky
Students will participate in drug usage evaluations, focusing on concurrent monitoring and interventions designed to improve patient outcome. They will also investigate reported adverse drug reactions and assist in the development of educational programs for other health care professionals. CL PHARM

185.96. Pharmacy Administration-S. (1-8) Su, F,W,Sp. Prerequisite: Fourth-year standing and/or consent of instructor.

Winter, Caldwell
Students develop practice management skills under supervision and guidance of a Pharmacy manager. Activities include attendance and participation at meetings, implementation of programs assisting the manager in ensuring departmental compliance with regulatory requirements. CL PHARM

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

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

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

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

186.59. Medical Specialties-UCSD. (1-8) F,W,Sp. Prerequisite: Clinical Pharmacy 148.01A or 149.01. Consent of instructor.

D. Adler and Staff
Exploration of the potential service roles of clinical pharmacists in various medical specialty settings. CL PHARM

186.74. Home Care/Infusion Therapy-UCSD. (1-8) Su, F,W,Sp. Prerequisite: Fourth-year standing.

D. Adler, D. Goldman
Students will work with nursing and pharmacy staff providing services to home care/home infusion patients, including IV compounding, therapeutic monitoring, documentation, physician and nurse case conferences, student presentations, and projects. CL PHARM

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

Shimomura
General orientation to the most frequently occurring diseases of oncology and hematology. Emphasis on developing working knowledge of chemotherapeutic agents. Emphasis on application of chemotherapy to oncologic diseases, preparation and administration of agents, side effects and toxicity, applicable pharmacokinetic calculations. CL PHARM

187.02. Pharmacokinetics-MHLB. (1-8) F,W,Sp. Prerequisite: Clinical Pharmacy 148A or 149. Consent of instructor.

Shimomura, Ambrose
Participation in all aspects of clinical pharmacokinetics service including information, consultations, 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.

Shimomura
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

187.04. Pediatrics-MHLB. (1-8) F,W,Sp. Prerequisite: Clinical Pharmacy 148A or 149. Consent of instructor.

Shimomura
Participation in patient care rounds, monitoring case presentations, pharmacokinetic evaluations, literature research, and CPRs 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.

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

187.06. Pediatrics-UCI. (1-8) W,Sp. Prerequisite: Clinical Pharmacy 148A or 149. Consent of instructor.

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

187.07. Ophthalmology-UCLA. (1-8) W,Sp. Prerequisite: Fourth-year standing and consent of instructor.

Shimomura, S. Gardner
Students participate in the activities of the Jules Stein Eye Institute, which include patient monitoring, attendance at conferences and seminars, and dispensing of ocular medications. Students work under the supervision of the pharmacist preceptor in learning the management of common diseases of the eye. CL PHARM

187.09. Fairview State Hospital Clkshp. (1-8) F,W,Sp. Prerequisite: Clinical Pharmacy 130, 131 and 132. Consent of instructor.

Shimomura, Shukur
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 seizure disorders and mental retardation. CL PHARM

187.10. Long-Term Care Facilities. (1-8) F,W,Sp. Prerequisite: Clinical Pharmacy 130, 131 and 132. Consent of instructor.

Shimomura, Tobias
Students observe and participate in monitoring geriatric patients in several long-term care facilities. Students will gain appreciation of the role of the consultant pharmacist and learn how to adjust drug therapy and dosages for geriatric patients. CL PHARM

187.11. Medicine at Friendly Hills Medical Center (1-8) F,W,Sp. Prerequisite: Fourth-year standing and consent of instructor.

Shimomura, Kitayama, Levesque
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 levels of selected agents. CL PHARM

187.20. Psychopharmacology-Patton. (1-8) F,W,Sp. Prerequisite: Clinical Pharmacy 130, 131, 132 and consent of instructor.

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

187.21. Presbyterian Intercommunity Clin. Pharmacokinetics. (1-8) F,W,Sp.

Shimomura, Zeisler
Students will acquire the basic knowledge in applied pharmacokinetics necessary to provide consultative assistance to the physicians 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. CL PHARM

187.60. Home Care-Pharm Enterprises Inc. (1-8) F,W,Sp. Prerequisite: Clinical Pharmacy 130, 131, 132 and consent of instructor.

Shimomura, Martinez, Henry
Students round with health care team in hospitals, extended care facilities, and homes. Involved with monitoring total parenteral nutrition, chemotherapy, pain management, antibiotic therapy, and related services for home care patient. CL PHARM

187.61. Foster Infusion Care. (1-8) F,W,Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework.

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

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

Shimomura
Students participate in providing clinical pharmacy services in an HMO setting. Activities include attending inpatient service rounds, providing clinical services to ambulatory patients and providing inservice education classes and preparing pharmacy and therapeutic committee drug reviews. CL PHARM

187.80. Drug Information-MHLB. (1-8) F,W,Sp. Prerequisite: Fourth-year standing and consent of instructor.

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

187.81. IV Additives-UCI. (1-8) F,W,Sp. Prerequisite: Fourth-year standing and consent of instructor.

Shimomura
Students participate in the activities of an intravenous additive service in a large university teaching hospital. Students will learn about aseptic technique, compatibility and stability of drugs in intravenous solution, total parenteral nutrition, prefilled syringe programs, home hyperalimentation and piggy-backs. CL PHARM

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

Shimomura
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 retrieval skills. CL PHARM

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

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

188.01. Oncology-UCD. (1-8) F,W,Sp. Prerequisite: Successful completion of all first-, second- and third-year coursework and consent of instructor.

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

188.02. Psychiatric Consult Service-UCD. (1-8) F,W,Sp. Prerequisite: Successful completion of all first-, second- and third-year coursework, Clinical Pharmacy 148 and 149 and consent of instructor.

Sauer and Staff
Students will participate in the activities of the Psychiatric Consult Service. Activities include participation on consult rounds, interviewing patients, and monitoring drug therapy in selected patients. CL PHARM

188.03. Poison Information-UCD. (1-8) Su, F,W,Sp. Prerequisite: Successful completion of all first-, second- and third-year coursework and consent of instructor.

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

188.04. Neonatal Intensive Care-UCD. (1-8) F,W,Sp. Prerequisite: Successful completion of all first-, second- and third-year coursework, CP 148, and consent of instructor.

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

188.05. Medical Intensive Care-UCD. (1-8) F,W,Sp. Prerequisite: Successful completion of all first-, second- and third-year coursework, Clinical Pharmacy 148 and consent of instructor.

Sauer and Staff
The student will work with pharmacist in the Medical Intensive Care Unit (MICU) and satellite pharmacy providing both clinical and distributive pharmacy services. Students will be exposed to drug therapy as it relates to different disease states seen in the unit. CL PHARM

188.06. Surgical Intensive Care-UCD. (1-8) F,W,Sp. Prerequisite: Successful completion of all first-, second- and third-year coursework and consent of instructor.

Sauer and Staff
The student will work with pharmacists providing clinical and distributive services to critically ill patients in the surgical Intensive Care Unit. Activities will include patient rounds, monitoring drug therapy, and providing drug information and pharmacokinetic consultation. CL PHARM

188.07. Clinical Nutrition/Total Parenteral Nutrition-UCD. (1-8) Su, F,W,Sp. Prerequisite: Successful completion of all first-, second- and third-year coursework, Clinical Pharmacy 148 and consent of instructor.

Sauer, Nishikawa, Sieplar
This clerkship offers the student an extensive experience in clinical nutrition. Students will assist pharmacists in the management of patients requiring parenteral nutrition and will become an integral member of the Clinical Nutrition Service. CL PHARM

188.09. Drug Use Evaluation-UCD. (1-8) F,W,Sp. Prerequisite: Fourth-year standing and completion of Clinical Pharmacy 148 or 149.

Sauer, Mowers, Dunlap
The student will participate in the activities of the Drug Use Evaluation/Drug Information Service. Activities include conducting DUEs, preparing formulary evaluations for the Pharmacy and Therapeutics Committee and providing drug information consultation to hospital staff. CL PHARM

188.10. Infectious Diseases-UCD. (1-8) F,W,Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework and comprehensive examination.

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

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

B. Sauer, Dager
Students will participate in the activities of the pharmacokinetics consult service. Activities will include monitoring patients on selected drugs and providing pharmacokinetic consultation to the medical staff. CL PHARM

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

Sauer 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

188.13. Cardiology-UCD (1-8) Su, F,W,Sp. Prerequisite: Fourth-year standing and completion of CP 148 or CP 149.

Sauer and Staff
Students actively participate as members of the cardiology service, collecting and interpreting patient data and lab results, developing and implementing a monitoring plan, evaluating responses and prospectively monitoring for efficacy and toxicity. CL PHARM

188.14. Pain Management-UCD (1-8) SS1, SS2, Su, F,W,Sp. Prerequisite: Fourth-year standing and/or consent of instructor. Clinic 40-60 hours.

Sauer and Staff
Student participates in the provision of post-operative trauma and cancer pain management, promotion of rational use of medications to alleviate pain, nausea, vomiting, and itching, and provides oral and written consultations. Student will also work on investigational drug studies with the Acute Pain Service. CL PHARM

188.20. Oncology-Sutter Memorial Hospital. (4-8) F,W,Sp. Prerequisite: Fourth-year standing and consent of instructor.

Sauer, 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) F,W,Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework and consent of instructor.

Sauer, 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) F,W,Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework, and consent of instructor.

Sauer, Mitsuoaka

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

188.26. Acute Care—CHS. (1-8) F,W,Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework, and consent of instructor.

Sauer, Dallas, Beeman

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

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

Sauer, Hazlet

The Food & 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 units will depend on the student 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.

Sauer, Fox

Students will participate in selected areas of a home health care pharmacy. Students will develop skills in areas of parenteral and enteral nutrition, diabetic training, ostomy appliance applications, and durable medical equipment services in a home setting and a skilled nursing facility (convalescent hospital) setting. CL PHARM

188.31. Skilled Nursing Facility Consultation—Sutter Oaks. (1-8) Su, F,W,Sp. Prerequisite: Successful completion of all first-, second- and third-year coursework and consent of instructor.

Sauer, DiGiambattista

The student will participate in the activities of a pharmacist consulting in the long-term care setting. The student will learn federal and state SNF regulations and will conduct a project. CL PHARM

188.32. Home Infusion Pharmacy—NMC Inc. (1-8) F,W,Sp. Prerequisite: Successful completion of all first-, second- and third-year coursework and consent of instructor.

Sauer, 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.

Sauer, 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 multi-disciplinary treatment. CL PHARM

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

Sauer, Enos

The student will participate in the clinical and dispensing activities of a pharmacy practice 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

188.45. Hematology/Oncology—K. (1-8) F,W,Sp. Prerequisite: CP 130, 131, 132. Fourth-year standing.

Sauer, Lance

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

188.81. Community Pharmacy Management—UCD. (1-8) F,W,Sp. Prerequisite: CP 130, 131, 132. Fourth-year standing.

Sauer, Lallo, Ingram

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

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

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

Comprehensive Dental Care

110.01 Introduction to Comprehensive Dental Care. (1) F Lecture 1 hour.

Lee

Lecture topics include basic concepts of dental health and disease, examination of the oral and facial structures, and working in the dental clinic environment. RESTOR DENT & DENT PUB HLTH

110.02 Introduction to Comprehensive Dental Care. (1) W Lecture 1 hour.

Lee

Lecture topics include dental assisting skills, the dental operative fields, and oral hygiene care at the level of preventive and maintenance care. RESTOR DENT & DENT PUB HLTH

116. Introduction to Comprehensive Dental Care. (0-6) F,W,Sp.

Nakahata

First-year students will be introduced to comprehensive care through seminars, laboratory and clinical experiences in epidemiology, preventive dentistry, ergonomics, basic-level dental hygiene and assisting skills, patient counseling and behavioral science techniques, history recording, and clinical oral radiography. DENT PUB HLTH, RESTOR DENT, STOMATOL

126 Intermediate Comprehensive Dental Care. (0-6) Pre-F, F,W,Sp. Clinic 3 hours. Rotation 3 hours.

Richards, Bird, Lee

This course provides introductory experiences in health assessment, generating differential diagnoses, administering local anesthesia, root-planing teeth, and operating as clinical assistants. Clinical problem-solving sessions coordinate and reinforce important principles. Students learn to provide appropriate treatment to patients with uncomplicated periodontal and restorative needs. STOMATOL, DENT PUB HLTH, RESTOR DENT, ORAL & MAX SURG

136. Laboratory Procedures in Comprehensive Dental Care. (0-3) F,W,Sp.

Finzen

Scheduled laboratory time for supervised dental technical work related to the care of assigned patients. Supervised preparation for, and fabrication of, assigned restorations. Assessment and finalization of commercial laboratory work. RESTOR DENT

139. Comprehensive Dental Care Clinic. (0-8) Su, F,W,Sp. Clinic 240 hours per quarter.

White, Ino

Introductory clinical course in basic general dentistry. Students will learn to diagnose and treat, as well as prevent, dental diseases. Students will develop skills in communication, time management, and infection control while delivering comprehensive care to patients needing simpler treatments. DENT PUB HLTH, RESTOR DENT

149. Comprehensive Dental Care. (0-25) Su, F,W,Sp. Clinic 750 hours per quarter.

Pelzner, Goodis, Finzen, Taggart, Herbert

Clinical instruction and practice in oral diagnosis, treatment planning, periodontics, general restorative dentistry, endodontics, prosthodontics. Students will further develop communication skills, time management, and infection control while delivering comprehensive care to patients. DENT PUB HLTH, RESTOR DENT

156. Introduction to Comprehensive Dental Care. (0-4) F,W,Sp. Seminar 25 hours, clinic 45 hours per quarter.

Bird, Hume, Angin

First-year dental hygiene students will be introduced to comprehensive care through seminars, laboratory and clinical experiences in epidemiology, preventive dentistry, ergonomics, basic-level dental hygiene and assisting skills, patient counseling and behavioral science techniques, history recording, and clinical oral radiography. DENT PUB HLTH, RESTOR DENT, STOMATOL

Craniofacial Anomalies

206. Etiology, Growth Characteristics and Management of Cleft Lip and Palate. (2) W. Prerequisite: Enrollment in a post-professional graduate program or consent of instructor. Seminar 2 hours.

Vargervik

The etiological factors of cleft lip and palate will be discussed following the development postnatally and the effect of various surgical and non-surgical treatment approaches. GR DEVEL

207. Etiology, Growth Characteristics and Management of Various Craniofacial Anomalies. (1) Sp. Seminar 1 hour.

Prerequisite: Enrollment in a post-professional graduate program or consent of instructor.

Vargervik

The underlying factors that lead to various craniofacial anomalies other than cleft lip and palate will be discussed and treatment approaches will be analyzed and compared. GR DEVEL

419. Craniofacial Anomalies. (1) Su, F,W,Sp. Prerequisite: Enrollment in a post-professional graduate program or consent of instructor. Clinic 3 hours.

Vargervik

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

Dental Health Education

150. Human Development & Oral Health Education. (2) W. Lecture 2 hours.

Rowe

Introduces the 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. DENT PUB HLTH

161ABC. Curriculum Theory & Design. (0-3) F,W,Sp. Lecture 3 hours.

Walsh

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

198. Supervised Study. (1-5) F,W,Sp. Prerequisite: Dental Health Education 150A-B, 160A-B, and Biostatistics.

Walsh

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

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

Walsh

A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. DENT PUB HLTH

Dental Hygiene

101.01. Leadership & Mgmt in Dental Hyg. (2) W. Lecture 2 hours.

M. Walsh

Analysis of leadership and management theories, and of primary leadership skills related to personal behavior, communication, organization, and self examination. Graduate programs and leadership roles in dental hygiene education, accreditation, public health, and industry are discussed. Course provides opportunity to develop leadership roles appropriate to the student's area of interest. DENT PUB HLTH

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

Hannebrink

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-B, 159, and approval of the chairperson of the division. Clinic 3-6 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. (2) F. Prerequisite: Dental hygiene standing. Lecture 20 hours.

Walsh

Course introduces a conceptual framework and theoretical approach as 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 Hygiene Process. (2) F. Prerequisite: DH 150.01. Lecture 20 hours per quarter.

Yamamoto

This course focuses on assessment, planning, goal setting, implementation, and evaluation of the dental hygiene process. The rationale for data collection, clinical techniques, and documentation procedures are presented. DENT PUB HLTH

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

Yamamoto

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.

Rowe

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.

Staff

Concomitant with Dental Public Health and Hygiene 121, each student will prepare an annotated 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 155A&B (Clinical/Lab application). Armamentarium, sequential steps for technique performance as well as specific criteria for performance evaluation are included. DENT PUB HLTH

153C. Clinical Dental Hyg Care Seminar. (1) Sp. Seminar 1 hour.

Perry

Seminar discussions will focus on code of conduct, 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. Introduction to Clinical Dental Hygiene Care. (1) F. Lab 3 hours.

Yamamoto

Laboratory and clinical experiences to introduce the student to interpersonal skills, technical skills, and procedures used in the clinical practice of dental hygiene. They include professional conduct, medical history review, and introduction to examination, exploring, probing, and scaling techniques. 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. (2) Sp. Prerequisite: DH 155A-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) Sp. Lecture 1 hour.

Hannebrink

Introduction to the ethical, legal, and 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) Sp. 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. (2) F. Lecture 2 hours.

Perry

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. (0-1) F,W,Sp. Prerequisite: Second-year dental hygiene standing. Seminar 1 hour.

Hannebrink (F,W), Perry (Sp)

Clinical seminar to discuss clinic policies and procedures, dental hygiene treatment planning, and related topics. DENT PUB HLTH

166. Expanded Clinical Functions (3.5) F. Lecture 30 hours, lab 15 hours per quarter.

Hannebrink

Study of the anatomical, physiological, pharmacological, 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. Compr Clinical Dental Hygiene Care. (4-5-5) F,W,Sp. Prerequisite: Dental Hygiene 150.01, 150.02, 150.03, 150.04, 155A, 154.01, 154.02, 154.03, 159.

Concurrent enrollment in Dental Hygiene 169. Clinic 12 hours F, 15 hours W, Sp.

Perry

Assessment of patient histories 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 curettage, for the periodontitis-affected patient. DENT PUB HLTH

189. Independent Study. (0-4) F,W,Sp. Prerequisite: Second-year standing in dental hygiene and consent of instructor.

Perry

Students select an area of interest for independent study or research. These may include clinical, community, educational, institutional, or other areas. DENT PUB HLTH

189.01. Mobile Clinic. (0-3) SS. Clinic variable.

R. Miller

Clinical experience in mobile dental clinics. DENT PUB HLTH

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

Silverstein

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

199. Laboratory Project. (1-5) F,W,Sp. Lecture 1 hour. Lab 0-12 hours.

Walsh

A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. DENT PUB HLTH

201A-B-C. Current Topics I. (1-1-1) F, W,Sp. Seminar 1 hour.

Walsh, Ishida

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

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 for use in planning educational programs in schools of dental hygiene. DENT PUB HLTH

203A-B-C. Current Topics II. (1-1-1) § F, W, Sp. Prerequisite: DH 201A-B-C. Seminar 1 hour.

Walsh, Ishida

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

301. Teaching Practicum in Dental Hygiene Education. (1) § F, W, Sp. 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 and Hygiene

117. Professional Issues in Dentistry.

(3) F Seminar 5 hours, lecture 5 hours per quarter.

Silverstein and Staff

Lectures and seminars on professional issues in dentistry. Topics included are: Modes of practice, dental needs of special groups, drug use/abuse, ethics and history of dentistry. DENT PUB HLTH

121. Dentist-Patient Communication.

(1) F Lecture 5 hours. Seminar 5 hours.

Gerbert

Students will be introduced to the dentist-patient relationship, including communication skills such as active listening, facilitative communication, and tailoring communication to the individual patient. Methods to improve the dyadic relationship and to increase patient compliance will be addressed. DENT PUB HLTH

140A-B-C. Multidisciplinary Topics in Dentistry. (0-6) F, W, Sp. Prerequisite: Senior dental student. 20 hours per week for 3 weeks.

Bird and Staff

A comprehensive course designed for fourth-year students. Reinforces significant aspects of clinical and biomedical sciences, bioethics, and dental practice management, and updates students on new developments in dentistry. DENT PUB HLTH

140.01. Multidisciplinary Topics in Dentistry. (1.5) SS. Fifteen hours per week for one 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 esthetics, materials, complex case and team efficiency management. In addition, it is intended to give the student direction to achieve immediate post-graduate goals. DENT PUB HLTH

149. Family Dental Care. (0-8) Su. Fifteen hours per week for one 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 esthetics, materials, complex case and team efficiency management. In addition, it is intended to give the student direction to achieve immediate post-graduate goals. DENT PUB HLTH

150. Dental Morphology. (2) F Prerequisite: Concurrent enrollment in Dental Hygiene 150A. Lecture 2 hours.

K. Wong

The development and form 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. (1-9) Su, F, W, Sp. Prerequisite: Postgraduate standing and permission of instructor.

Silverstein and Staff

To provide the dental public health residents with the opportunity to participate in the Family and Preventive Dental Service. They will learn about marketing strategies, computer billing services, office management, expanded function dental auxiliaries, and the delivery of preventive dental services. DENT PUB HLTH

180. Dental Jurisprudence. (1) W Lecture 1 hour.

F. Bradley

The course broadens student insight into the legal problems and obligations of dental practice. DENT PUB HLTH

186. Multidisciplinary Geriatric Care. (1.5) F, W, Sp. Lecture 2 hours. Field work 2 hours. Conference 1.5 hours (optional).

Bird and Staff

A seminar and clinical rotation in which the students function as members of a multidisciplinary health care team. Students evaluate geriatric patients and formulate comprehensive treatment plans. Seminar topics include functional assessment, home assessment, social resources and dental management. DENT PUB HLTH

186.10. Issues in Professional Leadership. (1) Su, F, W, Sp. Prerequisite: Permission of instructor. Restriction: Limited to 12 students. Conference 1 hour.

Greene

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

186.20. Communication Skills in Dentistry. (1) F Seminar 1 hour.

Yee, Bird, and Staff

Practice management: communication skills in dentistry. Students will learn effective communication skills with patients and staff through personality profiles. They will become effective in case presentations, and in dealing with fearful, angry, unmotivated patients. DENT PUB HLTH

186.30. Dental Private Practice: Career Guidance and Planning. (1) W Seminar 1 hour.

Yee, Bird, and Staff

Practice management: career guidance and planning. Students will learn effective resume writing and interviewing skills for associate-ship positions, and key steps needed to purchase a new or existing dental practice. Each student will have written career and life goals and action steps. DENT PUB HLTH

186.40. Dental Private Practice: Financial Planning and Management. (1) Sp. Seminar 1 hour.

Yee, Bird, and Staff

Practice management: financial planning and management. Effective financial management principles to run a profitable, low stress private practice. Concepts on debt management, cash flow, fee setting, budgeting, doctor and staff compensation, and break-even analysis will be covered. DENT PUB HLTH

186.50. Advanced Dental Practice Management. (1-2) F, W, Sp. Prerequisite: Permission of instructor. Restriction: Limited to 15 students. Seminar 1 hour. Research 1 hour. Project 1 hour (optional).

Bird

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

188.10. Dental Science and Health Education I. (1) F Prerequisite: DPHH 116 or consent of instructor. Restriction: Limited to 6-10 students. Seminar 1 hour. Research 0-1 hour. Field work 0-3 hours.

Pollick

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

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

Pollick

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

188.30. Dental Science and Health Education III. (1) Sp. Prerequisite: DPHH 188.20 or consent of instructor. Restriction: Limited to 6-10 students. Seminar 1 hour. Research 0-1 hour. Field work 0-3 hours.

Pollick

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

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. DENT PUB HLTH

410. Practice Management for Advanced Education in General Dentistry. (1) W Seminar 1 hour.

Bird

This seminar series is designed to provide the trainee with information on hiring, training, and evaluating personnel; purchasing or associating in a dental practice; role of business and professional advisers; and development of a business plan. DENT PUB HLTH

429.10. Clinical Teaching Practicum. (0-4) F, W, Sp. Clinic 4 hours. Restriction: AEGD students enrolled in the second-year program.

Kirkland

Instruction and practice in providing dental clinical teaching. DENT PUB HLTH

489. Advanced Care for Special Patients. (0-6.5) Su, F, W, Sp.

Kirkland, Chin, Weisman

This seminar series will present the etiology, rationale, and methods used in the oral diagnosis and dental treatment of patients with medical or physical conditions that require a modification in the provision of dental care. Trainees will provide dental services for such patients. DENT PUB HLTH

489.10. Advanced Dental Care for Special Patients. (0-6.5) Su, F, W, Sp. Prerequisite: DPHH 489. Restriction: AEGD students enrolled in the second-year program.

Kirkland

This course will emphasize the provision of comprehensive dental services for patients with special needs such as the frail, elderly, developmentally disabled, and medically compromised. Students will provide clinical instruction for first-year trainees. DENT PUB HLTH

Dermatology

First-Year Coordinated Instruction—Medicine 131A-B-C. Lecture-demonstrations and section work devoted to the supervised examination of patients.

Core Clerkship—Family and Community Medicine 110 includes lectures and case demonstrations on the examination and diagnosis of dermatological diseases. This includes instruction in physical diagnosis, history-taking, and diagnostic and therapeutic procedures.

140.01. Advanced Dermatology Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor.

Odom

Activities of students are determined after an initial interview with the instructor. Emphasis is placed on routine outpatient and inpatient care and research methods, according to individual interest. DERMATOL

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

Wintroub

Clinical clerkship in approved hospitals by special arrangement and approval of the dean and chairperson of the department. DERMATOL

140.03. Advanced Dermatology Clerkship—Fresno. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and consent of instructor.

Hamlin

Activities of students are determined after an initial interview with the instructor. Emphasis is placed on routine outpatient and inpatient care and research methods, according to individual interest. DERMATOL

140.04. Inpatient Clinical Dermatology. (1.5 per week) Su, F, W, Sp. Prerequisite: Dermatology 140.01.

Odom

Four-week block rotation. Students will work with inpatient Dermatology resident and share primary responsibility for inpatients, hospital consultations and psoriasis day care center patients. DERMATOL

140.22P. Selected Issues in Dermatology. (1.5 per week) Sp. Prerequisite: Fourth-year medical students only.

Humphreys, McCalmont, Williams

Independent exploration of four important topics (moles and melanoma; connective tissue disease; dermatology and primary care; the skin as a barrier) in dermatology. Students will pose a self-study question regarding the weekly topic, obtain additional information, and present their findings for discussion. DERMATOL

150.01. Dermatology Research. (0.5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor.

Wintroub

A research project under the direction of a member of the faculty. DERMATOL

400. Staff Conference. (2) F, W, Sp.

Wintroub and Staff

Residents prepare and present case histories of patients at conferences, making reference to appropriate literature, special studies and laboratory work. Conferences include discussions of new developments and research investigation by staff members and faculty from other UC departments and other universities. DERMATOL

401. Dermatopathology. (2) Su, F, W, Sp. Lecture 2 hours.

LeBoit

Lectures and demonstrations of the histopathology of skin diseases with special emphasis on correlation with clinical findings. Activities include the study of microscopic sections and discussions of material presented. DERMATOL

402. Dermatological Literature. (1) F, W, Sp. Seminar 1 hour.

Maibach and Staff

Seminar covers recent literature in dermatology. Included is assigned reading with required reports which are evaluated by members of the faculty. DERMATOL

403. Specialty Seminar. (2) F, W, Sp. Seminar 2 hours.

Wintroub and Staff

Seminars include discussions, required reading, and reports on dermatology and related basic sciences such as embryology, mycology, histopathology, and parasitology in relation to dermatologic conditions; and oncology as it relates to the skin. DERMATOL

404. Clinical Evaluation. (1) F, W, Sp. Seminar 1 hour.

Wintroub and Staff

Seminar involves the evaluation of recent clinical cases of special interest. Cases are presented by the faculty and resident staff. DERMATOL

405. Research. (3) Su, F, W, Sp. Lab 9 hours.

Wintroub

Instruction in the conduct of research projects dealing with electron microscopy, biology, biochemistry, and immunology of the skin under normal and pathological conditions. DERMATOL

406. Related Science Seminar. (10) Su, F, W, Sp. Seminar 1 hour.

Wintroub and Staff

In-depth discussion of the sciences basic to an understanding of the function and dysfunction of skin, including anatomy, physiology, microbiology, pharmacology, biochemistry, genetics, and pathology. Over a three-year period, course covers all aspects of basic sciences relevant to dermatology. DERMATOL

407. Cutaneous Microbiology. (2) Su, F, W, Sp. Prerequisite: Consent of instructor. Lecture 2 hours.

Aly

Course is designed to familiarize dermatology residents with the techniques of isolation and identification of dermatophytes, skin bacteria, and viruses. Occasional lectures on specialized topics are given. DERMATOL

450. Clinical Care Clerkship. (10) Su, F, W, Sp.

Wintroub and Staff

Residents, under supervision, are responsible for patient care in the wards and outpatient clinic. Duties include history-taking, physical examinations, and consultations. In addition, the senior resident has certain administrative, teaching, and clinical responsibilities. DERMATOL

451. Clinical Care Clerkship. (1.5 per week) Su, F, W, Sp.

Wintroub

Residents, under supervision, are responsible for patient care in the wards and outpatient clinic. Duties include history-taking, physical examinations, and consultation. In addition, the senior resident has certain administrative, teaching, and clinical responsibilities. DERMATOL

452. Off-Campus Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor.

Wintroub

Assistant residents work at off-campus hospitals, in the United States and other countries, approved by the dean and the chairperson of the department. Course includes training in clinical and investigative dermatology. DERMATOL

Endocrinology

Courses in Endocrinology are offered through various departments. For further information regarding any of them, contact the instructor in charge or Dr. Zach Hall, Chair, Department of Physiology, Interdisciplinary Program in Endocrinology. See also Biochemistry course offerings.

150.01. Research. (1.5 per week) F, W, Sp. Prerequisite: Consent of instructor.

Staff

Individual research in endocrinology supervised by members of the faculty in the Interdisciplinary Group in Endocrinology. PHYSIOLOGY

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

Dallman

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

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

Ganong

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

202. Mechanisms of Hormone Action. (3) § Sp. Prerequisite: Physiology 101 and/or Human Biology 200A-B, or Biochemistry 100A-B, or consent of instructor. Lecture 2 hours plus independent study.

Nisenson, Bourne

Course covers classical and current literature concerning known and speculative mechanisms of hormone action. Major topics are: G proteins, adenylate cyclase, Ca²⁺ as a second messenger, oncogenes, growth factors, and steroid hormone action. PHYSIOLOGY

203. General Endocrinology. (5) § F. Prerequisite: Consent of instructor. Lecture 3 hours. Lab 3 hours. Seminar 1 hour.

Dallman, Weiner

A survey of the principles of endocrinology focusing on experimental approaches. The course includes lectures, reading of the primary literature and a laboratory problem. PHYSIOLOGY

210. Clinical Endocrinology Seminar. (1) § F, W, Sp.

Shoback

Clinical and basic seminar in endocrinology presented in a format which provides both lecture and discussion. Emphasis is placed on clinical applications of research at the frontier of modern endocrinology. PHYSIOLOGY

250. Research. (1-8) § F, W, Sp.

Hall

PHYSIOLOGY

Epidemiology

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

101. Epidemiology and Biostatistics. (3) Sp. Lecture 1.5 hours. Seminar 1.5 hours.

Restriction: First-year medical student or consent of instructor.

Ernster, Croughan-Minihane, Black

Introduction to epidemiologic and biostatistical methods: Research approaches to disease etiology, prevention and treatment; interpretation and critical evaluation of medical literature; measures of disease occurrence; screening and diagnostic test evaluation; major disease risk factors; and clinical importance of preventive medicine. EPID & BIOSTAT

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

Petrakis and Staff

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

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

Siegel, Bersot, Cheitlin

Clinical experience in hypertension, lipid, cardiology, and smoking cessation clinics stressing 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

140.22C. Scientific Foundation of Clinical Prevention for Women. (6) F Prerequisite: 4th-year medical students only.

Grady, Kerlikowske

Students will learn how to critically evaluate scientific information that is the basis for recommending or not recommending various screening tests and preventive treatments for women in the areas of heart disease, breast cancer, osteoporosis, and sexually transmitted diseases. EPID & BIOSTAT

140.22L. Cardiovascular Disease Prevention. (6) F Prerequisite: 4th-year medical students only.

Siegel

Cardiovascular disease prevention issues will be introduced within the context of case presentations. Students will research the epidemiology, pathophysiology, clinical trials and varying recommendations from experts in the field. Topics include hypercholesterolemia, hypertension, stroke, and secondary prevention. EPID & BIOSTAT

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

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. (1-2) W. Prerequisite: Epidemiology 101 or consent of instructor. Lecture 1 hour. Optional term paper for 2 units.

Petrakis and Staff

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

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

Justice and Staff

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

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

J. Justice

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

170.10. Occupational Epidemiology. (1-2) W. Prerequisite: Epidemiology 101 or 190. Seminar 1 hour. Optional term paper for 2 units.

Mustacchi

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

170.12. Epidemiology of Infectious Diseases. (1-2) F. Lecture 1 hour. Term paper for 2 units optional with consent of instructor.

Conte

Course considers the public health consequences of different communicable diseases (including 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

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

Wiencke and Guest Lecturers

Course explores how biologic markers can be used to understand factors involved in human carcinogenesis and how to use lab methods and analytical epidemiology to identify, at the molecular and biochemical level, exogenous agents and host factors affecting human cancer causation. EPID & BIOSTAT

180. Hlth Intervention in Devel Areas. (1) § Sp. Prerequisite: Consent of instructor. Seminar 1 hour. Project 1 hour.

Kiefer

Explores practical and ethical problems of health workers from urban-industrial cultures intervening in developing areas. Provider/client differences in perception, values, needs. Problems of goal-setting, assessment, rapport, communication, consensus-building, evaluation. Practical experience in teaching health promotion to underserved groups. EPID & BIOSTAT

180.04. Research Design. (3) § Su, F. Prerequisite: Consent of instructor. Lecture 1 hour. Workshop 6 hours.

Hulley

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, measurements, sample size, ethical considerations, presets, data management, quality control, and proposal writing. EPID & BIOSTAT

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

Tarcher

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

186. Tropical Medicine Lectures. (1) § Sp. Lecture 1 hour.

R. Goldsmith

Lectures, case histories, and films emphasizing diagnosis and treatment of tropical diseases including malaria, amebiasis, cholera, typhoid, schistosomiasis, leprosy and arbovirus infections, plus a review of opportunities for clinical clerkships abroad in developing countries. EPID & BIOSTAT

190. Introduction to Epidemiology. (3) § F, W, Sp. Lecture 3 hours.

White and Staff

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

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. EPID & BIOSTAT

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. EPID & BIOSTAT

201. Socioepidemiology of Aging. (3) § Sp. Prerequisite: Consent of instructor. Lecture/seminar 2 hours. Library research 3 hours.

Davis and Guest Lecturers

Overview of the influences of sociodemographic structure, status, processes and changes on morbidity, functioning, longevity and mortality across the adult life span, with special emphasis on changes in sociodemographic risk factors with age. EPID & BIOSTAT

202. Nutritional Epidemiology. (2-3) § W. Prerequisite: Consent of instructor. Lecture/seminar 2 hours. Library research 3 hours (optional).

Lee

Course explores epidemiologic studies on the influence of dietary factors to risk of disease, with special emphasis on the methodology used and on understanding its strengths, limitations, and appropriate applications to interpret epidemiologic information relating to nutrition. EPID & BIOSTAT

Family and Community Medicine

110. FM Core Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Completion of 20 weeks of clinical clerkship including Medicine 110.

Blossom, Schafer

Students function as family/primary physicians in ambulatory settings at affiliated residency programs. Family Practice: at SFGH, CHS in Santa Rosa, NAT in Salinas, and VMC in Fresno. Primary Care Internal Medicine: at UC, SFGH, and MZ. FAM CM MED

140.01A-B-C-D. Advanced Family Practice. (1.5 per week) A, B, C, and D are offered in all of the following quarters: Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Consent of instructor.

A-Blossom, Schafer, B-Tunzi, C-Slater, D-Rodnick, Mitchell

A-VMC in Fresno; B-NAT in Salinas; C-CHS in Santa Rosa; D-other sites. Comprehensive inpatient and outpatient experience in family practice. Students assume sub-intern responsibility for patient care. Community assignments may be individually arranged. FAM CM MED

140.02. Community Health Programs. (1.5 per week) Su, F, W, Sp. Prerequisite: Determined by student's clinical experience. Consent of instructor.

Barbaccia and Staff

Elective clinical experience for four or more weeks in various community health projects in California and out of state as well. Programs include Indian Health Service, Diabetic Summer Camp, Asian Health Service, and varied neighborhood clinics. FAM CM MED

140.04. Family Practice Preceptorship. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor.

Shore

Students work with a family physician, alternatively general internist or general pediatrician, 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 preceptorships are encouraged. FAM CM MED

140.05A-B-C-D. Social Medicine. (1.5 per week) F, W, Sp, Su. Prerequisite: Consent of instructor.

Barbaccia

Field work experience or research germane to social medicine individually arranged with consideration to student's major area of interest. FAM CM MED

140.06A-B-C. Rehabilitation Medicine. (1.5 per week) A, B, and C are offered in all of the following quarters: Su, F, W, Sp. Prerequisite: Consent of instructor.

L. Crain, N. Byl

A-San Francisco Bay Area; B-Fresno; C-other sites. Students are assigned to rehabilitation facilities for two to four weeks. Emphasis will be on the selection of patients who are suitable for rehabilitation and the inter-professional approach to rehabilitation. FAM CM MED

140.15. Continuity Clinic. (1) Su, F, W, Sp. Prerequisite: Senior clerkship which would enable the student to pick up patients to be followed in clinic.

Shore, Mitchell, Brody

Students will see primary care patients one-half day per week for six to nine months. They will continue to see patients who were initially seen during the student's medicine or FCM 110 clerkship. FAM CM MED

140.22M. Physicians and Managed Care. (6) Sp. Prerequisite: Fourth-year standing.

O'Neil

This course is designed to introduce fourth-year medical students to the practice realities and opportunities that will emerge throughout their professional practice in managed care environments. FAM CM MED

140.40. Adv Inpatient Fam Med Clkshp. (1.5 per week) Su, F, W, Sp. Prerequisite: Senior medicine clerkship.

R. Goldschmidt

The Family Practice Inpatient Service at SFGH 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. Attending rounds are held daily. FAM CM MED

140.51. Emergency Medicine-VMC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110, Obstetrics and Gynecology 110, Pediatrics 110 and Surgery 110.

Kallsen, Chooljian, Comes

Students receive practical training in emergency medicine, in emergency prehospital 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 CM MED

140.52. Rural Family Practice-Selma. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110, Surgery 110, Pediatrics 110, Ob/Gyn 110.

Schafer, Zweifler

Primary care at Selma Community Health Center, in an agricultural community near Fresno. Ambulatory practice includes pediatrics, obstetrics, gynecology, and chronic diseases. Includes patient rounds, deliveries, and emergency room experience at modern rural hospital. Exposure to rural private family practice available. FAM CM MED

140.53. Inpatient Medicine/Family Practice. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110, FCM 110, fourth-year standing.

Bradley, Nowlis

Students function as subinterns on general medicine ward staffed by Family Practice residents and faculty. Acute medical care is provided with special input from department psychologist and health educator. FAM CM MED

140.54. Primary Care in the Latino Community-Fresno. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110, or Peds 110, or Ob/Gyn 110, or consent of instructor.

Logan

Outpatient clinical experience in a community health center in a predominately Latino community, with emphasis on community-oriented primary care. Each student's program will be individually tailored to include exposure to epidemiology, pediatrics, ob/gyn, and adult medicine in a Latino community. FAM CM MED

140.60A-C-D. Clinical Geriatrics. (1.5 per week) F, W, Sp. Prerequisite: Medicine 110 and Neurology 110 and consent of instructor.

Barbaccia, Werdegar and Staff

A-San Francisco; C-St. Mary's; D-Other. Students supervised by attending staff are assigned patients in clinical settings; outpatient departments, adult day centers, nursing homes, acute hospital; also home care. Students will attend multidisciplinary case conferences, didactic sessions, geriatrics consultation rounds. FAM CM MED

140.61. Geriatrics-Long-Term Care-LH. (1.5 per week) Su, F, W, Sp. Prerequisite: Third-year standing.

Beck, Borgenicht and Johnson

Students will work with geriatricians and other health professionals to learn about the clinical management of geriatric patients. FAM CM MED

140.70. Community Medicine in International Perspective. (1.5 per week) Su, F, W, Sp. Prerequisite: Conversational command of language of country of placement and consent of instructor.

Coady, Goldsmith, Pettiti

A 4-12 week elective involving placement at a supervised primary care training and/or service site abroad. Placements will be made according to student interest and language capability, and according to availability of appropriately supervised sites, mainly in Latin America. FAM CM MED

150.01. Research. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor.

Rodnick, Barbaccia and Staff

Clinical epidemiology, health services, or behavioral science research approaches are applied in the study of selected areas in family medicine or community health. FAM CM MED

160.01. Community Medicine Field Work. (1.5-3) Su, F, W, Sp. Prerequisite: Medical student standing. Consent of instructor. Field work 4-8 hours.

Barbaccia

Non-block assignments to community health agencies where students have patient contact. Students choose an aspect of the agency's program for analysis. FAM CM MED

160.03. Family Practice Preceptorship. (1-3) Su, F, W, Sp. Prerequisite: Medical student standing. Consent of instructor. Field work 4-12 hours.

Shore

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 CM MED

160.04. Seminars in Sports Medicine. (3) 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 CM MED

160.05. Mission Community Hlth Elective. (1-3) Su, F, W, Sp. Prerequisite: Consent of instructor. Lab 2-6 hours. Field work 2-8 hours.

D. Sanchez, N. Medina

Explores 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 analyzed in seminars and tutorials. FAM CM MED

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

Ransom, Braveman, Segal

Introductory principles of family medicine are discussed in class and discussion groups led by family physicians and family psychologists. Preceptorships with family physicians in private offices and community clinics. Each student will interview a family and present a case report. FAM CM MED

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

Coady, Lane, Goldsmith, Pettiti

An elective involving placement at a supervised primary care training and/or service site abroad. Placements will be made according to student interest and language capability as well as availability of appropriately supervised sites. FAM CM MED

170.01A-B-C. Special Issues in Health Care. (0-3) A, B, and C are offered in all of the following quarters: Su, F, W, Sp. Prerequisite: Consent of instructor. Lecture and reading 1-3 hours.

Rodnick and Staff

Explores in systematic (lecture/readings/discussion) format new issues in health care or special content areas related to family and community health. Topics are developed and prepared according to faculty student interests. FAM CM MED

170.02. Elderly Community Programs. (2) W. Lecture 1 hour. Conference 2 hours. Enrollment limited.

Barbaccia, Robinson, Weiss

This course offers the student a survey of the aged in San Francisco. Lectures cover the socio-demographic, cultural, and health status factors of the city's aged. On-site conferences are held at representative programs and facilities serving the aged. FAM CM MED

170.03. Developmental Disabilities. (2-5) Su, F, W, Sp. Prerequisite: Consent of instructor. Field work 4-8 hours.

L. Crain

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. FAM CM 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. FAM CM MED

170.05. Rehabilitation Medicine. (1-5) F, W, Sp. Prerequisite: Consent of instructor. Field work 4-8 hours.

L. Crain

Through individualized arrangements, course provides an introduction to the broad spectrum of rehabilitation services for children and/or adults with chronic or disabling diseases. FAM CM MED

170.07. Communication with Latino Patients. (2) F, W, Sp. Prerequisite: Medical student status. 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 persons. FAM CM MED

170.08. Complementary Forms of Healing. (1) F. Medical students only. Lecture 1 hour.

Hughes

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. FAM CM MED

170.09. Health Issues in Central America. (1) W. Lecture 1 hour.

Baron, Braveman, Perez-Stable

A lecture-discussion course on current issues in health care in Central America. Emphasis is on relationship between health situation in Central American nations and its relation to Central American patients seen in San Francisco. FAM CM MED

170.10A. Homeless Health Issues. (1) F. Lecture 1 hour.

Desmond

A survey course covering the broad spectrum of living issues (health care, drug addiction, HIV, shelter life, etc.) confronting the homeless population of San Francisco. The seminar will be given in lecture format during the lunch hour. One session will be devoted to discussion of issues presented. FAM CM MED

170.10B-C. Homeless Health Issues: Case Discussion and Presentation. (1-1) W, Sp. Prerequisite: Involvement with student-run homeless health clinic. Conference 1 hour.

Desmond

A two-quarter conference which enables first- and second-year medical students to research and present case studies encountered during work at the student-run clinic. Two to three cases will be presented and discussed each week. FAM CM MED

171.01. The Healer's Art. (1) W, Sp. Lecture 1 hour.

Remen

An integration of the values and strategies of contemporary medical practice with the wisdom of psychological, anthropological, and philosophical traditions, helping students to deepen the personal meaning of their training and best serve the human needs of patients and themselves. FAM CM MED

171.02A. Asian/Pacific Islander Health Issues. (1) F. Lecture 1 hour.

Yu

This course will introduce some of the health care issues facing Asian and Pacific Islanders in the U.S. and will discuss the cultural considerations that come into play when addressing these issues in the API community. FAM CM MED

172A. Legal Medicine-Basic Concepts. (2) F. Lecture 2 hours.

Tennenhouse

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 lawsuit. FAM CM MED

172B. Legal Medicine-Practical Aspects. (2) W. Lecture 2 hours.

Tennenhouse

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 lawsuit. FAM CM MED

174. Family Medicine Concepts. (2) W. Seminar 2 hours.

Rodnick

An exploration of the comprehensive role of the family physician in providing longitudinal health care. Students will learn to recognize priorities in patient care, with an emphasis on the patient as a whole person. FAM CM MED

180. Intro to Social & Preventive Med. (1-2) F. Lecture and seminar 1-2 hours.

Barbaccia

Lectures and seminars introduce entering students to social, political, economic and environmental factors influencing health of the community and provision of care. Topics include preventive health care, health behavior and formulation of policy. FAM CM MED

184. Contemporary Issues in Latino Health. (2) Sp. Prerequisite: Medical student status. Seminar 2 hours.

Medina

An introduction to demographic, political/economic, anthropologic and sociologic issues of importance for the health of diverse Latino subcultures in the US. FAM CM MED

185. Health Care Systems. (3) Sp. Lecture 1 hour. Seminar 2 hours.

Barbaccia

Lecture-seminar format is used to cover most aspects of the organization and function of the health care system and its subsystems, including manpower, hospitals, ambulatory care, planning regulation and control, economics, government programs and health services research. FAM CM MED

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

Rodnick and Staff

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

Genetics

200A. Principles of Genetics. (3) § F. Lecture 3 hours.

Herskowitz

In-depth analysis of genetic mechanisms in selected prokaryotes, eukaryotes. Topics include genetic exchange (conjugation, generalized and specialized transduction, transformation), recombination (general, site-specific, "illegitimate"), mapping, mutagenesis (induction and consequences), mobile genetic elements, gene expression, meiotic and mitotic segregation, 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. (0.5) § F,W, Sp. Prerequisite: Consent of graduate adviser in genetics. Seminar.

Herskowitz and Staff

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

222. Topic in Medical Genetics. (1) § Su, F,W, Sp. Conference 1.5 hours. Clinic 1.5 hours.

Epstein, Packman, Cox

A course using participation in a working genetics clinic and directed reading and discussion to present the concepts and approaches of medical genetics and the application of molecular, cellular, and developmental biology to the understanding of human genetic disease. BIOCHEM

224. Advanced Human Genetics. (1.5) § Sp. Lecture 1.5 hours. Offered in alternate years. Offered 1995-96.

Epstein, Kan, Cox, Gitschier, Packman, Wolff

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

226. Human Developmental Genetics. (2) § Sp. Seminar 2 hours. Prerequisite: Genetics 200A. Offered in alternate years. Not offered 1995-96.

Epstein

A seminar course in which human genetic disorders affecting morphogenesis and development will be analyzed to elucidate the pathogenetic relationships between the underlying molecular defects and the resulting phenotypic abnormalities. BIOCHEM

250. Research. (1-8) § F,W, Sp. Staff
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 DEVEL

120. Orofacial Functions/Dysfunctions. (1) W. Lecture 1 hour.

Vargervik, Peterson-Falzone, Kapila
Clinical considerations of normal and abnormal patterns of orofacial function are discussed to provide a basis for diagnosis and prognosis of functional disorders involving the orofacial region. GR DEVEL

122. Oral Physiology. (1.5) F. Lecture 3 hours.

A. Miller

The physiology of the craniofacial region will be taught emphasizing endocrine control of calcium and phosphate, mineralization, salivation and taste, sensory control related to craniomandibular muscles, mastication, swallowing, and characteristics of craniomandibular muscles. GR DEVEL

198. Supervised Study. (1-5) Su, F,W, Sp. Prerequisite: Enrollment in dentistry or dental hygiene programs. Project 30-150 hours per quarter.

Kahn and Staff

This elective course allows dental and dental hygiene students to do research related to growth and development. Library research and directed reading are conducted under supervision of a member of the faculty with approval of the Chair of the Division. GR DEVEL

199. Laboratory Projects. (1-5) Su, F,W, Sp. Prerequisite: Enrollment in dentistry or dental hygiene programs. Lab 30-150 hours per quarter.

Kahn and Staff

This elective course allows dental and dental hygiene students to do research related to growth and development through laboratory or clinical research programs in the department. GR DEVEL

210. Developmental Biology of the Craniofacial Complex. (2) § SS1, SS2.

Prerequisite: Available for credit to graduate students in Oral Biology, dental postgraduate specialty programs, and as an elective to upper class students in Dentistry and Medicine. Lecture 1 hour. Seminar 0.5 hour. Conference 0.5 hour.

Kahn, Derynck, Vargervik, Chierici, Damsky

Lectures, seminars, and classroom discussion on the fundamental mechanisms underlying craniofacial development and the etiology, pathogenesis, and treatment of craniofacial defects. GR DEVEL

211. Behavior and Ethical Considerations in Dentistry. (2) § Su. Prerequisite: Available for credit to students in dental postgraduate specialty programs and to graduate students in Oral Biology. Seminar 2 hours.

Baumrind, Gerbert, Pollick

This course includes discussion of behavioral issues that affect dental practice. Students will also be made aware of the ethical aspects of dental practice and dental research, and will consider how these concerns affect their decisions. GR DEVEL

212. Neuromuscular System & Craniomand Dev. (2) F. Prerequisite: Available for credit to graduate students in Oral Biology, dental postgraduate specialties, and as an elective to upper class students in Dentistry and Medicine.

A. Miller
Seminar provides students with an understanding of craniomandibular muscles and the neuromuscular system as they relate to cranoskeletal and mandibular development. GR DEVEL

A. Miller
Seminar provides students with an understanding of craniomandibular muscles and the neuromuscular system as they relate to cranoskeletal and mandibular development. GR DEVEL

Health Sciences Education

200. Intro to Teaching Health Science. (1) § F. Prerequisite: Consent of instructor. Lecture 2 hours.

Lem

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

History of Health Sciences

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

Sadee

Emphasis is 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 HL 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.

Staff

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 HL SC

160.01. Tuberculosis Then and Now. (1) Sp. Lecture 12 hours.

Pressman

Two-day course by international scholars on the history and current contours of TB; epidemiology of the disease, stigma and cultures of the disease; TB control strategies; molecular epidemiology; and discussion from an interdisciplinary perspective viewed cross-culturally and cross-temporally. HIST HL SC

170.01. Historical Perspectives in Medicine. (1-3) F,W, Sp. Prerequisite: Consent of instructor. Lecture 1-2 hours. Optional 1-2 hour seminar, conference, or independent study or research paper.

Risse, Pressman

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

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

Staff

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

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

Risse

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

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

Risse, Pressman

General survey from the Renaissance to the end of the eighteenth century with special emphasis on the mechanical revolution, in medical thought and the medicalization of European society. HIST HL SC

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

Pressman

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

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

Risse

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

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

Risse, Pressman

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

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

Risse, Pressman

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

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

Pressman

Introduction to medical historiography. Discussion of different historical approaches employed in writing history: intellectual, social, sociological, feminist perspectives, and the sociology of knowledge. HIST HLTH SCI

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

Pressman

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

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

Pressman

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

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

Pressman

Evolution of conceptions of madness and treatment of the mentally ill, from the Renaissance to 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 HLTH SCI

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

Flood

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

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

Risse

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

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

Risse, Pressman

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

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

Pressman

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

215. Clinical Medicine Since 1750. (2-4) § Sp. Prerequisite: Consent of instructor. Lecture 2 hours. Seminar 1 hour (optional). Term paper (optional).

Risse

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

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

Staff

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

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

Staff

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

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

Clarke

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

297. Special Study. (1-4) § F,W, Sp. Prerequisite: Consent of instructor. Seminar 1-2 hours. Term paper/independent study (optional).

Staff

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

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

Staff

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

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

Staff

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

Human Development & Aging

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

Staff

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

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

Kiefer

Representative works from behavioral science literature and world poetry and prose are brought together in the study of personality development in adult life. Compares insights from the two fields on how the developing person copes with social, historical, and psychological challenges. PSYCHIATRY

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

Mullan

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

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

Kiefer

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

229. Sociology of Stress. (2) § Su. Prerequisite: Consent of instructor. Doctoral students only. Seminar 2 hours.

Mullan

Course explores current theories and research dealing with sources of stress and coping mechanisms. Course examines the conditions and experiences that act as stressors, coping behaviors, the nature and functions of social support systems, and the health consequences of stress. PSYCHIATRY

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

Staff

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

231. Social Psychology of Aging. (3) § F. Prerequisite: Doctoral student and consent of instructor. Lecture 2 hours. Lab 3 hours.

Pearlin

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. PSYCHIATRY

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

Staff

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

250. Research. (1-8) § F,W, Sp. Staff
PSYCHIATRY

Human Sexuality

159. Human Sexuality. (1.5) Sp. Lecture 1.5 hours. Offered in alternate years. Not offered 1995-96.

R. Day

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

Interdepartmental Studies

100. Cell & Tissue Biology. (10) F. Restriction: Permission of instructor required for all students except first-year medical students. Lecture 7 hours. Lab 4 hours. Conference 2 hours.

Colby, Calarco, Rosen

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

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

Maas, J. O'Donnell, J. Morris, E. Tanagho

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, outpatient clinical activities and, to a limited degree, procedure and surgical experience in both ambulatory and operating room areas. OTO-LARYN, OPHTHALMOL, ORTHO SURG, UROLOGY

130. Successful Dental Practice. (0-3) F, W, Sp. Prerequisite: Concurrent enrollment in CDC 139. Lecture 9 hours. Seminar 21 hours.

Bird, Centore, Jensen

Lectures and small-group discussions focus on the delivery of quality dental care in a highly ethical manner while establishing positive interpersonal relationships, enhancing the self-esteem and well-being of the dental team and creating a financially well-managed business. DENT PUBL HLTH

135. Reproduction Growth & Devel. (3) F. Lecture 3 hours.

Parer, Sniderman

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

140.22J. Medical Problem Solving-Nutritional Disorders. (6) W. Prerequisite: 4th-year standing.

Humphreys, Dallman, Baron

This is an in-depth elective to provide fourth-year medical students the opportunity to explore through overview lectures, conferences, and library research their capacity for self-guided continued learning in the basic biology underlying nutritional requirements and disorders. MEDICINE

Interdepartmental Studies

149. Family Dental Care. (0-8) Su, F, W, Sp. Prerequisite: 4th-year standing. **Bird and Staff**

The fourth-year dental student will learn advanced skills in pediatric and general restorative dentistry in oral diagnosis, treatment planning, and delivery of comprehensive dental care. Emphasis will be on the efficient delivery of care considering the family as a unit. DENT PUBL HLTH

182. Dental Implantology. (1) Su, F, W, Sp. Prerequisite: 3rd- or 4th-year dental students only. Seminar 10 hours per quarter. **Finzen, Smith**

A didactic elective course on dental implantology. The diagnostic, surgical, laboratory, restorative, periodontal, and maintenance phases of dental implant treatment will be presented. INTERDEPARTMENTAL

187. Clinical Dental Implantology. (0.5-3) Su, F, W, Sp. Prerequisite: Must be taken concurrently with or after successful completion of IDS 182. Restriction: 4th-year dental students only. Lab 10-30 hours, clinic 10-60 hours per quarter. **Finzen, Smith**

A clinical elective course on dental implantology. The diagnostic, surgical, laboratory, restorative, periodontal, and maintenance phases of dental implant treatment will be presented. INTERDEPARTMENTAL

189. Dentistry for Medical Students. (3-18) F, W, Sp. Restriction: Enrollment in the third or fourth year of an accredited medical school. Mandatory for medical students enrolled in the combined UCSF Oral and Maxillofacial Surgery/M.D. Program **Pogrel and Staff**

This is a full-time clinical elective of 2-12 weeks for junior and senior medical students devoted to the diagnosis and management of problems of the oral and maxillofacial regions. ORAL & MAX SURG

191. Introductory Cell Biology. (3.5) § F. Restriction: Permission of instructor. Lecture 7 hours, lab 4 hours, conference 1 hour: 5-week course. **Colby, Calarco, Rosen**

Course covers the basic principles of cell biology and introduces the histology of epithelia, nerve cells, muscles, and connective tissue. Intended for beginning graduate students. ANATOMY & BIOCHEM

192. Introductory Molecular Biology. (2.5) § F. Prerequisite: IDS 191. Restriction: Permission of instructor. Lecture 3 hours, conference 1 hour: 6-week course. **Colby**

Covers the basic principles of molecular biology with emphasis on their application to control of gene expression in humans. ANATOMY & BIOCHEM

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

Course covers the light and electron microscopic structure of organs with emphasis on the relationship of structure to organ function. The histology of endocrine and reproductive systems is presented in a separate course, Physiology 101. ANATOMY & BIOCHEM

Laboratory Medicine

140.01. Principles of Laboratory Medicine-SFGH. (1.5 per week) Su, F, W, Sp. Prerequisite: Two years of medical school. **Gottfried, Ng, Hadley, Khayam-Bashi**

Laboratory sessions, seminars and rounds at SFGH 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 can be modified to accommodate special interests. LAB MED

140.05. Clinical Pathology-VMC. (1.5 per week) § F, W, Sp. Prerequisite: Medicine 110 and consent of instructor. **Sobenes, Moseley**

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, radioisotopic pathology, hematology, immunology and serology, blood banking, microbiology, mycology, parasitology. LAB MED

140.06. Laboratory Medicine-Fresno. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110. **Bauer, Beland**

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. Hematology-UC. (1.5 per week) F, W, Sp. **Atwater, Corash**

Students participate in daily operations of the hematology laboratory, working with a resident on either the Bone Marrow or Heme-Coag rotations evaluating current case materials, attending daily signout rounds, and attending weekly teaching conferences. LAB MED

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

Course provides practical microbiology laboratory instruction correlated with clinical infectious disease rounds. The goal is a better understanding of how to use the laboratory for infectious diseases diagnosis. The schedule can be modified to accommodate special interests in microbiology. LAB MED

140.22K. Mechanisms of Bacterial Pathogenesis. (1.5 per week) W. Fourth-year standing. **Griffiss, Jarvis**

This course is designed to cause students to approach bacterial infections as a dynamic interaction between living organisms rather than as a problem of identifying symptom patterns. The course will focus on the molecular strategies used by different bacteria. LAB MED

160.02. Sexually Transmitted Diseases. (2) § W. Lecture 2 hours. **Palefsky, Brooks**

Course covers biological and clinical aspects of the syndromes and agents of sexually transmitted diseases, including herpes, chlamydia, gonorrhea, syphilis, vaginitis, AIDS, and others. This is an elective course oriented toward medical students. LAB MED

160.03. Laboratory Work-up of Disease. (0.5) Sp. Second-year standing. Seminar 1 hour. **Ng**

Students learn to make appropriate use of laboratory tests in the evaluation of clinical problems. Case discussions are led by a variety of faculty members. LAB MED

180. Intro: Science Education and Gender. (1) F, W, Sp. Second-year standing. Prerequisite: Permission of instructor. Seminar 0.5 hour. Field work 1.5 hours. **Clark**

Course project through the Science and Health Education Partnership of UCSF involves UCSF students working with middle school students and a middle school teacher. Methods include cooperative, constructivist, and inquiry-based strategies, classroom management, and effective teaching strategies for girls. LAB MED

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

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

Medicine

110. Medicine Core Clerkship-UC-SFGH-VA-MZ-VAF-VMC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 131A-B-C and 132A-B-C. Open to UCSF students only. **UC Papadakis, SFGH Haber, VA Tierney, MZ Woeber, VAF/VMC Freeman**

Students are part of the ward team with the housestaff and faculty. Bedside instruction in history-taking, physical diagnosis, selected seminars in general medicine including the psychiatric aspects of medicine, and presentations and demonstrations of relevant cases. MEDICINE

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

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

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

Course will discuss the ethical, legal, and policy issues in the clinical practice of medicine. Students are required to write a paper analyzing a case that presented ethical dilemmas. MEDICINE

131A-B-C. Introduction to Clinical Medicine. (1-2-3) F, W, Sp. Prerequisite: First-year standing or consent of instructor. Lecture 1 hour Sp. Section work 2 hours F; 4 hours W, Sp. **M. Cooke, P. Braverman**

Interdepartmental instruction in clinical problem-solving, interviewing, medical history, ethics, organization, and financing of care. On-going relationship with a patient focused on: health promotion/education; understanding barriers to access and "compliance"; community resources; health team. Small groups, lectures, and preceptorships. MEDICINE

132A-B-C. Introduction to Clinical Medicine. (5-7-4) F, W, Sp. Prerequisite: Anatomy 100, 103; Biochemistry 100; Interdepartmental Studies 100, Medicine 131A-B-C; Microbiology 100A-B (may be taken concurrently); Pathology 101, 102 (may be taken concurrently); Physiology 100, 101; or consent of instructor. **M. Cooke**

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

132D. Introduction to Clinical Medicine. (2) Sp. Prerequisite: Medicine 131A-B-C (must be taken concurrently). **Hughes, Cooke**

Working with a faculty preceptor over three quarters of the second year, students in the Clinical Skills Preceptorship are taught the techniques of the physical examination, including techniques of the medical history, complete write-up, and oral presentations. MEDICINE

140.01. Acting Internship-UC-VA-MZ-VAF-VMC-SFGH. (1.5 per week) Su, F, W, Sp. Prerequisite: Completion of Medicine 110. **UC Papadakis, VA Tierney, MZ Woeber, VAF/VMC Freeman, SFGH Haber**

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

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

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

140.03. Hematology/Oncology-UC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110. **Henderson**

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

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

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

140.05. Clinical Cardiology-PMC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 or consent of instructor. Next offered 1996-97. **Kline**

Students manage one to two patients per week, giving them direct "hands-on" clinical experience. Students are expected to participate in all cardiology conferences, ward rounds, ECG reading sessions, Echocardiography and Nuclear Medicine rounds. MEDICINE

140.07. Oncology-SFGH. (1.5 per week) F, W, Sp. Prerequisite: Medicine 110. **Luce**

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

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

Students, along with a second-year fellow, two first-year fellows, a medical resident and attending, serve as a member of the gastroenterology clinical service. Participate in all conferences, journal review and teaching sessions, including 'specialty clinic' (e.g., Liver, IBD clinics). MEDICINE

140.09. Clinical Cardiology-MZ. (1.5 per week) SS1, SS2, Su, F, W, Sp. Prerequisite: Medicine 110 and fourth-year standing. Consent of instructor. **Mailhot, E. Cohen, Paley**

Students work up patients and follow patients through diagnostic and therapeutic procedures. There is considerable exposure to non-invasive, invasive, and interventional cardiology and post-operative cardiac care. Students participate in departmental conferences and hospital-wide conferences. MEDICINE

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

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

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

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

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

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

140.13. Care of the Patient with AIDS at SFGH. (1.5 per week) Su, F, W, Sp. Prerequisite: Completion of core clinical clerkships. Fourth-year standing. **Stansell**

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

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

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

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

Students, under supervision, evaluate hematology patients in the outpatient/inpatient consultation service; review relevant clinical data; interpret bone marrow slides. Emphasis is on the diagnosis and management of patients with hemoglobinopathies, sickle cell diseases, disorders of hematopoiesis, and abnormal coagulation. MEDICINE

140.18. Gastroenterology-VA. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and fourth-year standing. **Wright**

Students share consultations with GI fellows; work up patients on wards; see patients in outpatient; attend endoscopies; attend rounds and conferences. MEDICINE

140.19. Cardiology-VA. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110. **Karliner**

Students share consultations with cardiology fellows; work up patients on the wards; interpret ECGs and other Holter monitor studies; attend rounds and conferences. MEDICINE

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

Hospitalized patients with a wide range of infectious diseases are evaluated and presented by students under the direct supervision of the infectious disease fellow. Students present patients at attending rounds, infectious disease conferences, and review appropriate literature on the subject. MEDICINE

140.21. Private Practice. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110. Approval of third- and fourth-year coordinator. Student must make arrangements with private-practice physician. **Papadakis**

Working experience with an internist on clinical faculty as he/she makes rounds in various private hospitals and at UC, sees patients in private office and on house calls, does follow-up studies, and reads electrocardiograms. MEDICINE

140.22B. Current Topics in Oncology. (6) F. Restriction: 4th-year medical students only. **Humphreys, Schaufele, Luce**

Following the introduction of a selected novel concept in clinical or experimental oncology, participant-initiated library research and subsequent discussion will be emphasized as a method to keep pace with the rapid changes in oncology that will occur post-graduation. MEDICINE

140.22D. Advanced Airway Pathophysiology. (6) W. Restriction: 4th-year medical students only. **Humphreys, Mustacci, Stulberg**

This course will provide an in-depth understanding of the most pressing issues and challenges that asthma, chronic bronchitis, emphysema, and cystic fibrosis present at the bedside, in the laboratory, and at the community level. The course accommodates ample time for independent study, student presentations, and small group discussions. MEDICINE

140.22F. Clinical Therapeutics. (6) W. Restriction: 4th-year medical students only. **Humphreys, Benowitz**

This course emphasizes applied pathophysiology and clinical therapeutics. Case-oriented workshops will present the principles of therapeutics with application to specific therapy of common cardiovascular, respiratory, gastrointestinal, and infectious diseases as well as diabetes. MEDICINE

140.22G. Endocrine Pathophysiology. (6) W. Restriction: 4th-year medical students only. **Lingappa, Strewler, Woeber**

One week each of lecture, discussion, and library research on selected topics in adrenal, thyroid, parathyroid, and lipid pathophysiology. MEDICINE

140.22N. Renal Clinical Pathophysiology. (6) Sp. Restriction: 4th-year medical students only. **Humphreys, Cogan**

The course material will be clinically case-based with a format of small group seminars with supplementary lectures emphasizing pathophysiology of renal disorders. MEDICINE

140.23. Endocrine Metabolism-UC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110. **Tyrrell**

Students based at Moffitt Hospital, twelfth floor south, act as assistants to residents and to endocrine fellows for consultations as well as for hospitalized endocrine patients; attend endocrine and metabolic clinics and seminars, and teaching exercises of endocrinology and metabolism, including Medicine Grand Rounds. MEDICINE

140.24. Rheumatology & Immunology-UC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110. **Sack**

Familiarization with clinical manifestations, rheumatic disease therapy, immunologic disorders. Participation in in/outpatient clinics. Basic immunologic principles as related to clinically apparent immunologic dysfunction. Assignment of pertinent literature, lectures, and introduction to principles and practice of various immunologic testing. MEDICINE

140.25. Renal Disease-SFGH. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and fourth-year standing. **Humphreys**

Students work up and follow up patients with a wide variety of renal and electrolyte disturbances, and see outpatients in a weekly Renal Clinic. Cases are discussed with attending physicians daily. Students also attend weekly Journal Club, Renal Grand Rounds, and Chief of Service Rounds. MEDICINE

140.26. Critical Care-MZ. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and fourth-year standing. **Addison, Woeber**

Primary emphasis is on the management of critically ill patients in Coronary Care Unit and Intensive Care Unit. Includes teaching in the use of monitoring equipment, cardioversion, and related aspects of critical care medicine. MEDICINE

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

Students will attend rounds in the coronary care unit and receive instruction in cardiology, stressing electrocardiography; students may work in the pulmonary function laboratory and attend all teaching conferences and seminars. MEDICINE

140.28. Infectious Disease-SFGH. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110. **Chambers**

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

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

Shuman
Students evaluate patients on the wards and outpatient clinics; review peripheral blood smears; participate in conferences and seminars. Emphasis on patients with blood coagulation disorders, hematologic malignancies, and anemia. MEDICINE

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

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

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

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

140.34. Renal Disease—UC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110.

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

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

Cheitin, Rapoport
Students see patients in consultation on wards and clinics, read electrocardiograms, improve auscultatory skills, review cases with cardiac consultant, observe cardiac procedures such as electrocardiograms and catheterizations, and attend all seminars and conferences. MEDICINE

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

Wang
Advanced clerkship in emergency medicine with extensive hands-on instruction in procedures, decision-making, and management of acute patients. Two shifts spent with paramedics, one-half shift with the central EMS base station/dispatch. An excellent elective for students considering a career in emergency medicine. MEDICINE

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

Simon, English
Students evaluate medical, surgical, gynecologic, and non-critical trauma patients under attending supervision. Attend short teaching conferences held daily, with longer departmental conferences weekly. "Hands-on" training such as suturing, casting and splinting, and airway managing are provided. MEDICINE

140.39. Pulmonary Disease—UC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110.

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

140.40. Gastroenterology—KP. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110.

Allison, Kaufman, Udrow, Grossman
As a member of the GI Consult team, student will work-up patients, observe and participate in diagnostic and therapeutic procedures, and attend all rounds and GI diversion conferences. MEDICINE

140.41. Gastroenterology—SFGH. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and fourth-year standing.

Cello
Students evaluate and present GI consults on patients admitted to the medical and surgical wards. Observe GI techniques, including sigmoidoscopy, colonoscopy, endoscopy, liver biopsy. Attend weekly GI and liver clinics, and conferences held in conjunction with Surgery, Pathology and Radiology. MEDICINE

140.42. Clinical Toxicology & Pharmacology—SFGH. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and fourth-year standing.

Olson
The Poison Control Center handles over 200 calls per day, many from physicians managing an acute poisoning or drug overdose. Students will learn to use computerized and other poison information resources; participate in discussions of a variety of acute poisonings. MEDICINE

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

Wofsy
This is an introduction to cardiac rheumatology and immunology. The student will participate in inpatient and outpatient care and take part in didactic conferences relating to rheumatology and immunology. 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.

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

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

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

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

Pollock
A broad array of acute and chronic renal disease patients are worked up by the student under the direct supervision of the attending physicians. MEDICINE

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

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

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

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

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

Luxenberg, Feigenbaum
Students, under supervision, perform consults on hospitalized and clinic patients. They participate in multidisciplinary geriatric assignment, 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.

Deedwania
Students see patients in the coronary care unit, wards and clinics at the University of California Teaching Facility at Fresno. They will develop and implement treatment plans with the consultant, read electrocardiograms, and attend all seminars and conferences. MEDICINE

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

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

140.59. Adv Medicine Clerkship KTU—UC. (1.5 per week) Su, F, W, Sp. Prerequisite: Fourth-year standing.

Amend, Vincenti
Rotation through an active renal transplant service including clinical immunology, clinical renal pathophysiology, 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—VAE. (1.5 per week) Su, F, W, Sp. Prerequisite: Fourth-year standing.

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

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

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

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

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

140.64. Diagnosis of Electrocardiography—UC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110.

Evans
The primary course focus is diagnostic cardiology. Students interpret 12-lead electrocardiograms, learn the indications for various studies, observe these studies, and describe how they influence patient care. Students will rotate on the cardiology consult service and attend selected conferences. MEDICINE

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

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

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

Libke
Management of common and unusual infectious diseases. May include use of antimicrobials 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.

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

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

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

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

Feigenbaum
Acting internship at this urban community prepaid health plan hospital. Students examine patients, participate in ward rounds, and attend teaching seminars 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, Hawkins, Murthy, Ginier
Students gain extensive experience in care of patients with diabetes and other endocrine disease through active participation in special diabetes inpatient units, ward consultations, diabetes and endocrine clinics, and patient educational programs located at Valley Medical Center and in the community. MEDICINE

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

Hirasuna
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

140.79. Inpatient Medicine—STM. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110.

Solari
The student, teamed with a resident, will evaluate and share in the care of patients admitted to a community based hospital. Students will take call, attend teaching rounds and conferences; will attend clinic one afternoon per week. MEDICINE

140.80. GI and Liver Diseases—VMC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 or consent of instructor.

Holmes, Arora, Peters
Students will become part of the GI-Liver team. In addition to basic patient evaluation, they will participate in the broad range of diagnostic and therapeutic endoscopic procedures. Participation in an active ambulatory clinic adds to the variety of patients seen. MEDICINE

150.01. 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

150.03. Cancer Viruses. (1.5 per week) Su, F, W, Sp. Prerequisite: Basic course in microbiology.

J. A. Levy
Tissue culture 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

160.04. Medical Science & Clinical Problems. (0-2) Su, F, W, Sp. Prerequisite: Must be an M.D./Ph.D. trainee in the MSTP at UCSF. Conference 1-2 hours.

Parslow, Papadakis
Clinical contact is arranged with mentor for experience in ward rounds, clinic work, etc. in clinical departments with approved faculty. Student will choose mentor from list of available faculty. MSTP students are required to complete 6 units before completion of the Ph.D. MEDICINE

160.10. Clinical Medical Ethics. (1) F Seminar 1 hour.

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

170.04. EKG Fundamentals—VA. (1) Su, F, W, Sp. Prerequisite: Medicine 132A-B-C. Lecture 1 hour.

M. Goldman
Instruction in basic electrophysiologic principles and interpretation of electrocardiograms. MEDICINE

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

Rapaport
Review of physical principles of electrocardiography and clinical application of electrocardiographic interpretation. MEDICINE

170.09. Current Topics in Medical Science. (2) F, W, Sp. Seminar 2 hours.

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

170.10. Introduction to Occupational Medicine. (1) F Seminar 1 hour.

Balmes
Practice of occupational medicine as related to the prevention, recognition, and treatment of disease and injuries resulting from employment. Interaction of economic, political, and social forces bearing on worker health problems. MEDICINE

170.11. Introduction to Environmental Medicine. (1) W Seminar 1 hour.

Balmes
Introductory course in health issues related to the environment. MEDICINE

170.12. Introduction to Geriatric Medicine. (1.5) W. Lecture 1.5 hours.

Luxenberg
Course covers the physiology and psychology of normal aging and health care problems of the elderly, including functional status and cognitive impairment. Use of medications, health care policies, multidisciplinary geriatric health care teams, and ethics are reviewed. MEDICINE

170.15. Art and Science of Health Services Research. (2) F. Prerequisite: Graduate training in applied health services research, e.g., public health, medical sociology, health economics, preventive medicine.

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

170.18. Principles of Occupational Health. (2) Sp. Seminar 2 hours.

Balmes
This course presents an overview of occupational health, with seminars and site visits. MEDICINE

170.19. Introduction to Emergency Medicine. (2) W. Restriction: First- and 2nd-year preclinical medical students; priority to 2nd-year students. Lecture 1 hour. Conference 1 hour.

Gelb, Chin, Neighbor
Discuss the specialty of Emergency Medicine and initial care of emergency patients both in the pre-hospital phase and in the Emergency Department. Lectures and practical sessions will cover common medical emergencies and initial management of trauma patients. MEDICINE

180. Industrial Toxicology. (2) § 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

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

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

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

199. Laboratory Project in Medicine. (1-6) Su, F, W, Sp. Prerequisite: Consent of instructor preceptor and approval of third- and fourth-year course director. Laboratory 3-18 hours.

Papadakis
Students will select and conduct a research project under the guidance of a member of the Department of Medicine Faculty. MEDICINE

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

UC R.K. Root, SFGH Rapaport, VA Slesinger
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 professors discuss the cases and present new developments to their respective fields. MEDICINE

401. Interdept Clinical Correlation. (4) F, W, Sp.

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

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

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

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

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

404. Specialty Seminar. (4) F, W, Sp.

SFGH H. Williams and Staff
Seminars are conducted in cardiology, hematology, gastroenterology, infectious diseases, metabolic diseases, and pathology, involving discussions, required reading, and reports. MEDICINE

405. Specialty Seminar. (4) F, W, Sp.

VA Slesinger
Seminars are conducted in cardiology, electrocardiology, hematology, gastroenterology, radiology, fluid and electrolyte balance, endocrinology and pathology, involving discussions, required reading, and reports. Elective seminars include a chest disease conference, joint medical and surgical conference, tumor board, dermatology conference, and neuropsychiatry conference. MEDICINE

406. Research Elective. (1-10) Su, F, W, Sp. UC R.K. Root, SFGH Williams, VA Slesinger
Research programs are arranged with appropriate faculty members on an individual basis. MEDICINE

407. Clinicopathological Conference. (1) F, W, Sp. SFGH H. Williams, VA Slesinger
Residents take an active part in the presentation and discussion of problems connected with the correlation of clinical manifestations of disease with postmortem studies. Conferences include reference to the literature, clinical demonstrations, and laboratory work. MEDICINE

408. EKG Interpretation. (2) Su, F, W, Sp. Sokolow
Seminars (individual instruction) for residents in medicine and trainees in cardiology by cardiac consultants in the interpretation of all electrocardiograms and phonocardiograms taken at UC. MEDICINE

411A. Introduction to Molecular Genetics. (4) Su. Lecture 3 hours. Conference 1 hour.

Gitschier, Ganem, Parslow
A general overview of molecular genetics, aimed principally at fellows in clinical departments. MEDICINE

411B. Introduction to Cell Biology. (4) Su. Lecture 3 hours. Conference 1 hour.
Kelly
A brief introduction to contemporary cell biology for clinical fellows. MEDICINE

411C. Laboratory Techniques. (3) Su. Prerequisite: Medical fellows in School of Medicine. Lab: 40 hours/week for 2 weeks.

Welch, Pytella
A short, but intensive, laboratory course in modern laboratory techniques of cell and molecular biology meant to facilitate transition of medical fellows beginning their rotation in basic research laboratories. MEDICINE

420. Intro to Structural Biology. (3) Sp. Lecture 3 hours.

Cohen, Kuntz, Craik
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. Restricted to postdoctoral fellows in RWJ Clinical Scholars Program & NIMH-funded Clinical Sciences Research Training Program. Seminar 4 hours.

Henke
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. SFGH 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. Third-year, senior and chief residents provide teaching and consultation service in the hospitals and outpatient clinics. MEDICINE

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

452. Clinical Medicine. (1.5 per week) Su, F, W, Sp. VAF Rosenstiel
Residents are responsible for patient care under the direction of the attending staff, including history-taking, physical examinations, laboratory tests, and consultations. The chief resident, in addition, has certain responsibilities involving the residents, and consults for all other hospital services. 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
Residents in the Primary Care Track of Internal Medicine are responsible for patient care in a multi-specialty 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. SFGH 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

491. Clinical Medicine. (1.5 per week) Su, F, W, Sp.

SFGH H. Williams
A modified "straight" medical internship consisting of eight to nine months service in general medicine, chest, and the emergency rooms, with three to four months spent in other hospital services. 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. MICROBIOL

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

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. MICROBIOL

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

Brodsky
Lectures on the fundamentals of immunology, drugs in hypersensitivity and immunosuppression. MICROBIOL

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

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

120. Microbiology in Pharmacy. (4) Sp. Prerequisite: Successful completion of all first-year required coursework. Lecture 3 hours. Lab 3 hours.

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

150.01. Microbiology Research. (1.5 per week) Su, F, W, Sp. Prerequisite: Microbiology 100A and 100B and consent of instructor.

Staff
Research in microbiology; block elective for fourth-year students. MICROBIOL

170.02. Case of the Week. (1) F. Prerequisite: Microbiology 100B concurrently. Seminar 1 hour.

W. Levinson
Infectious disease cases are discussed in a problem-solving format. MEDICINE

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

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

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

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

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

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

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. MICROBIOL

203. Cellular Immunology. (3) F. Prerequisite: General knowledge of immunology and biochemistry. Lecture 3 hours. Offered in alternate years. Not offered 1995-96.

DeFranco, J.W. Goodman
Course covers chemical and genetic basis of immunogenicity, properties of immunocompetent cells, cell interactions in the immune system, and regulatory circuits. MICROBIOL

204. Molecular and Cellular Immunology. (3) F. Prerequisite: General knowledge of immunology. Lecture 3 hours.

DeFranco
Topics to be covered: hematopoiesis, 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. MICROBIOL

208. Biology of Animal Virus Infection. (3) W. Prerequisite: General knowledge of nucleic acid structure and chemistry. Lecture 3 hours. Seminar 4 hours.

Ganem, Young, Andino
The nature of viruses: dynamics of virus-cell interaction with emphasis on animal virus systems, control of expression of virus-specific information in lytic and temperate infection, and role of viruses in malignant transformation of cells. MICROBIOL

209. Special Topics in Immunology. (2) Sp. Conference 2 hours.

Goodman
Small group tutorial in which topics and correlative reading will be selected for discussion with individual faculty members. MICROBIOL

210. Research Problems in Mycology. (1-5) F. Prerequisite: Microbiology 100A, 100B and 206. Lab and conference.

Halde
Participation in research problems in a mycology laboratory. This is not a structured laboratory methods course, but rather a practical research experience involving basic research with pathogenic fungi. MICROBIOL

215. Laboratory Rotation. (3) Su, F, W, Sp. Prerequisite: Consent of instructor. Lab 9 hours.

Staff
Lab research for one quarter with a departmental faculty member to familiarize new graduate students with experimental approaches to microbiological or immunological problems of current interest. MICROBIOL

220. Selected Topics Seminar. (1) F, W, Sp. Seminar 1 hour.

Staff
General microbiology; individual research of advanced graduate students, invited speakers and staff members. Reviews of special topics and journal articles by advanced students and faculty. MICROBIOL

221. Graduate Research Seminar. (1) Sp. Seminar 1 hour.

Staff
Seminar series in which graduate students present their thesis research. MICROBIOL

250. Research. (1-8) F, W, Sp.

Staff
MICROBIOL

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

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

Neurological Surgery

Core Clerkship-Neurology 110. Students serve as clinical clerks in the inpatient and outpatient clinics.

140.01. Advanced Neurosurgery Clerkship. (1.5 per week) Su, F, W, Sp.

Gutin, Wilson
The student will become a member of the housestaff, attending ward rounds, working up patients, assisting at operations, and taking night call on rotation with a resident. Limited to one student per hospital. NEURO SURG

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

Chesnut, Weinstein
Clinical clerkship in approved hospitals by special arrangement, and approval of the dean and chairperson of the department. NEURO SURG

150.01 Research in Neurosurgery. (1-5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor and department. Passing grade in NB Examination Part 1. 40 hours per week.

Staff
Research project under the direction of a member of the faculty. Extensive background reading will be required and discussion of important topics will be held at weekly laboratory and program project research conferences. NEURO SURG

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 chairperson of the department.

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

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

400. Staff Conference. (2) Su, F, W, Sp.

Gutin
Residents, under supervision, prepare and present case histories of ward patients including laboratory work, X-ray studies, special investigation and reference to the literature. Discussion is led by the faculty with participation by visitors. NEURO SURG

402. Clinicopathological Conference. (2) Su, F, W, Sp.

R. Davis, C.B. Wilson
Residents discuss clinicopathological aspects of cases, and their correlation with the literature and special studies. Faculty and visitors discuss developments in related fields. Second-year residents organize conferences and participate in gross autopsies on patients from the Neurological Surgery Service. NEURO SURG

403. Literature Review. (1) Su, F, W, Sp. Pitts

Recent literature in neurology and neurological surgery is presented. Discussion by members of the faculty in attendance and by visitors from other schools interested in this and related fields. NEURO SURG

450. Clin Neurological Surgery-UC.

(10) Su, F, W, Sp. **Gutin, Wilson**
Residents, under supervision, are responsible for patient care in the wards and outpatient clinics including history-taking, physical examinations, laboratory tests, and consultations. In addition, the senior resident has certain administrative, teaching, and clinical responsibilities. NEURO SURG

451. Clin Neurological Surgery-SFGH. (10) Su, F, W, Sp.

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

452. Clin Neurological Surgery-MZ. (10) Su, F, W, Sp. Restriction: Neurosurgery residents only.

Nockels, Weinstein, McCormack
Residents are responsible for the care of patients, under the direction of the attending staff, including history-taking, physical examinations, laboratory tests, and consultations, with major emphasis on the surgery of spinal disorders. NEURO SURG

453. Clin Neurological Surgery-VA. (10) Su, F, W, Sp.

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

490. Clin Neurological Surg-SFGH-VA. (1.5 per week) Su, F, W, Sp.

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

Neurology

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

110. Neurology-Neurosurg Core Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 132A-B-C. Concurrent enrollment in Psychiatry 135.

Layzer
Students are assigned patients for study under supervision of attending and resident staffs. They attend work rounds, attending rounds, grand rounds, conferences and lecture-seminars, emphasizing diagnosis and management of common clinical problems and psychiatric aspects of neurology. NEUROLOGY

140.01A-B-C. Advanced Clinical Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Neurology 110 and fourth-year standing. A: UC. B: SFGH. C: VA.

UC Hauser, SFGH So, VA Sharp
Students serve as acting interns on the inpatient service. Attendance at departmental clinical rounds, seminars, and conferences is required. NEUROLOGY

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

Hauser
Clinical clerkship in approved hospitals by special arrangement and approval of the dean and the chairperson of the department. NEUROLOGY

140.03. Outpatient Clinical Neurology. (1.5 per week) Su, F, W, Sp. Prerequisite: Neurology 110 and consent of instructor.

Engstrom
Senior students participate in the outpatient general neurology and subspecialty clinics. Students further develop neurologic history and examination skills applicable to clinical problems (i.e., Parkinson's disease) likely to confront the neurologist and non-neurologist. NEUROLOGY

140.04. Child Neurology. (1.5 per week) Su, F, W, Sp. Prerequisite: Pediatrics 110, Medicine 110, and Neurology 110.

Mobley
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. NEUROLOGY

140.06. Advanced Neurology Clerkship-VA. (1.5 per week) Su, F, W, Sp. Prerequisite: Neurology 110 and consent of instructor.

F. Sharp
Students serve as clinical clerks in the outpatient clinics and on the consultation service. Attendance at departmental clinical rounds, seminars, and conferences is required. Prior arrangements must be made. NEUROLOGY

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

Felms, Margolin, Ogren
Advanced students will have the opportunity to broaden and enrich their clinical neurology experience and expertise. Opportunity will be given to participate in didactic and case conference presentations. The opportunity exists for subspecialty clinical experience (e.g., behavioral neurology, neuromuscular disease). NEUROLOGY

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

Fields, Barbaro, McKay
Diagnosis, medical and surgical management of patients with chronic pain. Students will participate in conferences and rounds of the multidisciplinary pain service at UCSF's Parnassus campus. Direct patient contact will be under supervision of attending physicians (neurologists, neurosurgeons, anesthesiologists, psychiatrists). Students will learn to do sensory examinations and simple local anesthetic nerve blocks. They will learn pain management for acute post-operative patients, cancer pain, neuropathic pain, headache, low back pain. They will be expected to identify major psychological aspects of acute and chronic pain. NEUROLOGY

150.01. Neurology Research. (1.5 per week) Su, F, W, Sp. Prerequisite: Anatomy 103.

Hauser
Opportunities for research in one of the departmental laboratories by arrangement with the chairperson of the department. NEUROLOGY

150.02. Neuropathology. (1.5 per week) F, W, Sp. Prerequisite: Anatomy 103 and Pathology 102.

R.L. Davis
Tissue pathology of diseases of the nervous system will be explored in greater depth in the postmortem room and by gross and microscopic techniques. NEUROLOGY

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

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

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

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

400. Neuroscience Seminar. (1.5 per week) Su, F, W, Sp.

Hauser, D. Greenberg, F. Sharp
Seminars covering selected subjects in the basic sciences relevant to neurology including neuroanatomy, neurochemistry, neurophysiology, and neuropathology. NEUROLOGY

401. Grand Rounds. (1) Su, F, W, Sp.

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

402. Neurological & Neurosurgical Path. (1) Su, F, W, Sp.

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

403. Neuropathology Research. (1-10) Su, F,W, Sp. Prerequisite: Second- and third-year residents.

R.L. Davis

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

407. Neuroradiology. (1) F,W, Sp.

Dillon

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

411. Neurology Research. (5-13) Su, F,W, Sp.

Hauser

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

412. Neuropathology Research. (10) Su, F,W, Sp.

VA Sharp

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

450. Clinical Neurology-UC-SFGH-VA. (10) Su, F,W, Sp.

Hauser

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 Electroencephalography. (1.5 per week) Su, F,W, Sp.

Aminoff

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

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

Olney

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

456. Clinical Neuropathology. (1.5 per week) Su, F,W, Sp.

Malamud

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

458. Clinical Pediatric Neurology. (1.5 per week) Su, F,W, Sp.

Mobley

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

460. Clinical Neuro-Ophthalmology. (4.5) Su, F,W, Sp.

W. Hoyt

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

Neuroscience

117. Neurobiology. (6) Sp. Prerequisite: First-year Dentistry standing. Lecture 5 hours. Lab 2 hours. Conference 1 hour.

Sargent, Wentworth, Christie, Steller

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

201. Basic Concepts in Neuroscience. (6) F Lecture 4 hours. Conference 2 hours.

L. Jan, Y.-N. Yan

An interdisciplinary introduction 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 integration. PHYSIOLOGY

210. Critical Reading Skills. (2) W. Prerequisite: Approval of instructor. Conference 2 hours.

Reichardt

Important papers in different areas of neuroscience will be read and critically evaluated in class discussions. The aim is to develop reading skills. PHYSIOLOGY

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

Reichardt

A laboratory rotation course to familiarize new departmental graduate students with various approaches to neurobiological research. PHYSIOLOGY

220. Neurobiology Seminar. (1) F,W, Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

Sretavan

Topic in neuroscience is selected (e.g., development, anatomy and physiology of the visual system, biochemistry of membranes, etc.) and pertinent papers from the recent literature are read and discussed. Each student must participate regularly and present one seminar per quarter. PHYSIOLOGY

222. Advanced Topics in Neurochemistry and Molecular Neurobiology. (3) F,W, Sp. Lecture 1 hour. Seminar 2 hours.

Mobley, Levine

Lectures and critical discussion of current research on neurotrophic factors, their receptors, and molecular basis of neuronal signal transduction. PHYSIOLOGY

223. Developmental Neurobiology. (3) F,W, Sp. Prerequisite: Neuroscience 201 and consent of instructor. Lecture 3 hours.

Reichardt, Y.-N. Jan, L. Jan, J. LaVail

This course will cover 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 zebra fish. PHYSIOLOGY

225. Neurobiology of Disease. (3) F,W, Sp. Prerequisite: Neuroscience 201 and consent of instructor. Seminar 3 hours.

Mobley, Fields, Rubenstein

Seminar format with students reading and presenting papers in the current literature of neurobiological disease. Emphasis will be on the physiological and molecular bases of disease. PHYSIOLOGY

230. Biophysics of Membrane Excitability. (3) F,W, Sp. Prerequisite: Neuroscience 201 & consent of instructor. Seminar 3 hours.

Lansman

Course is designed to acquaint students with analytical methods used in studying excitation in nerve and muscle. Topics include: review of electrical fundamentals, Laplace transforms, linear cable theory, thermodynamic and kinetic descriptions of electrodiffusion, voltage clamp methods, and Hodgkin-Huxley analysis of nerve excitation. PHYSIOLOGY

234. Synaptic Mechanisms in Peripheral & CNS. (3) F,W, Sp. Prerequisite: Neuroscience 201. Seminar 3 hours.

Nicoll, Malenka, Sargent

This is primarily a reading course in which recent papers on various aspects of synaptic physiology and plasticity in the CNS will be discussed in depth. PHYSIOLOGY

240. Advanced Topics in Integrative Neurobiology: The Vertebrate Retina. (3) F,W, Sp. Prerequisite: Neuroscience 201 & consent of instructor. Seminar 3 hours.

Steinberg, Copenhagen

Selected topics in the physiology of the vertebrate retina. Emphasis is 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

241. The Central Visual System (3) F Prerequisite: Neuroscience 201 & consent of instructor. Seminar 3 hours.

Stryker

Course examines organization and function of central visual system with a view toward understanding the response properties of central visual neurons, the neural connections that underlie these response properties, and the role of these neurons in perception. PHYSIOLOGY

242. Advanced Topics in Integrative Neurobiology: The Auditory System (3) F,W, Sp. Lecture 3 hours.

Merzenich

Course will review in lectures, laboratory demonstrations, and in discussions the state of understanding the peripheral and central nervous system processes underlying hearing and speech perception. PHYSIOLOGY

243. Somatosensory Systems and Pain. (3) F,W, Sp. Prerequisite: Neuroscience 201 and consent of instructor.

Fields, Merzenich, Levine, Ralston

This is predominantly a lecture and discussion format course. The course will examine the neural basis of somatic sensation including pain and pain modulation. A general theme will be the correlation of information derived from pharmacology, anatomy, physiology, behavior and human studies. Clinical problems will be reviewed insofar as they illustrate important principles or gaps in our understanding of the neurobiology of somatosensory systems and pain. PHYSIOLOGY

244. Motor Systems in Mammals. (3) F Prerequisite: Neuroscience 201 and consent of instructor. Seminar 3 hours. Will not be offered before 1997-98.

Lisberger

Through readings from the literature and background lectures by the instructor, we will survey both classical and current approaches to understanding the control of motor activity in mammals. PHYSIOLOGY

245. The Limbic System. (1.5) F,W, Sp. Prerequisite: Neuroscience 201 or consent of instructor. Lecture 1 hour for 6 weeks. Seminar 2 hours for 6 weeks.

Stryker, Malenka

Lectures and critical discussion of current research on the limbic system in the mammalian brain and its relationship to behavior. Topics include the neural bases of learning, memory, motivation, and emotion; spatial learning; the meso-limbic reward system; and synaptic plasticity. PHYSIOLOGY

246. Neuroendocrinology. (1.5) F,W, Sp. Prerequisite: Neuroscience 201 or consent of instructor. Lecture 1 hour. Seminar 2 hours.

Dallman, Weiner

Lectures and critical discussion of current research on the hypothalamus and its relationship to vegetative behaviors. Topics include the neural bases and integration of circadian rhythms, hormone secretion, feeding, drinking, and sexual behaviors. PHYSIOLOGY

250. Research. (1-8) F,W, Sp. Prerequisite: Consent of instructor. Laboratory. Staff PHYSIOLOGY

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

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

Nursing

101. Managing the Care Environment. (4) F Prerequisites: None. Lecture 4 hours.

D. Oda

Course examines the management of interpersonal, financial, and cultural factors in the nursing unit environment that influence the cost, quality and outcomes of care delivery. MENT HLTH COMADM

102. Vulnerable Populations. (3) F Prerequisites: None. Lecture 3 hours.

D. Oda

Course provides an orientation to socioeconomically and/or developmentally vulnerable groups; low income children and adults; the homeless; immigrants, refugees, migrants; chronically ill and disabled; substance abusers; and the frail elderly. Emphasis is placed on risk factor identification and modification. MENT HLTH COMADM

103. Family Nursing. (3) F Prerequisites: None. Lecture 2 hours. Seminar 1 hour.

M. Savedra

Course examines family as primary unit of health care management. Theories for understanding and providing care to families of patients in primary, secondary, tertiary health care are reviewed/critiqued. Skills in conducting a theoretically relevant family health assessment are taught. FAM HLTH

104. Psychosocial Nursing. (4) F Prerequisites: None. Lecture 2 hours. Lab 6 hours.

D. Oda

Course presents psychosocial basis for assessment and intervention with actual or potential health problems. Interviewing and communication techniques are presented as an integral part of both assessment and intervention. MENT HLTH COMADM

105. Community Health Nursing. (8) W Prerequisites: None. Lecture 3 hours. Lab 15 hours.

D. Oda

Course explores application of nursing, family, and community health theory in community health settings, focusing on assessing, planning, implementing, and evaluating nursing care with families, groups, and communities. MENT HLTH COMADM

106. Health Assessment. (3) W Prerequisites: None. Lecture 2 hours. Lab 3 hours.

M. Savedra

Course covers health assessment of the well/healthy client through history taking, physical examination, and identification of stressors altering health status. The laboratory provides an opportunity for integration of theory and mastery skills. FAM HLTH

107. Health Policy. (3) W Prerequisites: None. Lecture 3 hours.

C. Harrington

Course provides an overview of health policy issues, legislations, and reforms affecting nursing practice, education, and research. SOC BEH SC

108. Pathophysiology of Acute Illness. (5) Sp. Prerequisites: None. Lecture 3 hours. Lab 6 hours.

E. Froelicher

Course explores and describes pathophysiological concepts related to nursing care of the acutely ill adult. Description of the manifestations and nursing management appropriate to these concepts will be compared and contrasted across a variety of diseases. PHYSIOLOGY

109. Nursing Science and Research. (3) Sp. Prerequisites: None. Lecture 3 hours.

M. Savedra

An overview of nursing science and research emphasizing the concepts, research styles, and language useful for scientific work in nursing. Engages students in analytic and reflective thinking through examination of selected scientific literature. Orients students to nursing's expanding science base. FAM HLTH

110. Contemporary Nursing. (3) Sp. Prerequisites: None. Lecture 3 hours.

E. Froelicher

Course explores nursing's role within the context of the changing health care system. Reviews the scope of expanding nursing practice responsibilities with special emphasis on nursing's role in improving access and quality of health care. PHYSIOLOGY

140. Integrated Sciences. (3) Su. Lecture 3 hours.

M. Engler

Course focuses on microbiological concepts and chemical principles essential to nursing practice. PHYSIOLOGY

141. Anatomy and Physiology. (6) Su. Lecture 5 hours.

B. Peterson

This introductory course integrates human anatomy and physiology of the major organ systems and emphasizes the intimate relationship between structure and function. The course provides the foundation needed to understand human responses to wellness and illness. PHYSIOLOGY

142. Introduction to Nursing. (1) Su. Lecture 3 hours. Patient contact 24 hours.

V. Carrieri-Kohlman

Course explores the concepts of health and illness and role of the professional nurse. Focuses on using the nursing process in care of persons across the adaptation and developmental continua. Concurrent laboratory designed to develop skills and knowledge common to the nursing care of adults. PHYSIOLOGY

143. Effective Communication. (3) F Lecture 3 hours.

S. Ziehm

Course reviews selected theories of human interaction and presents principles and techniques of effective communication as they relate to establishing and maintaining a helping relationship. Students use laboratory experience to develop skills in communication and interaction. MENT HLTH COMADM

144. Nursing Care of Med-Surg Patients. (14.5) F Prerequisites: N141, N142. Lecture 5 hours. Patient contact 28.5 hours.

P. Larson

Course focuses on nursing assessment, diagnosis and care of adults with common medical-surgical conditions including problems common to the elderly. Clinical experiences are provided to allow (for development of pertinent knowledge and skills) application of content with clients. PHYSIOLOGY

145. Pathophysiology. (2) F Prerequisites: N141, N142. Lecture 2 hours.

C. Miaskowski

Course provides understanding of disease and its treatment as the basis for nursing assessment and intervention. Major disease entities will be explored, utilizing a conceptual organization of the content. PHYSIOLOGY

146. Parent-Child Nursing. (7.5) W Prerequisites: N140, N141, N142, N144, N145. Lecture 4 hours. Patient contact 10.5 hours.

C. Kennedy

This clinical course in the nursing care of children and families integrates theoretical concepts related to the management of pediatric patients in acute and ambulatory settings. Application of concepts of growth and development of the child and family is included. FAM HLTH

147. Childbearing Families. (7.5) Sp. Prerequisites: N140, N141, N142, N144, N145. Lecture 4 hours. Patient contact 10.5 hours.

N. Green

Course focuses on biopsychological concepts forming the basis for normal childbearing events and application to clinical situations. Emphasis is on nursing assessment and management of the woman and fetus during antepartum and intrapartum periods, and new mother and infant during the first postpartum month. FAM HLTH

148. Sociocultural Issues in Health and Illness. (2) W Prerequisites: N140, N141, N142, N144, N145. Lecture 2 hours.

S. Kaufman

Course focuses on significant sociocultural aspects of health and illness that make particular impacts on nursing practice in a variety of settings. Attention will be given to cultural diversity associated with ethnicity and social class. SOC BEH SC

149. Psych/Mental Health Nursing. (5.5) W Prerequisites: N140, N141, N142, N143, N144, N145, N146, N147, N148. Lecture 3 hours. Patient contact 7.5 hours.

S. Ziehm

Course presents theories of human behavior as they relate to function, alteration, and/or disruption of mental processes; reviews current knowledge related to nursing care, psychiatric treatment, and psychosocial rehabilitation of the identified mentally ill individual and his/her family. MENT HLTH COMADM

150. Community Health Nursing. (8.5) Sp. Prerequisites: N140, N141, N142, N143, N144, N145, N146, N147, N148. Lecture 4 hours. Patient contact 13.5 hours.

A. Dingerson

Course explores application of nursing, family, and community health theory in community health settings, focusing on assessing, diagnosing, planning, implementing, and evaluating community health nursing care with families, groups, and communities. General principles will be applied to specific vulnerable populations. MENT HLTH COMADM

151. Issues in Nursing. (3) W 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. FAM HLTH

152. Community Gerontological Nursing. (1) Sp. Lecture 1 hour.

Staff

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. PHYSIOLOGY

181. Law and the Practice of Nursing. (2) Sp. Lecture 2 hours.

D. Tennenhouse

Survey of fundamental and critical 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. PHYSIOLOGY

187. Scientific Writing. (1) F,W, Sp. Prerequisites: Consent of instructor. Lecture 1 hour. Enrollment limited.

J. Grout

Course reviews bibliographic search methodology, the style of scientific writing, American Psychological Association (APA) editorial format, and composition of the introductory paragraph. PHYSIOLOGY

197. Group Independent Study. (1-5) SS1, SS2, F,W, Sp. Lab 3-15 hours.

Staff

Students collaborate in 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. (1-5) SS1, SS2, F,W, Sp. Prerequisites: Consent of instructor. Lab 3-15 hours.

Staff

Student conducts library research and does directed reading under supervision of a faculty member with approval of the chairperson of the department.

199. Laboratory Project in Nursing. (1-5) SS1, SS2, F,W, Sp. Prerequisites: Consent of instructor. Lab 3-15 hours.

Staff

Student conducts a laboratory research project under direction of a faculty member with the approval of the chairperson of the department.

201. Curriculum & Program Development. (3) W Prerequisites: Graduate standing or consent of instructor. Lecture 1 hour. Seminar 2 hours.

H. Wilson

Course reviews educational principles, nursing models, and conceptual framework for curriculum and program development to enable students to analyze, critique, and develop curricula and programs for schools of nursing and health delivery systems. MENT HLTH COMADM

202A. Theory Development in Nursing. (3) W Prerequisites: Doctoral standing or consent of instructor. Lecture 1 hour. Seminar 2 hours.

A. Meleis

Critical analyses of contemporary strategies for the development of nursing theory building, particularly as they relate to selected nursing phenomena and an in-depth analysis of selected theoretical schools of thought. MENT HLTH COMADM

202C. Theories & Conceptual Frameworks. (3-4) Sp. Prerequisites: Doctoral standing. Lecture 3 hours.

A. Meleis

Comparative study and critical analysis of major conceptual models and theories in nursing. Considers relationship congruency of models to prototype theories; system, interaction, developmental, adaptation level theories. Examines the implication of nursing theories and models for practice and research. MENT HLTH COMADM

203. Consultation Theory & Process. (2-3) W, Sp. Lecture 2 hours. Lab 0-3 hours.

D. Oda

Course provides a study of theories and concepts of consultation as a facilitating process relevant to nurses working in primary, secondary, and tertiary prevention services. Emphasis will be on consultation strategies. Optional laboratory for theory testing. MENT HLTH COMADM

206A. Nursing Management of Psychiatric Conditions in Adults. (3) § F. Prerequisites: 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 COMADM

206B. Environmental Issues in Psychiatric Rehabilitation. (3) § Sp. Prerequisites: None. Lecture 2 hours. Lab 3 hours.

L. Chafetz

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 COMADM

208A. Human Pathophysiology and Aging. (3) § F. Prerequisites: None. Lecture 3 hours.

M. Engler, M. Wallhagen

Course integrates and applies knowledge of aging and pathophysiological concepts/alterations in selected organs and systems as a basis for advanced practice. Content areas to be addressed include: altered cellular, neurological, and hormonal regulation. PHYSIOL NURS

208B. Human Pathophysiology and Aging. (3) § W. Prerequisites: None. Lecture 3 hours.

M. Engler, M. Wallhagen

Course integrates and applies knowledge of aging and pathophysiological concepts/alterations in selected organs and systems as a basis for advanced practice. Content areas to be addressed include: altered cardiovascular, pulmonary, and renal function. PHYSIOL NURS

209. Comparative Research Designs. (3) § F. Prerequisites: Doctoral standing or by consent of instructor. Lecture 3 hours.

M. Dodd, K. Lee

Course critically analyzes the elements of qualitative and quantitative research designs set within the context of the research question to be asked and the existing knowledge in the area.

210. Information Technology and Nursing Care. (3) § F. Lecture 3 hours. Lab hours vary.

S. Henry

Course applies research from information technology and selected aspects of nursing care (diagnoses, nursing minimum data set, decision-making) in order to capture patient outcomes for program planning activities. MENT HLTH COMADM

211A. Research Methods and Critique. (4) § F,W. Prerequisites: None. Restriction: To be taken during the first or second quarter of the first year of the master's program. Lecture 4 hours.

L. Reif

Course introduces research terminology and methods. Emphasis will be placed on the development of research critical skills, and on research approaches used to evaluate health problems, risk factors, and the impact of nursing interventions on service recipients and delivery systems. PHYSIOL NURS

212. Data Collection and Measurement. (3) § W. Prerequisites: N209. Lecture 3 hours.

S. Weiss, R. Slaughter

Course critically evaluates concepts underlying the validity, reliability, and appropriateness of data collection methods as a basis for their construction and use in qualitative and quantitative research.

213A. Clinical Cancer Care. (3) § W. Prerequisites: None. Seminar 3 hours.

M. Dodd

Course addresses the theoretical and scientifically based clinical perspectives essential to managing common problems of the person with cancer and HIV/AIDS related malignancies. This includes nursing interventions, self-care, and ambulatory/home measures across the illness continuum of these disease states. PHYSIOL NURS

213B. Innovations in Cancer. (2) § F. Prerequisites: None. Seminar 2 hours.

C. Miaskowski

Course reviews the theoretical rationale for diagnostic and therapeutic innovations of cancer and HIV/AIDS. Research findings will be analyzed in terms of their implications for nursing practice and patient care. PHYSIOL NURS

213C. Complex Cancer/AIDS Care. (3) § Sp. Prerequisites: None. Lecture 3 hours.

C. Miaskowski

Course addresses the theoretical and scientific basis for management of complex clinical conditions experienced by patients with cancer and HIV/AIDS. Emphasis is on nursing management of conditions such as: spinal cord compression, sepsis, superior vena cava syndrome, and pneumocystis carinii pneumonia. PHYSIOL NURS

214. Community-Based Long-Term Care. (3) § Sp. Prerequisites: 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. Examination of patient characteristics and needs, models of service delivery, factors affecting service utilization, and nurses' roles in provision and management of community-based long-term care. PHYSIOL NURS

214A. Community-Based Long-Term Care. (1-2) § Sp. Prerequisites: S222 (taken prior to or concurrent with course). Seminar 1 hour. Optional field work 3 hours.

L. Reif

Course analyzes empirical research and theory dealing with noninstitutional approaches to long-term care. Examination of patient characteristics and needs, models of service delivery, factors affecting service utilization, and nurses' roles in provision and management of community-based long-term care. PHYSIOL NURS

214B. Institutional Care of the Aged. (1-2) § W. Prerequisites: None. Seminar 1 hour. Optional field work 3 hours.

J. Kayser-Jones

Course uses a theoretical, historical, and cross-cultural approach to focus on issues, problems, and trends in institutional care of the elderly. Research studies will be discussed and analyzed, and the health professionals' role in providing care will be explored. PHYSIOL NURS

215A. Community/Health Sys Assessment. (3) § F. Prerequisites: Consent of instructor. Lecture 3 hours.

M. White

Course emphasizes concepts and skills in the assessment of population aggregates and the health systems that serve communities. MENT HLTH COMADM

215B. Community/Health Sys Interventions. (3) § Sp. Lecture 3 hours.

C. Portillo

Course includes analysis of theory and research-based interventions appropriate for identified health risks and available resources for clients, communities, environments, and health systems. Application issues will be explored. MENT HLTH COMADM

216A. Cardiovascular Disease I. (3) § F. Prerequisites: None. Seminar 3 hours.

M. Engler

Course correlates pathophysiology, clinical diagnosis, and current management of cardiovascular disorders across the illness continuum and across settings. Content areas include: cardiac diagnostics, hypertension, hyperlipidemia, atherosclerosis, and myocardial ischemia. PHYSIOL NURS

216B. Cardiovascular Disease II. (3) § W. Prerequisites: N216A or consent of instructor. Seminar 3 hours.

B. Drew

Course correlates pathophysiology, clinical diagnosis, and current management of cardiovascular disorders across the illness continuum and across settings. Content areas include: revascularization procedures, valvular heart disease, cardiomyopathy, and heart failure. PHYSIOL NURS

217. Neonatal/Ped Pharmacology. (2) § F. Prerequisites: None. Lecture 2 hours.

M. Lynch, P. Jackson, A. Wong

Course presents the clinical application of pharmacologic interventions commonly prescribed for healthy and sick infants and children in varied health care environments. Emphasis is placed on the integration of pharmacologic interventions as a component of advanced nursing practice. FAM HLTH

218A. Phenomena Common to the Nursing Care of Ill or Injured. (3-4) § F. Prerequisites: N276. Prior or concurrent enrollment in physiology or consent of instructor. Lecture 1 hour. Seminar 2 hours. Lab optional 3 hours for 4 units.

N. Stotts

Knowledge is organized around phenomena common to ill or injured individuals across the life span. Concepts such as stress, healing, clotting, infection, consciousness, pain and coping will be examined from a theoretical and clinical perspective. PHYSIOL NURS

218C. Current Therapeutics. (1-5) § F. Prerequisites: Physiology, N218A and N218B. Seminar 1-5 hours.

N. Stotts

Course investigates the theoretical basis of selected therapies commonly used with the ill or injured. Therapeutic aspects of interventions as well as side effects will be explored. Recent research will be used as the basis for discussion. PHYSIOL NURS

218.05B. Concepts in Oncology Nursing. (2) § W. Prerequisites: N218A. Lab 2 hours. Seminar 1 hour.

C. Miaskowski

Course analyzes the needs of the cancer patient. Physiologic and pathophysiologic mechanisms are explored from the theoretical perspective and compared and contrasted with clinical nursing practice. PHYSIOL NURS

218.06B. Concepts in Critical Care Nursing. (3) § W. Prerequisites: N218A. Seminar 3 hours.

K. Puntillo

Course analyzes the needs of the critically ill patient. Physiologic and pathophysiologic mechanisms and appropriate treatments are explored. Issues in clinical management are discussed from the theoretical perspective, and compared and contrasted with clinical practice. PHYSIOL NURS

219. Psychiatric Assessment. (2-3) § W. Lecture 2 hours. Lab 3 hours (optional).

H. Wilson

Course uses clinical material in the critical examination of standard psychiatric diagnoses. Emphasis will be on the utility of assessment tools such as the mental status examination and the psychiatric history across diverse clinical specialties and the life span. MENT HLTH COMADM

220.01. Adv Sem in Nursing Research. (3) § F,W,Sp. Prerequisites: Successful completion of the qualifying examination and/or consent of instructor. Seminar 3 hours.

Staff

This seminar guides doctoral students in the design and conduct of research in specialty areas in cross-cultural and international nursing and mental health and community nursing. MENT HLTH COMADM

220.02. Adv Sem in Nursing Research. (3) § F. Prerequisites: Graduate nursing standing and completion of at least one research methods course. Restriction: Second-year graduate standing. Seminar 3 hours.

J. DeJoseph

A seminar which guides students in the design and conduct of research in specialty areas in family health care nursing. FAM HLTH

221. Theory in Advanced Practice Nursing. (2) § F,Sp. Prerequisites: None. Lecture 2 hours.

P. Benner, A. Meleis

Course provides an introduction to critical thinking about the discipline of nursing. Comparative analyses of frameworks to critique competing theoretical approaches to nursing practice are presented. Methods for the development, testing, and implementation of practice theories are discussed. PHYSIOL NURS

222A. Principles of Nurse Midwifery. (4) § F,W. Prerequisites: Enrollment in Nurse-Midwifery specialty. Lecture 3 hours. Lab 3 hours.

L. Ennis, D. Anderson

Course critically analyzes scientific principles underlying selected obstetric and gynecologic diagnostic and therapeutic procedures in the management of health care of women throughout the childbearing cycle. FAM HLTH-UCSD

222B. Nurse Midwifery Management. (4) § W,Sp. Prerequisites: Enrollment in Nurse-Midwifery specialty. Lecture 4 hours.

S. Leibel, V. Lops

Course expands the theoretical knowledge base of the normal physiology of pregnancy. Emphasis is placed on the intrapartum period with facilitation of normal processes and patient teaching. FAM HLTH-UCSD

222C. Complex Probs in Nurse Midwifery. (4) § Sp. Prerequisites: Enrollment in Nurse-Midwifery specialty. Lecture 4 hours.

V. Lops, L. Ennis

Course explores the theoretical concepts and principles applied to the management of pathophysiological and psychosocial issues complicating the birthing process. Issues of professional practice, adjustment to primary care role, and medical collaboration and consultation are considered. FAM HLTH-UCSD

223. Mental Health and Aging. (3) § F,W,Sp. Prerequisites: Consent of instructor. Lecture 3 hours.

C. Deitrich

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

224. Neonatal/Ped Ethical Issues. (2) § W. Prerequisites: None. Lecture 2 hours.

M. Lynch, I. Martinson

Course uses ethical theories and principles to explore conflict resolution in chronic, acute, and primary health care for infants, children, and adolescents. FAM HLTH

225. Cardiac Rhythm: Theory & Analysis. (3) § Sp. Prerequisites: Consent of instructor. Lecture 3 hours.

B. Drew

Cardiac electrophysiology in normal and pathological states and the scientific base for nursing's response to cardiac arrhythmias. Content includes: theory and research on the mechanisms, diagnosis, electrocardiographic monitoring, treatment of cardiac arrhythmias, and use of the electrocardiogram for nursing research. PHYSIOL NURS

227A. Theories of Major Psych Conditions. (4) § F,W. Prerequisites: Consent of instructor. Seminar 4 hours.

L. Chafetz

Course reviews major psychiatric conditions, outlined by the DSM-III-R, explores socio-cultural, psychological, and biological theories as dimensions in understanding the etiology, onset, course, treatment, nursing care, and outcome of selected conditions. MENT HLTH COMADM

227B. Theories of Major Psych Conditions. (4) § Sp. Prerequisites: Consent of instructor (N227A). Seminar 4 hours.

P. Underwood

Course reviews major psychiatric conditions, outlined by the DSM-III-R, explores socio-cultural, psychological, and biological theories as dimensions in understanding the etiology, onset, course, treatment, nursing care, and outcome of selected conditions. MENT HLTH COMADM

228. Concepts in Nursing Practice. (2) § W. Prerequisites: None. Lecture 2 hours.

V. Carrieri-Kohlman

Course examines selected clinical concepts from their scientific and theoretical basis. Theoretical issues related to the application of the concepts across settings and life span will be addressed. Students will be introduced to a process of concepts analysis. PHYSIOL NURS

229. Philosophy of Nursing Science. (3) § F. Prerequisites: Doctoral standing or consent of the instructor. Lecture 2 hours. Seminar 1 hour.

P. Benner

Contemporary philosophic viewpoints on the nature of nursing science, addressing natural science, integrative science, and human science traditions and scientific integrity. PHYSIOL NURS

230A. Quality Assurance. (3) § F. Lecture 3 hours.

S. Henry

Course critically reviews strategies to design, monitor, and evaluate quality assurance programs. Theoretical linkages between QA and evaluation research are presented. MENT HLTH COMADM

230B. Human Resources Development. (3) § 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 COMADM

230C. Health Services Evaluation. (3) § Sp. Lecture 3 hours.

W. Holzemer, S. Henry

Course presents a patient outcome model for health services evaluation research. The contributions of research on patient/client, provider, and setting characteristics to individual and organizational outcomes are critically analyzed. MENT HLTH COMADM

231. Issues in Nurse-Midwifery Practice. (3) § Sp. Prerequisites: Enrollment in the midwifery program at UCSF School of Nursing. Seminar 3 hours.

J. DeJoseph, L. Ennis

Seminar focuses on a critical analysis of current issues in midwifery, including the context of practice, health policy, and patient education. FAM HLTH

232. Clinical Pharmacology. (1-2). § Sp. Prerequisites: Consent of instructor. Lecture 1-2 hours.

S. Echaves

Course focuses on clinical application of pharmacology in the management of patients, including frequently prescribed drugs for the treatment of chronic diseases and minor acute illnesses across the life span. MENT HLTH COMADM

233A. AIDS Overview and Prev Strategies. (3) § F. Prerequisites: None. Lecture 3 hours.

C. Portillo

Course provides an overview of the AIDS epidemic and prevention of AIDS-prevention theories and ethical dilemmas are discussed. Emphasis is on prevention issues for different target populations, such as health care worker, injection drug users (IDUs), women, and children. MENT HLTH COMADM

233B. Applied Pathophysiology of AIDS/HIV. (3) § W. Lecture 3 hours.

M. Dodd, A. Hughes

Course describes theories of the natural history of HIV/AIDS and related conditions. Symptomatology, diagnostic tools, treatments, and investigational protocols are reviewed. Clinical cases and nursing management using secondary prevention techniques are emphasized. PHYSIOL NURS

233C. Issues in Hospice Care. (3) § Sp. Prerequisites: Consent of instructor. Lecture 3 hours.

I. Martinson

Course explores history, function, and models of hospice care. Supportive physical/psychosocial nursing interventions to promote symptom control and family coping during end-stage of life are covered with emphasis on AIDS. Research, legal, ethical issues and nursing implications are discussed. FAM HLTH

235A. Child Mental Health Assessment. (2) § F. Lecture 2 hours.

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 COMADM

235B. Child Mental Health Counseling II. (2) § W. Prerequisites: N235A. Seminar 2 hours.

S. Weiss

Course covers cognitive, behavioral, and gestalt theories of child mental health counseling. Theories of group counseling will also be examined, including methods based on play, activity, and interview. MENT HLTH COMADM

236A. Nurse Anesthesia Pharmacology I. (3) § Su. Prerequisites: Admission to the Nurse Anesthesia Specialty and N211A, N275A, N276, N211.09, N221.02, N275B, N239A, N241D, N407.02. Lecture 3 hours.

K. Karp

Course examines basic principles of pharmacokinetics and pharmacodynamics and applies them to administration of key pharmacologic agents in anesthesia nursing. Focus is on structural properties and physiological responses to intravenous induction agents, volatile inhalational anesthetics, and carrier gases.

236B. Nurse Anesthesia Pharmacology II. (3) § F. Prerequisites: Admission to the Nurse Anesthesia Specialty and N211A, N275A, N276, N211.09, N221.02, N275B, N239A, N241D, N407.02, N236A, N266, N407.03. Lecture 3 hours.

K. Karp

Course examines pharmacology and therapeutics of major adjuncts employed in the anesthetic process. Emphasis on analysis of physiologic response patterns and perioperative clinical nursing management of the surgical patient.

236C. Nurse Anesthesia Pharmacology III. (3) § W. Prerequisites: Admission to the Nurse Anesthesia Specialty and N211A, N275A, N276, N211.09, N221.02, N275B, N239A, N241D, N407.02, N266, N407.03, N261B, N239B, N407.04, N236A, N236B. Lecture 3 hours.

K. Karp

Course examines pharmacology and therapeutics of commonly used agents in the anesthesia process. Emphasis is on analysis of physiologic response patterns and perioperative clinical nursing management of the surgical patient.

237. Health Assessment through Life. (3-4) § F,Sp. Prerequisites: Department of Family Health Care Nursing students. Approval by F.O.R. Concurrent practicum required. Lecture 2-3 hours. Lab 3 hours.

L. Ennis

Course presents theoretical principles of health assessment throughout the life cycle. Areas to be covered include methodologies of data gathering and data analysis essential to comprehensive health assessment of all groups. Laboratory experience provides application and integration of theory. FAM HLTH

238A. Infant & Child Development. (3) § F. Prerequisites: Consent of instructor. Lecture 3 hours.

C. Kennedy

Course covers major theories and research findings dealing with social, emotional, and cognitive development of the child from birth through school age. FAM HLTH

238B. Adolescent Development. (2) § W. Lecture 2 hours.

J. Broering

Course explores relevant theory, literature, and research findings dealing with normal development during the adolescent period. FAM HLTH

239A. Basic Anesthesia Nursing. (5) § Sp. Prerequisites: Admission to the Nurse Anesthesia Specialty and N211A, N275A, N276, N211.09, N221.02, N275B. Lecture 5 hours.

K. Karp

Course provides instruction in basic principles of anesthesia nursing. Emphasis is on physical assessment and patient evaluation through trending and analysis of human response patterns observed in various monitoring modalities, as a reflection of dynamic physiologic functioning. PHYSIOL NURS

239B. Anesthesia for Special Practice. (2) § F. Prerequisites: Admission to the Nurse Anesthesia Specialty and N211A, N275A, N276, N211.09, N221.02, N275B, N239A, N241D, N407.02, N236A, N266, N407.03. Lecture 2 hours.

K. Karp

Analysis of the anatomy and physiology of pediatric and obstetric patients and common pathophysiologic conditions as the basis for clinical nurse anesthesia management. The use of various anesthetic techniques in these populations will be evaluated. PHYSIOL NURS

239C. Advanced Anesthesia. (3) § W. Prerequisites: Admission to the Nurse Anesthesia Specialty and N211A, N275A, N276, N211.09, N221.02, N275B, N239A, N241D, N407.02, N261, N266, N407.03, N261, N239B, N407.04. Lecture 3 hours.

K. Karp
Analysis of the effects of aging, common acute and chronic illnesses, and major systemic pathology of body systems as the basis for advanced nurse anesthesia clinical practice. Content includes examination of strengths and limitations of inhalational, local, and regional anesthesia. PHYSIOL NURS

240A. Family Primary Care I. (5) § Sp. Prerequisites: Enrollment in Family Nurse Practitioner Program and N237. Lecture 5 hours.

Staff
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) § F. Prerequisites: N240A. Lecture 4-5 hours.

Staff
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) § Sp. Prerequisites: N240AB. Lecture 4-5 hours.

S. Pickwell
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

241. Leadership in Advanced Practice. (2) § W. Prerequisites: None. Lecture 2 hours.
D. Taylor
Course provides students the opportunity to define the social, political, legal, legislative, regulatory, and organizational factors that influence advanced nursing practice across practice settings. FAM HLTH

241A. Role Development in Primary Care. (2) § W. Prerequisites: Concurrent primary care clinical residency or consent of the instructor. 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 care area. MENT HLTH COM ADM

241B. Role Development in Primary Care. (2) § F. Prerequisites: Consent of instructor and concurrent enrollment in primary care clinical residency. Lecture 2 hours

J. Saxe
Course offers the student nurse practitioner the opportunity to discover strategies for promoting role development and advancing the nursing profession in the primary health care arena. INTERDEPARTMENTAL

241C. Collaborative Role Development. (1) § W. Prerequisites: Successful completion of N241B (Role Development in Primary Care) and concurrent primary care clinical residency. Lecture 2 hours every other week.

J. Saxe
Bi-weekly seminars deal with critical analyses 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

241D. Professional Aspects of Nurse Anesthesia. (5) § Sp. Prerequisites: Admission to the Nurse Anesthesia Specialty and N211A, N275A, N276, N211.09, N221.02, N275B, N239A. Seminar 5 hours.

K. Karp
Seminar explores diverse professional issues in nurse anesthesia practice. Historical development of nurse anesthesia, prescriptive authority, role in health care reform, relationships with other health practitioners, ethical issues, and key legal concepts specific to advanced anesthesia nursing practice is emphasized. PHYSIOL NURS

242B. Care of Acutely Ill Older Adults. (3) § F. Prerequisites: N257 (Biology of Aging) or consent of instructor. Seminar 3 hours.

M. Wallhagen
Course addresses major phenomena common in the acutely ill older adult and focuses on the scientific basis for nursing management, the role of the multidisciplinary team in case management, and ethical issues that influence decision-making. PHYSIOL NURS

243.01. Family Therapies (3) § Sp. 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 intervention with troubled families will be analyzed, including structural, strategic, and communication frameworks as well as psychoeducation. MENT HLTH COM ADM

243.02. Trends in Group Psychother Modalities. (2) § W, Sp. Prerequisites: Psychiatric/Mental Health students or consent of instructor. Seminar 2 hours.

S. Weiss
Students will examine and discuss theories and practice of various group modalities in current use. MENT HLTH COM ADM

245. Health Protection & Promotion. (2) § W. Prerequisites: None. Lecture 2 hours.

J. Saxe
Course emphasizes principles of individual health protection and promotion across the life span in advanced nursing practice. The examination of models of disease prevention, and health promotion for individual wellness in the context of the family, community, and culture is emphasized. MENT HLTH COM ADM

245.01 Seminar in Adult Primary Care. (1) § W. Seminar 1 hour.

C. Cutter
Seminar is taken concurrently with N245 PHC I and provides the specialty content necessary for adult primary care nurse practitioners. Application from PHC I lectures will be made to the specialty area using case presentations and other relevant learning strategies. MENT HLTH COM ADM

246. Symptom Assessment & Management. (3) § Sp. Prerequisites: N270, N245. Lecture 3 hours.

L. Lommel
Course introduces students to signs and symptoms of illness across the life span that are commonly encountered in ambulatory care. Symptoms and signs will be analyzed using a clinical decision-making model. FAM HLTH

246.01. Seminar in Adult Primary Care. (1) § Sp. Seminar 1 hour.

G. Collins-Bride, B. Burgel, D. Guyot, C. Kelber, K. O'Mara
Seminar is taken concurrently with N246 and provides the specialty content necessary for adult primary care nurse practitioners. Application from N246 lectures will be made to the specialty area using case presentations and other relevant learning strategies. MENT HLTH COM ADM

246.02. Seminar in Family Primary Care. (1) § Sp. Seminar 1 hour.

S. Faust
Seminar is taken concurrently with N246 and provides the specialty content necessary for family primary care nurse practitioners. Application from N246 lectures will be made to the specialty area using case presentations and other relevant learning strategies.

246.03. Seminar in Gerontological Primary Care. (1) § Sp. Seminar 1 hour.

D. Guyot
Seminar is taken concurrently with N246 and provides the specialty content necessary for gerontological primary care nurse practitioners. Application from N246 lectures will be made to the specialty area using case presentations and other relevant learning strategies. PHYSIOL NURS

246.04 Seminar in Pediatric Primary Care. (1) § Sp. Seminar 1 hour.

P. Jackson
Seminar is taken concurrently with N246 and provides the specialty content necessary for pediatric primary care nurse practitioners. Application from N246 lectures will be made to the specialty area using case presentations and other relevant learning strategies. FAM HLTH

246.05. Seminar in Women's Primary Care. (2) § Sp. Prerequisites: None. Seminar 2 hours.

P. Bernal de Pheils
Analysis, application of knowledge to maintain/promote women's health. Emphasis placed on application of knowledge to assess commonly occurring symptoms associated with women's health conditions; manage common health conditions of women across the life span; maintain and promote women's health. FAM HLTH

247. PHCIII: Complex Health Problems and Management. (3) § F. Prerequisites: N270, N245, N246, or consent of instructor. Lecture 3 hours.

D. Null
Course introduces the more complex health problems encountered in primary care. Client's clinical presentation, underlying causes and appropriate treatment are discussed. Separate specialty track seminars permit elaboration of problems as they occur in the specialty.

247.01. Seminar in Adult Primary Care. (1) § F. Seminar 1 hour.

S. Janson
Seminar is taken concurrently with N247 and provides the specialty content necessary for adult primary care nurse practitioners. Application from N247 lectures will be made to the specialty area using case presentations and other relevant learning strategies. MENT HLTH COM ADM

247.02. Seminar in Family Primary Care. (1) § F. Prerequisites: N270, N245, N246, N246.02, or consent of instructor. Seminar 1 hour.

S. Shea
Seminar is taken concurrently with N247 and provides the specialty content necessary for family primary care nurse practitioners. Application from N247 lectures will be made to the specialty area using case presentations and other relevant learning strategies. FAM HLTH

247.03. Seminar in Gerontological Primary Care. (1) § F. Seminar 1 hour.

C. Deitrich
Seminar is taken concurrently with N247 and provides the specialty content necessary for gerontological primary care nurse practitioners. Application from N247 lectures will be made to the specialty area using case presentations and other relevant learning strategies. PHYSIOL NURS

247.05 Seminar in Women's Primary Care. (2) § F. Prerequisites: N270, N245, N246, or consent of instructor. Seminar 2 hours.

P. Bernal de Pheils
Theory and management of bio-social deviation from normal in women before and during pregnancy, the interconceptional period, and climacteric. Emphasis placed on critical analysis of research in metabolic, infectious, and functional disorders and collaborative management of women manifesting these disorders. FAM HLTH

248. Group Independent Study. (1-6) § F, W, Sp. Prerequisites: 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. INTERDEPARTMENTAL

249. Independent Study. (1-5) § F, W, Sp. Prerequisites: Consent of instructor. Lecture 1-5 hours.

Staff
Student undertakes an individual study with emphasis on special problems in nursing. Students may select an area of study which is related to his/her area of interest or future goals. INTERDEPARTMENTAL

250. Research. (1-8) § F, W, Sp. Prerequisites: Admission to doctoral study and consent of instructor.

Staff
Course offers students an opportunity to engage in research with selected faculty. INTERDEPARTMENTAL

250.01. Research Rotation. (1-6) § Su, F, W, Sp. Prerequisites: Completion of first year of doctoral study and consent of adviser. Lab 3-18 hours.

Staff
The student will participate in ongoing faculty research. This experience will contribute to the student's methodological or substantive expertise. INTERDEPARTMENTAL

250.02 Clinical Research Rotation. (1-6) § Su, F, W, Sp. Prerequisites: Completion of first year of doctoral study and consent of adviser. Lab 3-18 hours.

Staff
The student will participate in ongoing faculty clinical research. This experience will contribute to the student's methodological or substantive expertise. INTERDEPARTMENTAL

251. Advances in Vascular Nursing. (3) § SS1, SS2, Su, F, W, Sp. Prerequisites: Consent of instructor. Learning modules 10 hours.

C. Hubner
Course examines the theoretical basis of prevention, intervention, adaptation, and rehabilitation in peripheral vascular insufficiency utilizing relevant research. Computer simulations facilitate synthesis and application of content. PHYSIOL NURS

253. Innovative Subsystems of Nursing Care. (3) § W. Restriction: Doctoral level-suggested D.N.S. Seminar 3 hours.

I. Martinson
Course provides instruction in the development of a nurse-directed subsystem of care, including the capability to develop a feasible, functioning system to plan design for collection and analysis of data needed for evaluation. FAM HLTH

254. Fetal-Newborn Development. (2) § F. Lecture 2 hours.

M. Lynch
Course is a study of body system development during embryonic, fetal, and postnatal growth. Emphasis is on normal anatomical and physiologic development, critical periods of developmental alterations, and transitions for extra-uterine adaptation. Implications for nursing practice are explored. FAM HLTH

255.03A. Common Pediatric Illness Management. (2) § F. Prerequisites: Consent of instructor. Lecture 2 hours.

P. Jackson
Course presents theories, concepts, and knowledge for comprehensive assessment and management of common pediatric illnesses. Emphasizes the most common acute conditions managed by a PNP in collaboration with pediatrician. Integrates history taking, physical findings, diagnosis, and management. FAM HLTH

255.03B. Common Pediatric Illness Management. (3) § W. Lecture 3 hours.

K. Duderstadt
Course presents theories, concepts, and knowledge for comprehensive care of children with common pediatric illness. It emphasizes common acute conditions managed by a clinical nurse specialist in Pediatric Primary Care in collaboration with a physician. FAM HLTH

256. Transitions & Health. (3) § W, Sp. Lecture 3 hours. Course may be repeated for credit.

A. Meleis
Critical and analytical review of theories and research that links health of the individual and families to relocations and transitions. Focuses on responses and coping with situational, developmental, health-illness, and sociocultural transitions. Nursing therapeutic theories will also be explored. MENT HLTH COMADM

257. Assessment/Management of Common Psychiatric Symptoms. (2) § F, W, Sp. Prerequisites: None. Lecture 2 hours.

L. Chafetz
Course analyzes common signs and symptoms of psychiatric illness from a biopsychosocial perspective. The diagnostic process will be highlighted and symptom management will be discussed. MENT HLTH COM ADM

258A. Feminist Perspectives on Women's Health. (3) § F. Prerequisites: None. Lecture 2 hours. Library research 3 hours.

J. DeJoseph
Course introduces feminist theories to assist the student to critically analyze selected topics in contemporary literature about women's health across the life span. Women's issues are considered in both local and global environments. FAM HLTH

258B. Family/Childbearing Phenomena. (3) § W. Seminar 2 hours. Project 3 hours.

K. Lee
Course studies perinatal phenomena identified in national reports for their theoretical, practice, and research implications. Phenomena include prevention of low birthweight infants, contemporary stressors for childbearing families, cognitive model to assess cultural diversity in perinatal health care, and related legislation. FAM HLTH

258C. Family/Childbearing Theory. (3) § Sp. Prerequisites: N 258A and N258B. Seminar 3 hours.

V. Lops
Clinical seminar addresses psychosocial and pathophysiologic issues of pregnancy, childbirth, parenting, and family/marital relationships during childbearing; focus on self-care practices for family; emphasis on midwife as facilitator of adaptation. FAM HLTH

259.01. Women's Reproductive Health. (1-5) § F. Lecture 1-5 hours.

L. Lommel
Course provides exploration of theories, concepts, and knowledge necessary to maintain and promote women's health. Emphasis is on application of current research: decision making and management of pregnancy, the interconceptional period, and the climacteric, including collaboration with health team members. FAM HLTH

259.02. Special Problems in Women's Health. (1-4) § W. Prerequisites: Consent of instructor. Lecture 1-4 hours. Seminar optional 1 hour.

Staff
Emphasis is on theory and management of bio-psychosocial deviations from normal in women before and during pregnancy, interconceptional period, and climacteric. Emphasis placed on critical analysis of research in metabolic, infectious, and functional disorders including collaborative management of women manifesting these disorders. FAM HLTH

259.03. Advanced Women's Health Seminar. (2) § Sp. Prerequisites: Consent of instructor. Lecture 2 hours.

P. Bernal de Pheils
Course explores theoretical and management aspects of selected phenomena in women's health applicable to the nurse practitioner role. FAM HLTH

260A. Cultural Concepts in Hlth Care. (3) § F, W, Sp. Seminar 3 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 HLTH COMADM

260B. Intl & Cross-Cultural Theories. (3) § F, W, Sp. Prerequisites: Consent of instructor. Lecture 2 hours. Lab 3 hours.

A. Meleis
Course explores theoretical and conceptual aspects of international and cross-cultural nursing. Topic areas covered include culture and ethnicity; social policy and international development; health planning; ethics; and cross-cultural communication. MENT HLTH COMADM

260C. Intl/Cross-Cultural Nsg Issues. (3) § F, W, Sp. Prerequisites: Consent of instructor. Seminar 3 hours.

A. Davis
Seminar examines selected international nursing issues including primary care, nursing education and nursing service, women's roles, and patients' rights. MENT HLTH COMADM

261. Mental Health Nursing and the Law. (2) § W, Sp. Prerequisites: Enrollment in M.S. program in Psychiatric Nursing or consent of instructor. Lecture 2 hours.

G. Gresham
Course reviews history and development of mental health legislation and decisional law in the U.S. and California. Explores current mental health laws as they relate to and influence the practice of psychiatric nursing in the public and private sectors. MENT HLTH COMADM

262A. Women's Health Roles/Issues I. (1) § F, W. Prerequisites: Enrollment in Women's Health Nurse Practitioner Program or consent of instructor. Seminar 2 hours (every other week).

J. DeJoseph, J. Flanagan, D. Taylor, L. Ennis, L. Lommel
Seminar focuses on critical analysis of issues influencing role transition, role enactment, scope and control of practice, and professional growth of the women's health care provider. FAM HLTH

262B. Women's Health Roles/Issues II. (1) § W, Sp. Prerequisites: N262A. Seminar 1 hour.

J. DeJoseph
Seminar focuses on critical analysis of issues influencing restraints and enhancements of contemporary practice for women's health care providers. Impact of current legal, legislative, technological, and health care delivery trends are examined. FAM HLTH

263. Bereavement. (2-3) § Sp. Lecture 2 hours. Lab 0-3 hours.

I. Martinson
Course analyzes empirical research and theory dealing with bereavement. Underlying physiological and psychological mechanisms and responses related to death will be explored across the life span.

264. Foundations of Nursing Knowledge (3) § F. Prerequisites: Doctoral student or consent of instructor. Seminar 3 hours.

A. Meleis
Course analyzes historical trends in theoretical nursing in the U.S. and in selected other countries, and a critique of the dominant epistemological approaches that influenced the development and testing of theoretical knowledge in nursing. MENT HLTH COM ADM

266. Nurse Anesthesia-Basic Sciences. (5) § Su. Prerequisites: Admission to the Nurse Anesthesia Specialty and N211A, N275A, N276, N211.09, N221.02, N275B, N239A, N241D, N407.02. Lecture 5 hours.

K. Karp
Course examines human responses of the surgical patient to anesthesia. Emphasis is on chemistry, biochemistry, and physics as the theoretical foundation for physiologic responses and anesthesia nursing practice. PHYSIOL NURS

267. Ethical Dilemmas & Nursing Prac. (3) § W. Lecture 2 hours. Library research 3 hours.

P. Benner
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. PHYSIOL NURS

268. Psychiatric Liaison Nursing. (2) § F, W, Sp. Prerequisites: N211A 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 studies from the area of general hospital psychiatry. Comparative models of practice are discussed. MENT HLTH COM ADM

270. Advanced Health Assessment. (2) § F, W. Lecture 2 hours.

C. Deitrich
Course introduces assessment concepts and skills to determine the health status of clients across the life span. Focuses on the collection and interpretation of clinical data derived from the history and physical exam. PHYSIOL NURS

271.01. Decision Making in Adult Primary Care. (3) § Sp. Prerequisites: N246, N247, N247.01 or consent of instructor. Lecture 3 hours.

J. Saxe
Case studies of complex chronic illnesses are analyzed to delineate critical decision-making variables, which include the relevant pathophysiology, epidemiologic principles, and psychological/sociological variables that impact symptom disease expression, clinical management, and methods of coping. MENT HLTH COMADM

271.02. Problems in Family Primary Care. (3) § W. Prerequisites: N245, N246, N247, N270, N279 or consent of instructor. Seminar 3 hours.

S. Shea, C. Chesla

Course explores complex health/illness problems as they occur in families. Complex assessment and management of patients and their families, across the life span, are discussed. FAM HLTH

271.04. School Health & Nursing. (3) § F. Prerequisites: School health focus or consent of instructor. Seminar 3 hours.

A. Hanson

Course explores contemporary school health issues, the interdisciplinary approach to the provision of school health services, including special education, the role of the Advanced Practice Nurse in the school setting, comprehensive school health program, and school health education. FAM HLTH

271.06. Management of Clinical Occupational Health Problems. (2) § W. Prerequisites: Consent of instructor. Lecture 2 hours.

B. Borge

Multidisciplinary course exploring the evaluation and clinical management of acute and chronic occupational and environmental health problems. Clinical diagnostic strategies and epidemiologic methods are used in evaluation of occupational health problems, including health hazards evaluations, surveillance and disability evaluation. MENT HLTH COM ADM

272. Children with Special Health Needs. (2) § W. Prerequisites: N283ABC or consent of instructor. Lecture 2 hours.

I. Martinson

Course explores the unique health care demands of vulnerable children with need for prolonged health support. The impact of the care giving environment, community, and care providers will be addressed in relation to the well-being of the child and family. FAM HLTH

273A. Curr Concepts in Occup Hlth Nsg. (2) § F. Prerequisites: Consent of instructor. Lecture 2 hours.

B. Borge

Course analyzes the role of the Occupational Health Nurse in managing an Occupational Health Service within a changing regulatory and fiscal environment. Emphasis is on planning, development, and evaluation of occupational health programs. MENT HLTH COM ADM

273B. Issues in Occupational Health. (1) § F. Prerequisites: Consent of instructor. Seminar 1 hour.

J. Faucett, B. Borge

Course focuses on the process and outcomes of developing federal and state policies and regulations for occupational health and safety. MENT HLTH COM ADM

274A. Hlth and Safety Hazards/Workplace. (3) § Sp. Prerequisites: Consent of instructor. Lecture 2 hours. Lab 3 hours.

P. Quinlan

Course introduces principles of industrial hygiene and safety for identification of chemical, biologic, physical, ergonomic, and safety hazards at work. Student will identify environmental monitoring methods, select health surveillance and safety measures, and discuss methods of control exposures and injuries. MENT HLTH COM ADM

274B. Factors in Injury Control. (2) § F. Prerequisites: Enrollment in Occupational Health Program or permission of instructor. Seminar 2 hours.

J. Faucett

Course describes and discusses political, sociocultural, organizational, interpersonal, and individual factors affecting injuries, injury control, and work re-entry. Students will learn how the principles of risk communication and adult learning may be applied in occupational health programs. MENT HLTH COM ADM

274C. Occupational Safety. (2) § F. Prerequisites: Consent of instructor. Lecture 2 hours.

B. Plog

Course emphasizes identification of safety hazards of work; components of an injury/illness prevention program; principles of hazard control and accident investigation; essentials of safety inspections and audits; application of safety inspection methods and ergonomic job analysis. MENT HLTH COM ADM

275. Sociocultural & Community Health. (3) § F,W. Prerequisites: None. Lecture 3 hours.

C. Portillo, J. Lipson, M. White.

Course examines health in a cultural context and assessment strategies for community and clinical settings. Course examines medical systems, health beliefs and behavior, social class and ethnicity, community assessment models, and communication. MENT HLTH COM ADM

275C. Neonatal Pathophysiology. (2) § F. Lecture 2 hours.

Lynch

Course is a study of the major disease processes encountered in the neonate and their relevance to nursing practice. The course will address etiology, manifestations and treatment during the acute phase of illness. FAM HLTH

277. Assessment/Management of Psychosocial Problems. (3) § Sp. Prerequisites: N270 or consent of instructor. Lecture 3 hours.

J. Faucett

Course focuses on assessment and management of psychosocial problems and psychiatric conditions. Course is designed to assist students in determining patients for management and for referral and to develop beginning skills in managing selected patients. MENT HLTH COM ADM

278. Nursing Science History & Philos. (4) § W. Prerequisites: Doctoral-level standing or consent of instructor. Lecture 2 hours. Seminar 2 hours.

S. Gortner

Course is an analysis of history and philosophy of nursing science in the United States and abroad, addressing origins of scientific questions and activity, contemporary philosophical viewpoints, and debates currently ongoing regarding design, conduct, and outcomes of nursing research. FAM HLTH

279. Family Nursing Theory and Practice. (3) § F. Prerequisites: None. Lecture 3 hours.

C. Chesla

Course integrates empirical evidence of reciprocal family and health interactions with family theoretical and therapeutic concepts applicable to advanced nursing practice. FAM HLTH

279C. Cultural Issues in Family Health. (2) § Sp. Prerequisites: N 279B and consent of instructor. Lecture 1 hour. Seminar 1 hour.

Pickwell

Course involves analysis of family, cultural, and behavioral theories and issues leading to clinical intervention in family primary care. FAM HLTH

280. Intl Primary Health Care. (2) § 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 HLTH COM ADM

282. Geriatric Pharmacology (3) § W. Lecture 3 hours.

S. Echaves, 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 minor acute illnesses. PHYSIOL NURS

283A. Pediatric Physiologic Development. (3) § W. Prerequisites: None. Lecture 3 hours.

M. Lynch

Course studies major organ system function as modified by developmental needs and system immaturity in the infant, child, and adolescent. Implications for advanced practice pediatric nursing interventions will be addressed in relation to health promotion and illness prevention. FAM HLTH

283B. Common Pediatric Pathophysiology & Clinical Management. (3) § Sp. Prerequisites: N283A. Lecture 3 hours.

M. Lynch, K. Duderstadt

Course will provide a conceptual approach to examine common pediatric pathophysiology phenomena observed in varied caregiving environments and across the illness continuum. The interrelationships of human responses, clinical manifestations, and therapeutic interventions will be discussed. FAM HLTH

283C. Complex Pediatric Pathophysiology & Clinical Management. (3) § F. Prerequisites: N283AB. Lecture 3 hours.

M. Lynch, K. Duderstadt

Course will provide a conceptual approach to examine complex acute and chronic pediatric pathophysiology phenomena observed in varied caregiving environments in infants, children, and adolescents. The interrelationships of human responses, clinical manifestations, and therapeutic interventions will be discussed. FAM HLTH

284. Adolescent Health Care. (2) § Sp. Prerequisites: Consent of instructor. Seminar 2 hours.

M. Savedra, J. Broering

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. FAM HLTH

285A. Qualitative Methods I. (5) § F. Prerequisites: Second-year doctoral student. Seminar 3 hours. Field work 6 hours.

J. DeJoseph

Course reviews many of the types of qualitative research methods, emphasizing assumptions, approaches. Focus on design, entry, ethics, data-gathering techniques (interviewing, observing) data recording and management. Introduction to data analysis.

285B. Qualitative Methods II. (5) § W. Prerequisites: N285A and second-year doctoral student. Seminar 3 hours. Field work 6 hours.

J. DeJoseph, J. Kayser-Jones

Course compares and contrasts modes of qualitative analysis. Examines issues in establishing plausibility, credibility, adequacy. Intensive data analysis and examination of the problems of presentation of findings with focus on questions of authority and preparation of text.

286A. Research in Stress & Coping. (3-4) § W. Prerequisites: Consent of instructor or doctoral-level theory development. Lecture 3 hours. Contract for 1 unit for proposal development (optional).

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. PHYSIOL NURS

287A. Organizational Theory & Research. (3) § F. Prerequisites: Consent of instructor. Lecture 3 hours.

M. Flood

A critical review and analysis of major organizational theories and research. Emphasis is on open-system theories to examine characteristics of health service organization and the role of management. MENT HLTH COM ADM

287B. Behavior in Organizations. (3) § W. Prerequisites: N287A and consent of instructor. Lecture 3 hours.

M. Flood

Course examines the characteristics, causes, and consequences of behavior and experiences of individuals as they function in organizations. Emphasis is on personnel management and other managerial functions. MENT HLTH COM ADM

287C. Processes in Administration. (3) § Sp. Prerequisites: 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. MENT HLTH COM ADM

287D. Financial Management for Nurse Administrators. (4) § W. Lecture 3 hours. Lab 3 hours.

H. DeGroot

Course offers 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 costing nursing care. Laboratory permits skill development. MENT HLTH COM ADM

288A. Management of Critically Ill Patients I. (3) § Sp. Prerequisites: Prior or concurrent enrollment in Pathophysiology course. Lecture 2 hours. Seminar 1 hour.

K. Puntillo

Course provides theoretical basis for monitoring and managing selected complex problems in critically ill adults with acute conditions or injuries. Students analyze clinical data from multiple sources, make management decisions, and evaluate treatment outcomes based on knowledge of high-risk conditions and research findings. PHYSIOL NURS

288B. Management of Critically Ill Patients II. (3) § F. Prerequisites: Prior or concurrent enrollment in Pathophysiology course. Completion of N288A. Lecture 2 hours. Seminar 1 hour.

K. Puntillo

Course provides theoretical basis for monitoring and managing selected complex problems in critically ill adults with chronic conditions. Students analyze clinical data from multiple sources, make management decisions, and evaluate treatment outcomes based on knowledge of high-risk conditions and research findings. PHYSIOL NURS

288C. Issues in Critical Care/Trauma. (1-3) § W. Prerequisites: None. Seminar 1 hour. Project 1-2 hours.

K. Puntillo

Course provides critical analysis of issues and population-specific problems that confront advanced practice nurses. Emphasis is on evaluation of factors that affect the knowledge and attitudes of nurses who manage the care of critically ill patients and their families. PHYSIOL NURS

289A. Advanced Quantitative Research Methods I. (3) § F. Prerequisites: N209 and N212 or equivalent, B187 and doctoral student only. Lecture 2 hours. Lab 3 hours.

E. Froelicher, R. Newcomer

Course addresses theoretical basis of advanced quantitative methods. Fundamental issues of causality, and design issues pertinent to causality, are addressed using randomized clinical trials as models for experimental designs. Methods of sampling and issues in data collection and measurement are explored. PHYSIOL NURS

N289B. Advanced Quantitative Research Methods II. (3) § W. Prerequisites: N289A and doctoral student only. Lecture 2 hours. Lab 3 hours.

E. Froelicher, R. Newcomer

Course covers continuing analysis of quantitative research methods including selected survey, longitudinal study designs. Focus compares and contrasts research designs, proposes strategies for maximizing strengths of various designs. Explores fit of research questions, methods, and statistical approaches. Examples of methods include questions answered by time series analysis, life table and survival analysis. PHYSIOL NURS

290.01. Family Health Nursing Theory. (3-4) § W. Prerequisites: Enrollment in doctoral program. Lab 0-3 hours. Seminar 3 hours.

C. Gilliss

Comparative analysis of classical theories and methodologies for deriving a theory base for family health nursing. Emphasis is on interactional, role, structural-functional, and systems theories. FAM HLTH

290.02. Family Health Theory. (3-4) § Sp. Prerequisites: N290.01. Seminar 3 hours. Independent Study 0-3 hours.

C. Gilliss

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. FAM HLTH

291. Acute Psych Care in the Community. (2) § F. Seminar 2 hours.

L. Chafetz

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 sociocultural, legal, ethical, and economic factors which influence provision of services. MENT HLTH COM ADM

292A. Physiology of Pregnancy. (2) § F. W. Prerequisites: Consent of instructor. Lecture 2 hours.

K. Lee, L. Ennis

Course reviews and analyzes advanced physiology and pathophysiology of pregnancy and their impact on the maternal-fetal unit as a basis for nursing practice and research. Emphasis is on reproductive and endocrine systems affecting adaptation and development during pregnancy. FAM HLTH

292B. Physiology of Pregnancy. (2) § W. Sp. Prerequisites: Consent of instructor. Lecture 2 hours.

M. Hansen

Course reviews and analyzes advanced physiology and pathophysiology of pregnancy as a basis for practice and research. Emphasis is on cardiovascular, hematologic, neuroendocrine, and renal systems affecting adaptation and development during pregnancy. FAM HLTH

292C. Biopsychosocial Alterations-Pregnancy. (2-3) § W. Prerequisites: N292A. Lecture 2 hours. Seminar 1 hour (optional).

P. Bernal de Pheils

Course analyzes the biopsychosocial alterations of women during the childbearing year. Clinical conditioning and related therapies will be examined in relation to policy issues and risk assessment.

293. Complex Pediatric Health Problems. (4) § F. Prerequisites: N270, N245, N245.04, N246, N246.04, or consent of instructor. Lecture 4 hours.

K. Duderstadt, M. Lynch

Course introduces the more complex health problems encountered in pediatric primary care. Clinical presentation, underlying causes and appropriate family centered treatment are discussed.

294. Concepts of Nurse-Midwifery Care. (3) § F. Prerequisites: Enrollment in Nurse-Midwifery Specialty. Lecture 3 hours.

L. Ennis

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 life. Course articulates with clinical lab which covers newborn health assessment and management skills. FAM HLTH

295A. Care of Older Adults. (2) § F. Prerequisites: Completion of N208AB or consent of instructor. Lecture 2 hours.

M. Wallhagen

Course focuses on advanced practice nursing of older clients across care settings. Case studies, lectures, and discussions allow students to integrate pathophysiology, pharmacologic, psychosocial, and ethical concepts and to analyze critical approaches to assessment and care. PHYSIOL NURS

295B. Care of Older Adults. (3) § W. Prerequisites: Completion of N295A, N208AB or consent of instructor. Lecture 3 hours.

M. Wallhagen

Course focuses on advanced practice nursing of older clients across care settings. Case studies, lectures, and discussions allow students to integrate pathophysiology, pharmacologic, psychosocial, and ethical concepts and to analyze critical approaches to assessment and care. PHYSIOL NURS

296. Teaching-Learning Processes. (4) § Sp. Prerequisites: Consent of instructor. Lecture 2 hours. Seminar 2 hours.

H. Wilson

Course analyzes principles, theories and research in the field of teaching with emphasis on teaching strategies and evaluation methods applicable to clinical and educational settings. A microteaching format is incorporated for application and evaluation of selected teaching interactions. PHYSIOL NURS

297. Human Responses to Pain. (2) § F. Lecture 2 hours.

M. Savedra, C. Miaskowski

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. FAM HLTH

298. Thesis or Comprehensive Exam. (0) § F,W,Sp. Prerequisites: Advancement to candidacy and permission of the graduate adviser.

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. (0) § F,W,Sp. Prerequisites: Advancement to candidacy and permission of the graduate adviser.

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,Sp. Prerequisites: 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.

402. Administration Residency. (2-12) § SS1, SS2, F,W,Sp. Prerequisites: Completion of N287ABC and N287D, 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,Sp. Prerequisites: 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. INTERDEPARTMENTAL

404. Clinical Residency. (4-12) § F,W,Sp. Prerequisites: 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. INTERDEPARTMENTAL

404.01. Adult Primary Care Nursing-Clinical Preceptorship. (4-12) § F,W,Sp. Prerequisites: 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

404.02. Advanced Practice Residency. (2-12) § Su, F,W,Sp. Prerequisites: Consent of instructor. Patient contact 6-36 hours.

Staff

Course provides student with the opportunity to apply and evaluate theories, concepts and skills under the supervision of a preceptor in one or more clinical practice settings. FAM HLTH

404.03. Nurse Anesthesia Residency. (12) § Sp. Prerequisites: Admission to the Nurse Anesthesia Specialty, and N211A, N275A, N276, N211.09, N221.02, N275B, N239A, N241D, N407.03, N261, N266, N407.02, N261B, N239B, N407.04, N407, N261C, N239C. Patient contact 36 hours.

K. Karp

Application and evaluation of theories, concepts, and skills in advanced nurse practice under supervision of a preceptor. Residency will include administration, management, and evaluation of nurse anesthesia for complex and difficult cases. PHYSIOL NURS

404.06. Pediatric Nursing Residency (4-12) § Su, F,W,Sp. Prerequisites: Consent of instructor. Lab 12-36 hours.

A. Hanson

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. FAM HLTH

405. Practicum in Mental Hlth & Com Nurs. (1-8) § F,W,Sp. Prerequisites: 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. MENT

406. Practicum in Family Hlth Care Nurs. (1-8) § F,W,Sp. Prerequisites: Consent of instructor. Lab 3-24 hours.

Staff

Course provides student opportunity to apply theory in clinical practice to further develop skills and to extend clinical expertise in selected aspects of family health care nursing. Guided clinical laboratory experience is designed to develop mastery of advanced skills. FAM HLTH

407. Practicum in Physiological Nursing. (1-8) § F,W,Sp. Prerequisites: Consent of Instructor. Lab 3-24 hours.

Staff

Opportunity to apply theory in clinical practice to further develop skills and to extend clinical expertise in selected aspects of physiological nursing. Guided clinical laboratory experience is designed to develop mastery of advanced skills. PHYSIOL NURS

407.01 Clin Mgmt of Older Adults. (2) § F Prerequisites: N242B (Care of Acutely Ill Older Adults) (concurrently), N257 (Biology of Aging), or permission of instructor. Lab 6 hours.

M. Wallhagen

Course provides opportunity for skill development in comprehensive assessment of acutely ill older adults. It emphasizes problem identification as a basis for planning scientifically based care from a multidisciplinary perspective and within the context of the life continuum. PHYSIOL NURS

407.02. Nurse Anesthesia Practicum. (3) § Sp. Prerequisites: Admission to the Nurse Anesthesia Specialty and N211A, N275A, N276, N211.09, N221.02, N275B, N239A, N241D, N261A, N266. Patient contact 9 hours.

K. Karp

Application of theory to develop essential skills fundamental to nurse anesthesia practice. Focus is on integration of foundational theories and concepts in anesthesia nursing with clinical management of the patient undergoing local, regional, and general anesthesia. PHYSIOL NURS

407.03 Basic Anesthesia Management Practicum. (3-5) § Su, F,W. Prerequisites: Admission to the Nurse Anesthesia Specialty and N211A, N275A, N276, N211.09, N221.02, N275B, N239A, N241D, N407.02. Patient contact 9-15 hours.

K. Karp

Application of theory in clinical practice to develop skills and extended clinical expertise in all phases of nurse anesthesia practice. Guided clinical experience is designed to develop mastery of advanced skills. PHYSIOL NURS

407.04. Prac. Pulmonary Function in Nurse Anesthesia. (2) § F Prerequisites: Admission to the Nurse Anesthesia Specialty and N211A, N275A, N276, N211.09, N221.02, N275B, N239A, N241D, N407.02, N261A, N266, N407.03. Lab 6 hours.

K. Karp

Application of theory in clinical nurse anesthesia practice to further develop skills and to extend clinical expertise in evaluation of pulmonary function. Guided clinical experience is designed to develop mastery of advanced skills. PHYSIOL NURS

408. Clinical Residency. (4-12) § Su, F,W,Sp. Prerequisites: Consent of instructor. Lab 2-36 hours.

Staff

Course provides the student an opportunity to apply and evaluate theories, concepts, and skills in the work setting under the supervision of a preceptor. INTERDEPARTMENTAL

10. Teaching Practicum. (1-8) § F,W,Sp. Prerequisites: Consent of instructor. Lab 3-4 hours.

Staff

Supervised practice in selected components of the teaching role in nursing. MENT ILTH COM ADM

11A. Introduction to Computers. (2) § W,Sp. Lecture 2 hours.

L. Slaughter

Course presents overview of the impact of computer technology upon nursing. Focus is upon hardware and software for nursing in the mainframe to micro environment. Word processing for scientific writing using IBM C is an integral part of the class. PHYSIOL NURS

11B. Fiscal Modeling. (2) § W. Prerequisites: N411A. Priority of space available to administration students. Lecture 2 hours.

L. Slaughter

Course emphasis is on the use of the computer as a tool for the nurse manager in financial planning. PHYSIOL NURS

11C. Computers in Administration. (2) Sp. Prerequisites: N411AB. Lecture 2 hours.

L. Slaughter

Course provides an introduction to administrative information systems and their impact upon patient care. Emphasis will be on data use management systems in a nursing administration environment. PHYSIOL NURS

411D. Introduction to Computers. (2) § F,W,Sp. Lecture 1 hour. Lab 3 hours.

J. Grout

Course provides an introduction to micro-computers, focusing on word processing, DOS basics and hard disk management, hardware and software applications, and purchasing a system. PHYSIOL NURS

411E. Data Management. (2) § SS1, F,W,Sp. Prerequisites: None. Biostatistics 187 or 185AB are recommended. Lecture 1 hour. Lab 3 hours.

S. Paul

Course offers a hands-on experience with computers and programs that can be used for data management and statistical analysis. The benefits of considering options for data collection, entry, analysis, and preparing research strategy before data are collected is emphasized. PHYSIOL NURS

Nutrition

120. Nutrition and Health. (1) W. Lecture 10 hours.

S. Silverstein

An introduction to the basic principles of human nutrition. Emphasis is on the maintenance of normal nutrition throughout the life span and its preventive role in maintaining general health, specifically oral health. DENT PUB HLTH

200. Maternal & Infant Nutrition. (2-4) § Sp. Prerequisites: Consent of instructor. Lecture 2-4 hours.

Y. Gutierrez

Application of current maternal nutrition research to train students in working with other health professionals to offer interdisciplinary maternal nutrition counseling in the prevention of low birth weight. Emphasis will be on cross-cultural factors in assessment and counseling. FAM HLTH

202. Family Nutrition Counseling. (3) § Sp. Prerequisites: Consent of instructor. Lecture 3 hours.

Y. Gutierrez

Theory and practice in the interpretation of current concepts, principles, and research in nutrition for family counseling. Emphasis on cultural dietary patterns. FAM HLTH

208. Childhood Nutrition. (2-3) § W. Lecture 2 hours, Module 1 hour.

Y. Gutierrez

Course provides study of nutritional principles, concepts, and knowledge related to infants and children, both healthy and ill. Emphasis is on growth processes, feeding practices, disease-induced nutritional deficiencies, common problems, and intervention approaches. Cross-cultural aspects included. FAM HLTH

249. Independent Study in Nutrition. (1-4) § F,W,Sp. Prerequisites: Completion of or concurrent enrollment in Nu200, or Nu202, or Nu208. Lecture 1-4 hours.

Staff

Course is designed to focus on the exploration of selected nutritional issues in clinical nursing practice. Guided study will include analyses of scientific and popular nutrition literature, and identification and delineation of therapeutic approaches. FAM HLTH

Obstetrics, Gynecology and Reproductive Sciences

110. Ob/Gyn Core Clerkship. (1.5 per week) Su, F,W,Sp. Prerequisite: Medicine 132A-B-C.

Robertson, Braga

Basic principles and fundamental techniques in obstetrics and gynecology are discussed in a series of seminars, case discussions, and teaching clinics. Students gain practical experience in clinics, wards, delivery room, and operating room under direct supervision. OB GYN R S

140.02. Advanced Clinical Clerkships. (1.5 per week) Su, F,W,Sp. Prerequisite: Satisfactory completion of Obstetrics and Gynecology 110, Pediatrics Core Clerkship and 110, and either Medicine 110 or Surgery 110 Core Clerkships.

Robertson

Advanced clinical clerkship, obstetrics and/or 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,Sp. Prerequisite: Satisfactory completion of Obstetrics and Gynecology 110, Pediatrics 110, and Medicine 110 or Surgery 110. Open only to 4th-year medical students of schools in U.S.A. and Canada.

Reyes, Cooke, Sueldo

Practical clinical training in obstetrics and gynecology at Valley Medical Center of Fresno. 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,Sp. Prerequisite: Obstetrics and Gynecology 110, Pediatrics 110, and either Medicine 110 or Surgery 110, or consent of instructor.

Grimes

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 Gynecology Oncology-MZ. (1.5 per week) SS1, SS2, Su, F,W,Sp. Prerequisite: Satisfactory completion of equivalent basic clerkships in Ob/Gyn 110, Pediatrics 110, and either Medicine 110 or Surgery 110.

Powell

The clerk functions in the role of an acting resident on the gynecologic oncology service. Responsibilities are primarily on the inpatient service and will include both surgical and non-surgical aspects of gynecologic oncology. OB GYN R S

140.08. Ob/Gyn Preceptorship. (1.5 per week) Su, F,W,Sp. Prerequisite: Obstetrics and Gynecology 110 and consent of instructor and chairperson of the department.

Robertson

Clinical experience in a subspecialty area or general obstetrics and gynecology under the direction of a member of the faculty. OB GYN R S

140.09. High-Risk Pregnancy-Advanced Senior Elective. (1.5 per week) SS1, SS2, Su, F,W,Sp. Prerequisite: Obstetrics and Gynecology 110.

Kilpatrick and Staff

Advanced clerkship focusing on outpatient special obstetrical care clinics and inpatient management of high-risk antepartum patients. Duties will include presentations at conferences, journal clubs, and at least one review of a pertinent topic. OB GYN R S

140.10. Advanced Obstetrics-SFGH. (1.5 per week) SS1, SS2, Su, F,W,Sp. Prerequisite: Obstetrics and Gynecology 110 at UCSF or equivalent course at recognized medical school. Satisfactory completion of equivalent basic clerkships in pediatrics and either medicine or surgery.

Beckerman and Staff

Advanced obstetrics clerkship at San Francisco General Hospital. The clerk will participate as a senior student member of the OB team. Attendance at High Risk OB Clinic. Presentations at conferences and journal club will be expected. This rotation will not provide additional experience with routine deliveries. OB GYN R S

140.11. Advanced Gynecological Clerkship-UC. (1.5 per week) SS1, SS2, Su, F,W,Sp. Prerequisite: Obstetrics and Gynecology 110, Pediatrics 110, and either Medicine 110 or Surgery 110.

Gates

Advanced clerkship focusing on benign gynecologic conditions. Includes experience in outpatient clinics, operating room, and emergency room. Duties will include presentations at conferences, journal clubs, and at least one review of a pertinent topic. OB GYN R S

150.01. Research in Ob/Gyn & Repro Sci. (1.5 per week) Su, F,W,Sp. Prerequisite: Consent of instructor and chairperson of the department.

Staff

A nonclinical 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) Su, F,W,Sp. 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

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

Robertson

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

199. Laboratory Project. (1-5) Su, 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. OB GYN R S

210. Molecular and Cellular Biology of Reproduction. (4) § W,Sp. Lecture 2 hours. Conference 2 hours.

Skinner

The molecular, cellular, and physiological aspects of selected areas of Reproductive Biology will be reviewed. Emphasis will be to convey an appreciation of taking a system from a physiological level to a molecular level of understanding. Application of this information will be illustrated by investigating the molecular medicine aspects of each topic. OB GYN R S

400. Staff Conferences. (1) Su, F,W,Sp. Prerequisite: Practicing physicians only.

Jaffe and Staff

Conferences comprised of formal discussions by staff, faculty, and visiting lecturers. OB GYN R S

401. Surgical Pathology Seminar. (1) Su, F,W,Sp.

Gates, 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

402. Residents Core Lecture Series. (1) Su, F,W,Sp.

Gates

Seminars include presentations of special topics, literature reviews, and discussions. Discussions of resident staff functions also are held. OB GYN R S

450. Clinical Obstetrics & Gynecology. (10) Su, F,W,Sp.

UC Laros, SFGH 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-demonstrations and section work devoted to the supervised examination of patients.

Core Clerkship-Surgery 110 and 111 include lectures and clinical experience in the diagnosis and care of eye diseases.

140.01A. Advanced Ophthalmology Clerkship-UC. (1.5 per week) Su, F,W,Sp. Prerequisite: Medicine 110 and Surgery 110 or consent of instructor.

M. Drake

Students will serve as subinterns on the ophthalmology wards. They will work up and present patients, and attend surgery and post-operative clinics. This is an intensive clerkship where students will be on twenty-four hour call the entire time. OPHTHALMOL

140.01B. Advanced Ophthalmology Clerkship-UC. (1.5 per week) Su, F,W,Sp. Prerequisite: Consent of instructor.

Hoyt

Students will observe, work up and present ophthalmology outpatients at the Eye Clinic. They will attend department rounds and conferences. OPHTHALMOL

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

Hoyt

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, F,W,Sp. Prerequisite: Medicine 110 or consent of instructor. One student per block.

Seiff, Good

Students serve as subinterns on the Ophthalmology Service. They work up and present cases in the outpatient clinic and on the wards; and have the opportunity to participate in the operating room. On-call and weekend responsibilities should be expected. OPHTHALMOL

140.06. Adv Ophthalmology Clerkship-VA. (1.5 per week) Su, F,W,Sp. Prerequisite: Consent of instructor.

Stanley

Clinical observation of patients in clinics, wards and surgery. OPHTHALMOL

150.02. Ophthalmology Research. (1.5 per week) Su, F,W,Sp. Prerequisite: Consent of instructor and chairperson of the department.

S. Kramer

A research project under the direction of a member of the faculty carried out in the Department of Ophthalmology. OPHTHALMOL

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

S. Kramer

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

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

S. Kramer

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. Kramer

Residents prepare and present diagnostic and therapeutic problem cases. Discussion by faculty and visitors follows. Residents also present papers on various aspects of medicine and ophthalmology, which are discussed by faculty members. OPHTHALMOL

401. Staff Conference. (1) F,W,Sp. Prerequisite: First- and third-year residents.

S. Kramer

Conferences include grand rounds and case presentations of hospital patients, review of recent literature in ophthalmology, and assigned reading with required reports. OPHTHALMOL

402. Special Topics Seminar. (6) F,W,Sp.

S. Kramer

Seminars include didactic lectures in practical work covering pathology, neuro-ophthalmology, uveitis, physiological optics, refraction, ocular motility, glaucoma, and microbiology. OPHTHALMOL

403. Basic Ophthalmologic Science. (6) Su. Required for first-year residents.

S. Kramer

Didactic lectures and demonstrations cover the basic sciences as applied to ophthalmology. These include anatomy, histology, biochemistry, physiology, and pharmacology. OPHTHALMOL

450. Clinical Ophthalmology. (1.5 per week) Su, F,W,Sp.

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. Specialty clinics include external diseases, extraocular muscles, medical ophthalmology, ophthalmoscopy, refraction, cataract, glaucoma, neuro-ophthalmology, plastic surgery, and tumor. OPHTHALMOL

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

UC Beard, CHMC E. Stern

Residents, under supervision, are responsible for patient care including diagnostic studies and treatment of medical eye care, diagnosis, surgery, and follow-up treatment of surgical eye cases. Residents consult for other hospital services. OPHTHALMOL

455. Fourth-Year Residency. (1.5 per week) Su, F,W,Sp.

S. Kramer

Fourth-year residency taken at UC or at any approved institution subject to the approval of the chairperson of the department and the dean. OPHTHALMOL

457. Clinical Ophthalmology. (1.5 per week) Su, F,W,Sp.

PH A. Schwartz, STM R.N. Shaffer, Schatz, CHS, SRM Rathbun, DMC T. Moore

Residents or fellows, under supervision, are responsible for patient care, including diagnostic studies and treatment of medical eye care, diagnosis, surgery, and follow-up treatment of surgical eye cases. OPHTHALMOL

490. Clinical Ophthalmology. (1.5 per week) Su, F,W,Sp.

Seiff

Residents, under supervision of the attending staff, are responsible for patient care on wards and in the follow-up clinic, including diagnostic studies and consultation. This rotation is combined with patient-care. OPHTHALMOL

Oral Biology

108.01. Intro to Caries & Perio. (1) Sp. Prerequisite: Biochemistry 110A-B, Microbiology 116. Lecture 1 hour.

Ryder

Introduction to the etiology, pathogenesis, and diagnosis of dental caries and periodontal disease. STOMATOL

108.02. Micro/Immuno of Caries & Perio. (2) F Prerequisite: Oral Biology 108.01. Lecture 2 hours.

Johnson

An in-depth study of the microbiology and immunology of periodontal diseases and dental caries. The formation and pathogenic potential of dental plaques are discussed. STOMATOL

108.03. Cariology & Preventive Dentistry (2) W. Prerequisite: Oral Biology 108.01 & 108.02. Lecture 1 hour. Seminar 1 hour.

Hume

Advanced concepts of dental caries management, including risk and activity assessment, preventive and therapeutic strategies for individual patients, the role of fluoride in caries prevention, and aspects of community-based caries management. STOMATOL

111. First-Year Special Study. (2) F Prerequisite: Passing placement examination and consent of instructor. Lecture 2 hours.

Newbrun

Discussion of biological problems of interest in dentistry including saliva, mineral metabolism, hydroxylapatite crystal structure, connective tissue, bacterial cell walls, oral bacterial metabolism, and blood coagulation. STOMATOL

116. Intro to Oral Biology. (2) F Lecture 1 hour, lab 2 hours.

Ryder

Introduction to oral biology correlating morphology, chemistry, function of dental and parodontal tissues. Topics include enamel, dentin, cementum, pulp, dental caries, tooth eruption, periodontium, oral mucous membranes. STOMATOL

150. Introduction to Oral Biology. (1) F Prerequisite: Dental Hygiene standing. Lecture 1 hour.

Ryder

Introduction to oral biology correlating morphology, chemistry, function of dental and parodontal tissues. Topics include enamel, dentin, cementum, pulp, dental caries, tooth eruption, periodontium, oral mucous membranes. STOMATOL

198. Supervised Study. (1-5) Su, F,W,Sp. Library research: 3-15 hours.

Staff

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

Oral Biology

199. Laboratory Project. (1-5) F,W,Sp. Prerequisite: Consent of instructor. Lab 3-15 hours

Staff

A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the division. STOMATOL

209. Connective Tissue Seminar. (2) § Sp. Seminar 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) § Sp. Prerequisite: General knowledge of microbiology, immunology, molecular biology, or consent of instructor. Seminar 1 hour. Offered in alternate years. Contact Oral Biology office for next offering.

Pereira

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 Prerequisite: Consent of graduate advisor and instructor. Seminar 2 hours. Offered in alternate years; contact Oral Biology office for next offering.

Newbrun

Recent information on the composition, regulation, and function of the secretions from the major and minor salivary glands. Special consideration will be given to salivary gland dysfunction and its consequences. STOMATOL

215. Laboratory Rotation. (4) § 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

220. Current Topics. (1) § F,W,Sp. Seminar 1 hour.

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 or guest lectures. STOMATOL

221. Extracellular Matrices. (2) § F Prerequisite: Consent of graduate advisor and instructor. Seminar 2 hours. Offered in alternate years. Contact Oral Biology office for next offering.

Damsky

Assembly and composition of extracellular matrices, including interactions that occur between cells and matrices. Emphasis on the role of various extracellular matrices during development, function of cell-matrix interactions in the adult, and the perturbation of these relationships that accompanies various disease processes. STOMATOL

223. Cell Physiology. (2) § Su. Lecture 1.5 hours, Conference 0.5 hours. Offered in alternate years. Contact Oral Biology office for next offering.

Rothman, Sargent, A. Miller, Gruenert Survey of selected topics in cellular physiology, including a discussion of cell permeability, electrical properties of cells, muscle contraction, secretion, and stimulus-response coupling. STOMATOL

224. Host Response. (2) § W. Prerequisite: Consent of graduate advisor and instructor. Seminar 2 hours. Offered in alternate years. Contact Oral Biology office for next offering.

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) § Sp. Prerequisite: Oral Biology 224 or consent of graduate advisor and instructor. Lecture 2 hours. Offered in alternate years. Contact Oral Biology office for next offering.

Armitage, Pereira, and Staff

Current information on pathogenic mechanisms involved in oral infections, with emphasis on the structure, metabolism, genetics and ecological relationships of bacteria and viruses that affect oral tissues. STOMATOL

226. Advanced Oral Microbiology. (3) § F,W,Sp. Prerequisite: Oral Biology 224 & 225 or consent of graduate advisor and instructor. Lecture 3 hours. Offered in alternate years. Contact Oral Biology office for next offering.

Armitage, Newbrun, Bramanti, Johnson, Richards

Continuation of studies in oral microbiology begun in Oral Biology 225. In-depth study of the structure, metabolism, genetics, and ecological relationships of bacteria, yeasts, and fungi that affect oral tissues. STOMATOL

250. Research. (1-8) § F,W,Sp.

Staff

STOMATOL

270. Journal Club. (1.5) § F,W,Sp. Seminar 1.5 hours.

Staff

Students review a small group of related papers and examine intensively the most significant paper. Students will present four such Journal Club talks in their first two years. A written report will be required in the other quarters. STOMATOL

297. Special Study. (1-3) § F,W,Sp.

Staff

Reading and conferences under the direction of a member of the staff. STOMATOL

298. Thesis. (0) § F,W,Sp. Prerequisite:

Advancement to candidacy and permission of the graduate adviser.

Staff

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

300A-B-C-D. Teaching Practicum. (1-4, 1-4, 1-4, 1-4) § F,W,Sp,SS1. Prerequisite: Consent of instructor.

Staff

Practice in teaching in a course in oral biology under the supervision of the instructor in charge. STOMATOL

406A-B-C. Selected Topics. (1-1-1) F,W,Sp. Seminar 1 hour.

Staff

A wide spectrum of selected topics related to oral biology is presented with emphasis on basic and applied research methodology, pertinence of problems, significance of findings, and critical evaluation of data. STOMATOL

Oral Diagnosis

139. Intro Clinical Oral Diag Sciences.

(0-4) Su, F,W,Sp. Prerequisite: Successful completion of Oral 129, Rest Dent 116B&C, 126A-B-C, and Oral Med 122. Clinic 3 hours.

Herbert, Brody

Dental clinical problem solving; recognition and resolution. Clinical activities include review of medical and dental histories; examination of oral and para-oral structures; radiographic prescription, technique and 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

189. Acute Dental Care Clerkship. (1-10) F,W,Sp.

Angin

Advanced instruction and clinical experience in the diagnosis and treatment of acute dental problems. STOMATOL

Oral & Maxillofacial Surgery

109. Clinical Oral Surgery Rotation. (0-7) SS1, SS2, F,W,Sp. Prerequisite: Third-year standing. For senior rotation, student must have passed Oral Surgery 120, 130.01, 130.02, 130.03, 131, and 132 or have consent from the course supervisor. Clinic variable.

R. Smith, Gordon, Pogrel

Students learn dentoalveolar surgery, suturing, sterile technique, prescription writing, how to take and interpret a medical history, and how to carry out a full physical examination. ORAL & MAX SURG

120. Local Anesthesia. (0.5) Sp. Lecture 1 hour.

R. Smith, Gordon, Perrott

Course covers local anesthetics and techniques as they pertain to the dentition and oral cavity. ORAL & MAX SURG

130.01. Dentoalveolar Surgery. (1) SS. Prerequisite: Anatomy 117.01, 117.02, and Microbiology 116. Lecture 1 hour. Library research 1 hour.

Gordon, R. Smith, Perrott

An introduction to the basic principles of exodontia, dentoalveolar surgery, postoperative care, hemorrhage control, and management of common complications. ORAL & MAX SURG

130.02. Pain & Anxiety Control. (1) F. Prerequisite: Anatomy 117.01, 117.02, and Microbiology 116. Lecture 1 hour.

Gordon, R. Smith, Perrott

A didactic course outlining the basic principles and techniques of pain and anxiety control in the dental office. Emphasis is on nitrous oxide and oxygen and intravenous sedation. ORAL & MAX SURG

130.03. Diagnosis & Treatment of Orofacial Pain. (1) W. Prerequisite: Anatomy 117.01, 117.02, and Microbiology 116. Lecture 1 hour.

R. Smith, Gordon, Kaban

A didactic course covering current advances in the field of pain and a variety of topics such as physical evaluation of the pained 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 130.03 or consent of instructor. Lecture 1 hour.

R. Smith, Kaban, N. Gordon

Procedural skills and academic knowledge the general dentist should be familiar with: includes preprosthetic surgery and implantology, treatment of developmental and acquired deformities of the jaws, infections, temporomandibular joint, fractures of the jaws and contiguous structures, osteomyelitis. ORAL & MAX SURG

132. Medical Emergencies & CPR. (1) F. Prerequisite: Third-year dental standing.

R. Smith

This course covers the prevention and management of medical emergencies in the dental office. There is discussion on the management of the medically compromised patient. CPR training is also provided. ORAL & MAX SURG

152. Oral & Maxillofacial Surgery. (0.5) F. Restriction: This course is offered for first-year dental hygiene students. Lecture 1 hour.

R. Smith, Walsh

This course offers the same lectures about prevention and management of common medical emergencies as are given to third-year dental students (OMFS 132). However, the prerequisites do not apply, and the academic standards are adjusted to the student's background. OMFS 152 does not include the CPR experience. ORAL & MAX SURG

189.04. Adv Clin Oral Surgery & Implantology. (0-16.5) F,W,Sp. Prerequisite: Fourth-year standing and approval of department chairperson.

R. Smith, Gordon

Clerkships at UC, affiliated or other institutions. Students participate in oral surgery care of ambulatory and hospitalized patients and attend seminars and conferences. ORAL & MAX SURG

198. Supervised Study. (1-5) Su, F,W,Sp. Library research 3-15 hours.

Pogrel & Staff

Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. ORAL & MAX SURG

199. Laboratory Project. (1-5) Su, F,W,Sp. Prerequisite: Approval of laboratory project by department chairperson. Lab 3-15 hours.

Pogrel & 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. Clinical Correlations. (2) SS1, SS2. Enrollment in master's or Ph.D. program in Oral Biology. Seminar 20 hours per quarter. Offered in alternate years. Offered 1995-96.

Pogrel

Course focuses on critical analysis of theoretical, basic, and clinical concepts underlying the assessment and management of problems involving orofacial diseases, deformities, and dysfunctions. The application of research findings to clinical practice is stressed. ORAL & MAX SURG

410. Advanced Techniques in Pain Control. (1) F. Prerequisite: Two-week anesthesia rotations. Seminar 1 hour.

Koppe

The trainees will attend seminars in the pharmacology and physiology of commonly used pain control medications. ORAL & MAX SURG

419. General Dentistry in the Operating Room. (1) Su, F,W,Sp. Patient contact 4 hours.

Koppe

The trainees will provide general dental services in the operating room for patients requiring general anesthesia. ORAL & MAX SURG

470. 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

471. Applied Surgical Anatomy. (0-1.5) F,W,Sp. Prerequisite: Course offered to first-year residents in Oral & Maxillofacial Surgery, other OMFS residents by arrangement, UCSF School of Dentistry postdoctoral residents and students by arrangement, selected senior dental students by arrangement as an elective. Lab 2 hours.

Pogrel, Perrott, Koury

Relationships of gross anatomical structures of the head and neck are studied during laboratory dissections. Emphasis is placed on the correlations of cadaver dissection findings to diagnosis and on operating room surgery. Dissections will be approached as surgical procedures. ORAL & MAX SURG

473. Orthognathic Surgery Seminar. (1) F,W,Sp. Prerequisite: Enrollment in oral & max. surgery residency or general practice residency program. Seminar 1 hour.

Kaban, Pogrel, Perrott

Residents will participate in evaluation and defining treatment options for patients with facial and dental deformities. ORAL & MAX SURG

474. Oral & Max Surgery Seminar. (1) F,W,Sp. Prerequisite: Limited to interns and residents. Seminar 1 hour.

Perrott, Pogrel, R. Smith, N. Gordon, Dodson, Kaban

Seminar includes presentation of case studies, literature review, clinical pathology presentations, and occasional guest lectures. ORAL & MAX SURG

475. Adv Clin Oral & Max Surgery. (1.5 per week) Su, F,W,Sp. Prerequisite: Limited to oral & max. surgery residents. Hospital and clinic 40 hours.

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

476. Clinical Methods. (4) Su. 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 patients admitted to a hospital or surgicenter. 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

477. Clinical Methods II. (1-2) F. Prerequisite: Completion of OMFS 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, Perrott

Physical examination of hospitalized patients demonstrating a wide range of physical signs and symptoms. ORAL & MAX SURG

478. Oral & Maxillofacial Surg Practice Mgmt. (1) F. Prerequisite: Enrollment in a postgraduate specialty program or consent of instructor. Lecture 2 hours.

Pogrel, Staff

Provides OMFS residents a broad spectrum of practice management information such as association memberships, disability insurance, loans, OSHA requirements, computers, and billing. ORAL & MAX SURG

489. Advanced General Dentistry in the Hospital. (11) Su, F,W,Sp.

Pogrel, Grimaldi, and Staff

Under direct faculty supervision, the trainee will provide dental consultation to hospitalized patients, treat medically compromised patients in the operating room, provide routine and complex oral surgery services utilizing conscious sedation and other pain control techniques. ORAL & MAX SURG

489.01. Clinical Oral Surgery. (1) 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 dentoalveolar surgery, inhalation and intravenous sedation 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

489.10. Advanced General Dental Care in the Hospital. (11) Su, F,W,Sp. Restriction: AEGD students enrolled in the second-year program.

Grimaldi, Pogrel, and Staff

This course will provide supervision of the trainee in the evaluation and care of the dental patient on the consultation, surgical, and outpatient services of the hospital. ORAL & MAX SURG

Oral Medicine

122. Clinical Oral Medicine. (4) Sp. Prerequisite: Oral Pathology 127A and 127B. Lecture 4 hours.

D. Greenspan

Introduction to recognition, diagnosis and treatment of oral manifestations of systemic diseases, and principles of clinical medicine through presentation of the mechanism, diagnosis and treatment of common organ system diseases. Will present modifications necessary for the dental treatment of patients with these diseases. STOMATOL

130. Clinical Oral Medicine. (2) Su. Prerequisite: Oral Medicine 122; second-year standing. Lecture 2 hours.

Silverman

History taking, differential diagnosis, and therapeutics. Signs, symptoms, diagnosis, and treatment of oral mucosal diseases with emphasis on oncology. Management problems and solutions. STOMATOL

139. Clinical Oral Medicine. (1) Su, F,W,Sp. Prerequisite: Oral Pathology 127A-B, Oral Medicine 122. Clinic 30 hours.

Chinn and Staff

One-week bloc rotation utilizing patients in the Oral Medicine clinic. Students will be exposed to various aspects of oral medicine, including history-taking, clinical examination, differential diagnosis, principles of diagnosis, treatment, and follow-up. STOMATOL

180A-B-C. Clinical Oral Medicine Conference. (1-1-1) F,W,Sp. Prerequisite: Fourth-year standing. Conference 1 hour.

Lozada-Nur, Silverman and Staff

Clinical pathology conference; biology, diagnosis, and treatment of various oral lesions and associated patient problems. Some oral conditions are critically re-evaluated in the light of current research advances. Specific medical knowledge is related to patient care. STOMATOL

189. Clinical Oral Medicine. (1-6) Su, F,W,Sp. Prerequisite: Third- or fourth-year standing and consent of instructor. Clinic 3-18 hours.

Staff

Participation in the Oral Medicine Clinic: apply knowledge of history-taking and differential diagnosis; utilize various diagnostic techniques such as biopsy, cytology, and certain clinical pathology laboratory tests; interpret results, prescribe treatment and follow-up; hospital rounds and weekly seminar. STOMATOL

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

Staff

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

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

Staff

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

206. Oral Medicine Seminar. (1-4) F,W,Sp. Seminar 1-4 hours.

Staff

A wide spectrum of selected topics related to oral biology is presented with emphasis on basic and applied research methodology, pertinence of problems, significance of findings, and critical evaluation of data. STOMATOL

489. Advanced Oral Medicine. (0-6.5) Su, F,W,Sp.

Greenspan, Silverman, Lozada-Nur

Under direct supervision of faculty, the trainees will take histories, examine, diagnose, and treat patients with a variety of oral signs and symptoms. STOMATOL

489.10. Advanced Oral Medicine. (0-6.5) Su, F,W,Sp. Restriction: AEGD students enrolled in the second-year program.

D. Greenspan

This course will provide clinical supervision of trainees in the diagnosis and management of patients with a variety of signs and symptoms related to oral disease. STOMATOL

Oral Pathology

127A-B. Introduction to Oral Pathology. (0-5.5) F,W. Prerequisite: Oral Biology 126. Lecture 4.5 hours. Lab 3 hours.

J. Regezi

Course correlates clinical oral pathology with histologic changes. Emphasis is placed on the microscopic and laboratory interpretation of cellular, tissue, and chemical alterations. Laboratory sessions concentrate on clinical presentation of oral diseases. STOMATOL

198 Supervised Study. (1-5) Su, F,W,Sp. Library research 3-15 hours.

Daniels, Regezi, J. Greenspan

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

199. Laboratory Project. (1-5) Su, F,W,Sp. Prerequisite: Consent of instructor. Lab 3-15 hours

Daniels, Regezi

A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the division. STOMATOL

208A-B. Oral Pathology Seminar. (3-3) § F,W. Seminar 3 hours.

Daniels

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

408A-B. Oral Pathology Seminar. (3-3) F,W. Seminar 3 hours.

Daniels

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

Oral Radiology

110.01. Oral Radiographic Imaging. (2) F. Lecture 2 hours.

Angin, Otis, Danford

This course presents radiobiologic theory and physical properties of ionizing radiation. The application of radiographic methods in dental practice, radiation safety, and normal radiographic anatomy are described. STOMATOL

110.02. Advanced Oral Radiographic Imaging. (2) W. Lecture 2 hours.

Angin, Otis, Danford
Advanced oral and maxillofacial imaging techniques and interpretation emphasizing deviations from the normal are presented in this course. STOMATOL

131. Radiographic Interpretation. (1) Sp. Prerequisite: Oral Radiology 121. Lecture 1 hour.

Angin
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 Clinic Review Committee. Seminar 1-2 hours. Clinic 0-6 hours.

Staff
Continuation of Oral Radiology 121 and 131 in a seminar teaching format. STOMATOL

198 Supervised Study. (1-5) Su, F, W, Sp. Library research 3-15 hours.

Otis, Taylor, Angin
Library research and directed reading under supervision of a member of the faculty with the approval of the director of the program. STOMATOL

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

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

Orthodontics**121. Development of Occlusion.** (1) Sp. Lecture 1 hour.

Gorczyca
Course describes the mode of growth of the craniofacial 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.

Vogel, Nielsen, Young
Recognition and treatment of orthodontic problems most commonly seen by the general practitioner. GR DEVEL

131.02. Orthodontics in General Practice. (1) F. Prerequisite: Orthodontics 121. Lecture 10 hours.

Vogel, R. Boyd
This course demonstrates methods to recognize and treat orthodontic problems most commonly seen by the general practitioner. GR DEVEL

131.03. Orthodontics in General Practice. (1) W. Prerequisite: Orthodontics 121 and Orthodontics 131.02. Lecture 10 hours.

Vogel, R. Boyd
This course demonstrates methods to recognize and treat orthodontic problems most commonly seen by the general practitioner. GR DEVEL

139. 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

160. Orthodontic Concepts. (1) Sp. Lecture 1 hour.

R. Lee
A discussion of recognition, etiology, and principles of orthodontics for the dental hygienist. 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

186. Orthodontic Journal Club. (1.5) Su, F, W, Sp. Prerequisite: Enrolled in 3rd- and 4th-year dentistry program or consent of instructor. Limited to the first 20 students. Seminar 15 hours.

Gorczyca
This course will review the current orthodontic literature in a seminar format for 3rd and 4th year dental and dental hygiene students. GR DEVEL

189. Adv Orthodontics in Gen Practice. (1-2) Su, F, W, Sp. Prerequisite: Fourth-year standing. Clinic 3-6 hours.

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 DEVEL

400. Orthognathic Surgery Conference. (1.5) Su, F, W, Sp. Enrolled in 1st, 2nd, or 3rd year of postdoctoral orthodontic program or consent of instructor. Seminar 15 hours.

Boyd, Nielsen, Pogrel
Orthodontic students and oral surgery residents learn to outline and evaluate alternative treatment possibilities for patients with facial and occlusal deformities that may require combined therapy. Review and presentation of the literature and of the records of previously treated patients is included. GR DEVEL

401. Clinical Orthodontic Research. (1) Su, F, W, Sp. Prerequisite: Enrolled in 1st, 2nd, or 3rd year of postdoctoral orthodontic program or consent of instructor. Seminar 10 hours.

Baumrind, Kapila, Miller
An introduction to the logic and methodology of clinical craniofacial research is presented and discussed with illustrations from the literature and from current research activities within the department. GR DEVEL

402. Treatment Progress Seminar. (1) Su, F, W. Prerequisite: Enrolled in 1st, 2nd, or 3rd year of postdoctoral orthodontic program or consent of instructor. Seminar 10 hours.

Boyd, Nielsen, Kapila
Postgraduate students will present individual cases that are in ongoing treatment for analysis of the diagnosis, treatment planning, and evaluation of growth and developmental changes. The purpose is to develop a critical analytical approach to treatment. GR DEVEL

403. Orthodontic Literature Review. (1.5) Su, F, W, Sp. Prerequisite: Enrolled in 1st, 2nd, or 3rd year of postdoctoral orthodontic program or consent of instructor. Seminar 15 hours.

Gorczyca
Students will review pertinent literature related to orthodontics and related fields emphasizing papers important to developing the modern concepts of orthodontic treatment. GR DEVEL

404. Treatment and Diagnosis. (2.5) Su, F, W, Sp. Prerequisite: Enrolled in 2nd or 3rd year of postdoctoral orthodontics or pediatric dentistry program or consent of instructor. Seminar 15 hours. Clinic 30 hours.

Nielsen
The various approaches to using orthodontic fixed and removable appliances will be taught. GR DEVEL

406. Journal Club. (1) Su, F, W, Sp. Prerequisite: Enrolled in 1st, 2nd, or 3rd year of postdoctoral orthodontic program or consent of instructor. Seminar 10 hours.

Boyd and Staff
A participation course in the review, analysis, and critical evaluation of the professional literature dealing with orthodontics and related fields. GR DEVEL

410. Orthodontics for the General Dentist. (0-8) Su, F, W, Sp. Prerequisite: Enrolled in Advanced Education in General Dentistry program or consent of instructor. Lecture 40 hours.

Iezman
Lectures will emphasize diagnosis and treatment planning for patients requiring minor tooth movement. GR DEVEL

411. Clin Ortho for Ped Dentists. (2) Su, F, W, Sp. Prerequisite: Enrolled in postdoctoral pediatric dentistry program or consent of instructor. Seminar 10 hours. Clinic 30 hours.

Lee
Seminar focuses on evaluation and treatment of clinical orthodontic problems as experienced in pediatric dental practice. Postdoctoral students will diagnose and treat orthodontic problems. Emphasis is on the relationship between the pediatric dentist and the specialist in orthodontics. GR DEVEL

412. Biology of Tooth Development. (1.5) F. Prerequisite: Enrolled in 1st year of postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Seminar 15 hours.

Kahn, Kapila, Boyd
The course will review in detail the principles associated with factors that modify bone and effect craniofacial growth at the cellular level. GR DEVEL

413.10. Biomechanics in Orthodontics. (0-3) Su, F. Prerequisite: Enrolled in 1st year of postdoctoral orthodontic program or consent of instructor. Seminar 30 hours.

Kapila
This course covers the biomechanical properties of edgewise appliances and wires. GR DEVEL

413.20. Orthodontic Biomaterials. (1.5) W. Prerequisite: Enrolled in 1st year of postdoctoral orthodontic program or consent of instructor. Seminar 15 hours.

Kapila
The course will provide a background in mechanical properties of orthodontic materials and the clinical use and interpretation of their material properties. GR DEVEL

414.10. Orthodontic Appliances. (2.5) Su, F. Prerequisite: Enrolled in 1st year of postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Seminar 15 hours. Clinic 30 hours.

Nielsen
Course is designed to familiarize the postdoctoral student with orthodontic appliances and their fabrication and adjustment. GR DEVEL

414.20. Facial Growth & Development. (1.5) W, Sp. Prerequisite: Enrolled in 1st year of postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Seminar 15 hours. Conference 10 hours.

Nielsen
The course will provide information on how facial morphology changes and develops, using full head radiographs both with and without treatment. GR DEVEL

415. Intro Clinical Orthodontics. (8.5) Su. Prerequisite: Enrolled in 1st year of postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lecture 24 hours. Lab 90 hours. Seminar 20 hours. Clinic 30 hours.

Boyd, Fullmer and Staff
This course prepares the postdoctoral orthodontic student for clinical orthodontic treatment of patients. Introductory lectures, seminars, clinical demonstrations, and a tyodont experience will provide the information necessary for students to treat their patients. GR DEVEL

416. Orthodontic Diagnosis. (2) Su, F, W, Sp. Prerequisite: Enrollment in 1st year of postgraduate orthodontic program. Seminar 10 hours.

R. Boyd
Classification, etiology, and diagnosis of malocclusion. The various diagnostic modalities used in patient evaluation and treatment planning will be presented. GR DEVEL

417.10. Prin Growth, Devel and Occlusion. (3) Su. Prerequisite: Enrolled in 1st year of postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Seminar 30 hours.

Bosch
The course will discuss several methods of applying cephalometric analysis for assessing growth of the cranium. GR DEVEL

417.20. Orthodontic Removable Appliances. (1) F. Prerequisite: Enrollment in postgraduate professional program in School of Dentistry. Seminar 10 hours.

West
The theory of removable orthodontic appliances, primarily of the Hawley type, will be taught and demonstrated. The design of various appliances and the fabrication of a typical retainer will be demonstrated. GR DEVEL

419. Clinical Orthodontics I. (8) Su, F, W, Sp. Prerequisite: Enrolled in 1st year of postdoctoral orthodontic program. Seminar 40 hours. Clinic 120 hours.

R. Boyd and Staff
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 orthodontic problems. GR DEVEL

426. Periodontics and Orthodontics. (2) Su. Prerequisite: Enrolled in the 2nd year of postdoctoral orthodontic, pediatric dentistry, periodontic, prosthodontic or advanced general dentistry program. Seminar 20 hours.

Boyd
The course describes periodontal disease with emphasis on current research and its relationship to orthodontic treatment. GR DEVEL

429. Clinical Orthodontics II. (8) Su, F, W, Sp. Prerequisite: Enrolled in the 2nd year of postdoctoral orthodontic program. Seminar 40 hours. Clinic 120 hours.

Boyd and Staff
Students will gain familiarity with the diagnosis, treatment, and evaluation of more advanced clinical postdoctoral orthodontic problems experienced in orthodontic practice. Students will treat patients with a broad spectrum of orthodontic problems. Students will work with other specialists in the management of complex orthodontic problems. GR DEVEL

436. Orthodontic Practice Management. (2) Su. Prerequisite: Enrolled in 3rd year of postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Seminar 10 hours.

D. Johnson, K. Moawad, M. Meyer
A survey course intended to prepare the student to deal with the realities of managing an orthodontic practice. Thirty-six topics are discussed by the students and faculty. Several guest lecturers represent different areas. Office visits to established orthodontic practices biweekly. GR DEVEL

439. Clinical Orthodontics III. (8) Su, F, W, Sp. Prerequisite: Enrolled in 3rd year of postdoctoral orthodontic program. Seminar 40 hours. Clinic 120 hours.

Boyd and Staff
Diagnosis, treatment, and evaluation of advanced clinical postdoctoral orthodontic problems experienced in orthodontic practice. Students will work with other specialists in the management of complex orthodontic problems and the instruction of first-year orthodontic students. GR DEVEL

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 seven 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-B-C-D-E-F. Orthopaedic Surgery Clinical Clerkship—UC-SFGH-SFGH ER-VA-PMC-SSF. (1.5 per week) Su, F, W, Sp. Prerequisite: Surgery 110 and Specialties 110. Must be a senior.

D. Bradford, G. Paiement, R. Maurer
Students receive instruction and experience in examination and treatment of patients. Assistance in surgery and 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.

Carpendale
Course will provide knowledge and skills in electrodiagnosis, neurologic rehabilitation, spinal cord injury, closed head trauma, the rheumatoid patient, orthopaedic rehabilitation, hazards of bed rest, and acute and chronic low back pain. ORTHO SURG

150.01. Research in Orthopaedic Surgery. (1.5 per week) Su, F, W, Sp. Prerequisite: Surgery 110 and 111 and permission of instructor.

Diao, Lotz
Research project under direction of a member of the faculty. ORTHO SURG

401. Orthopaedic Pathology. (1) W, Sp. Prerequisite: Third- and fourth-year residents.

UC J. Johnston
A lecture series covering tumors and infections of the musculoskeletal system, illustrated by microscopic slides and photographs of gross specimens. ORTHO SURG

402. Musculoskeletal System Physiol. (1) F, W, Sp. Staff

Seminars cover connective tissue metabolism; muscle, bone, and joint physiology; preoperative and postoperative management of patients; wound infections; microbiology; and surgical principles. ORTHO SURG

403. Gross & Functional Anatomy. (1) Su. Staff

Course includes lectures by students and faculty on gross and functional anatomy, laboratory dissections of cadaver material, and demonstrations of surgical approaches. ORTHO SURG

404. Orthopaedic Literature. (1) F, W, Sp. Residents at C, DMC, SFGH, SSF, UC and VA.

Staff
Seminars are student presentations of selected orthopaedic surgery subjects featuring historical review complete with bibliography. They are moderated by an assigned faculty member. ORTHO SURG

406. Orthopaedic Medical Staff Conf. (1) Su, F, W, Sp. UC D. Bradford

Clinical instruction in the care and management of orthopaedic problems in rheumatoid arthritis and allied diseases. Cases are presented by residents to attending staff and rheumatology consultants. ORTHO SURG

407. Orthopaedic Surgical Conference. (1) Su, F, W, Sp. H Slabaugh

Seminars include presentation of problem cases by residents for consideration of diagnosis, treatment, and discussion by the attending staff. ORTHO SURG

408. Orthopaedic Surgical Conference. (1) Su, F, W, Sp. SFGH Staff

Selected problems are illustrated by cases treated or under treatment. Cases are presented by the resident staff and discussed by members of the attending staff. ORTHO SURG

409. Orthopaedic Surgical Conference. (1) Su, F, W, Sp. SSF Skinner

Conference with emphasis on children's problems in which residents make case presentations of inpatients for review and of outpatients for consideration of diagnosis and therapeutic plan. ORTHO SURG

411. Orthopaedic Surgical Conference. (1) Su, F, W, Sp. VA Maurer

Conference includes review of admissions and discharges of hospitalized patients by the attending and consulting staffs. Cases are presented by the residents. ORTHO SURG

412. Orthopaedic Clinical Seminar. (1) Su, F, W, Sp.

CHMC Debenham, H Slabaugh, SM Jensen
Seminars are held in rotation at each of these hospitals with residents from all three hospitals attending. They include literature review and demonstrations related to surgical approaches, anatomical dissections, diagnosis, and treatment. ORTHO SURG

414. Hand Surgery Conference. (1) Su, F, W, Sp. Staff

Conference includes presentation of case studies in hand surgery with central subject for each session. ORTHO SURG

451. Clinical Pediatric Orthopaedics. (1.5 per week) Su, F, W, Sp.

C L. Larsen, CHMC Debenham, SSF Ashley
Residents are responsible for patient care in the wards and outpatient clinics including history-taking, physical examinations, laboratory tests, elective surgery, fracture treatment, plaster techniques and consultations. ORTHO SURG

452. Traumatic & Adult Orthopaedics. (1.5 per week) Su, F, W, Sp.

SFGH L. Day, SM Jensen, VA Maurer, H Slabaugh
Residents are responsible for patient care in the wards and outpatient clinics including history-taking, physical examinations, laboratory tests, elective surgery, fracture treatment, plaster techniques, and consultations. ORTHO SURG

455. Clinical Sports Medicine. (1) Su, F, W, Sp.

J. Glick and Staff
Clinical instruction in the care and management of orthopaedic problems in athletic injuries. Course consists of clinical practice under supervision as well as didactic lectures every third week. ORTHO SURG

490. Clinical Orthopaedics—SFGH. (1.5 per week) Su, F, W, Sp.

Staff
Residents—I rotate through orthopaedic wards and follow-up clinics. They are responsible for patient care under the direction of the attending staff, including history-taking, physical examinations, X-ray conferences, and consultations. ORTHO SURG

Otolaryngology

First-Year Coordinated Instruction—Medicine 131A-B-C. Lecture-demonstrations and section work devoted to the supervised examination of patients.

Core Clerkship—Surgery 110 and 111 include lectures and case demonstrations on the examination and diagnosis of otolaryngological diseases, particularly those related to trauma and infection. Instruction is given in the examination and diagnosis of ward and clinic patients with otolaryngological surgical diseases.

140.01A. Adv Otolaryngology Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 131A-B-C and Surgery 110.

Lee
A practical course in general otolaryngology including diagnosis and treatment of common ear, nose, and throat problems; both inpatient and outpatient experiences will be offered. OTOLARYN

140.01B. Adv Otolaryngology Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 131A-B-C and Surgery 110.

Lanser
A practical course in general otolaryngology including diagnosis and treatment of common ear, nose, and throat problems; both inpatient and outpatient experiences will be offered. OTOLARYN

140.01C. Adv Otolaryngology Clerkship—SFGH. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 131A-B-C and Surgery 110.

Lee
A practical course in general otolaryngology including diagnosis and treatment of common ear, nose, and throat problems; both inpatient and outpatient experiences will be offered. OTOLARYN

140.01F. Clinical Clerkship—MZ. (1.5 per week) Su, F, W, Sp. Prerequisite: Surgery 110.

Singer
This clerkship is in general otolaryngology and includes the diagnosis and treatment of common ear, nose, and throat problems. Both inpatient and outpatient experiences will be offered. OTOLARYN

140.02. Off-Campus Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 131A-B-C and Surgery 110.

Schindler
Clinical clerkships in off-campus hospitals approved by the chairperson of the department and the dean. OTOLARYN

140.03. Otolaryngology and Neurology. (1.5 per week) Su, F,W, Sp. Prerequisite: Third or fourth year (fourth preferred).

Jackler, Schindler

A course in basic audiometric and vestibular testing; diagnosis and management of diseases of the ear and skull base; and experience with surgery for hearing restoration, treatment of vertigo, and for removal of ear and skull base neoplasms. OTOLARYNG

140.04. Introduction to Facial Plastics—UC—VA. (1.5 per week) Su, F,W, Sp. Prerequisite: IDS 110.

Maas

This clerkship in otolaryngology—facial plastic and reconstructive surgery will include the diagnosis and treatment of common otolaryngologic problems associated with the facial area. Both inpatient and outpatient experiences will be offered. OTOLARYNG

150.01. Research in Otolaryngology. (1.5 per week) Su, F,W, Sp. Prerequisite:

Must be third- or fourth-year medical student. Must have approval of Chairman, Dean, and research faculty involved.

Jackler

Research project under the direction of a member (or members) of the Department of Otolaryngology. OTOLARYNG

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. OTOLARYNG

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. OTOLARYNG

400. Didactic Lectures. (2) Su, F,W, Sp.

Boles

Lectures cover the anatomical, physiological, and clinical aspects of otolaryngology. OTOLARYNG

401. Head & Neck Surgical Anatomy. (1) Su. Seminar 2 hours.

Kaplan

Didactic sessions in the surgical anatomy of the head and neck. Supplemental dissections included. OTOLARYNG

404. Staff Rounds. (2) Su, F,W, Sp.

Boles

Weekly seminars are held with discussion of current problems concerning diagnosis and management of patients with references to current literature, modern theory, and controversial aspects. OTOLARYNG

406. Tumor Conference. (1) Su, F,W, Sp.

UC Kaplan

Conference includes presentation of patients, study of histories, and discussion of the treatment of the patient in light of modern progress in the field. OTOLARYNG

407. Head & Neck Plastic Surgery. (1) Sp. Seminar 2 hours.

Maas

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, videotape movies, didactic lectures, and anatomic dissections constitute the curriculum. OTOLARYNG

410. Temporal Bone Anat & Pathology. (0.5-0.5) F Laboratory 2 hours.

Jackler

A laboratory course conducted in the ear, nose, and throat pathology laboratory. All resident staff members are required to familiarize themselves thoroughly with the microscopic anatomy of the temporal bone under formal staff instruction. OTOLARYNG

412. Tumor Board. (1) Su, F,W, Sp.

VA Kaplan

Tumor cases are presented for diagnosis and recommendations for treatment. OTOLARYNG

413. Audiology Conference. (1) Su, F,W, Sp.

VA Kaplan

Combined Audiology and Otolaryngology Staff Conference where all patients evaluated for hearing problems are presented, and diagnosis and treatment recommendations are made. OTOLARYNG

415. Otolaryngology Fundamentals Course. (1) W. Seminar 2 hours.

Jackler, Kaplan, Sooy

A review of fundamental principles of otolaryngology head and neck surgery, encompassing both the basic and clinical sciences. This course is intended as a comprehensive review for the yearly "in service" training examination as well as preparation for board certification. OTOLARYNG

450. Clinical Otolaryngology. (10) Su, F, W, Sp.

UC Boles, 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 consultations. Senior resident has certain administrative, teaching, and clinical responsibilities. OTOLARYNG

490. Clinical Otolaryngology—SFGH. (1.5 per week) Su, F,W, Sp.

Lee

Interns, under supervision of the attending staff, are responsible for patient care on wards and in the follow-up clinic, including history-taking, examination, and consultation. This rotation is combined with patient-care assignments in the Ophthalmology Service. OTOLARYNG

Parasitology

135. Medical Parasitology. (2) Sp. Lecture 2 hours.

Heyneman, Lim

An introduction to the protozoa, helminths, and arthropods that parasitize man. Parasitology and disease epidemiology, clinical and diagnostic aspects of parasite diseases and their treatment are considered. EPID & BIostat

Pathology

100. Medical Parasitology. (1) Sp. Lecture 1 hour. Lab 4 hours (optional).

Sakanari

An introduction to parasitic protozoa and helminths and the human disease they produce. Parasite epidemiology, biology, and life cycles, diagnosis, clinical aspects, treatment, and control are discussed in the lectures and labs. Laboratory demonstrations keyed to the lectures are displayed and an instructor is available for small group discussions. EPID & BIostat

101. General & Systemic Pathology. (4) F Prerequisite: Substantive courses in anatomy, biochemistry, physiology, histology, microbiology (or concurrent enrollment), concurrent enrollment in Medicine 132A. If in doubt as to adequacy of preparation, consult the instructor. Lecture 3 hours. Lab 2 hours.

Ferrell

Mechanisms and language of disease are discussed, with emphasis on cell injury, inflammation, infectious agents, repair, regeneration, hemodynamic derangements, neoplasia. Recent advances and classical concepts of diseases as they affect the heart and blood vessels, lungs, gastrointestinal tract are presented. PATHOLOGY

102. Systemic Pathology. (3) W. Prerequisite: Pathology 101. Lecture 3 hours. Lab 2 hours.

Ferrell

Recent advances and classical concepts of diseases as they affect the following organ systems are presented: pancreas, liver, central nervous system, kidney, endocrine system, skin. Emphasis will be on correlation of functional and morphologic characteristics of diseases of organ systems. PATHOLOGY

103. Systemic Pathology. (3) Sp. Prerequisite: Pathology 102. Lecture 3 hours. Lab 2 hours.

Ferrell

Recent advances and clinical concepts of diseases as they affect the following organ systems are presented: reproductive systems, skeletal system, hematopoietic system, and lymph nodes. Emphasis will be on correlation of functional and morphologic characteristics of diseases of organ systems. PATHOLOGY

126. General Pathology. (4) F Prerequisite: Substantive courses in biochemistry, physiology, histology, microbiology (first quarter, concurrent) or an introduction to immunology. If in doubt as to adequacy of preparation, consult the instructor. Lecture 3 hours. Lab 2 hours.

Sanchez

Mechanisms and language of disease are discussed, with emphasis on the dynamic nature of fundamental disease processes: cell injury, immunopathology, inflammation, responses to infectious agents, repair, regeneration, hemodynamic derangements, genetic disorders, disturbances of cell growth, and neoplasia. PATHOLOGY

135. General Pathology. (3) F Prerequisite: Substantive courses in biochemistry, physiology, histology, microbiology (first quarter, concurrent) or an introduction to immunology. If in doubt as to adequacy of preparation, consult the instructor. Lecture 3 hours.

Friend

This course is identical to the lecture portion of Pathology 126. PATHOLOGY

135.01. General Pathology. (3) F Prerequisite: Completion of prerequisite coursework in human physiology and microbiology or by consent of program director. Lecture 3 hours.

Sanchez

Mechanisms and language of diseases are discussed, with emphasis on the dynamic nature of fundamental disease processes such as cell injury, immunopathology, inflammation, response to infectious agents, repair and regeneration, hemodynamic arrangements, genetic disorders, disturbances of cell growth and neoplasia. PATHOLOGY

150.01. Surgery and Autopsy Pathology. (1.5 per week) Su, F,W, Sp. Prerequisite: Pathology 101. Consent of instructor. Enrollment limited.

Ferrell

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/or autopsy pathology similar to those of first-year residents.

150.02. Off-Campus Pathology Clerkship. (1.5 per week) Su, F,W, Sp. Prerequisite: Pathology 101 and 102.

Bainton

Clinical clerkships in off-campus hospitals approved by the chairperson of the department and the dean. PATHOLOGY

150.05. Research. (1.5 per week) Su, F,W, Sp.

McKerrow, Parslow, Yen

The staff of the Pathology Department have various ongoing research interests and have a number of projects for students to work on. Requires approval of the Dean and the Department. Obtain necessary forms from the Office of Curricular Affairs. PATHOLOGY

150.06. Surgical Pathology—VMC. (1.5 per week) F,W, Sp. Prerequisite: Pathology 102 and consent of instructor.

H.M. Price, Bezmalinovic

Clerkship is designed to acquaint students with available techniques of tissue analysis, from light microscopic to micromolecular 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 dean of the department. Third-year standing. One-year program starting in the summer quarter.

Ferrell

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) F 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, regeneration, hemodynamic derangements, disturbances of cell growth, and neoplasia. DENT PUB HLTH

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 specimen and correlation of cellular and tissue pathology with colposcopic and clinical findings on examination of the patient. PATHOLOGY

170.04. Anatomy 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, DeArmond

Emphasis is placed on clinicopathological correlation of neurological 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 chairperson of the department.

Staff

Studies in pathology at other institutions with the approval of the chairperson of the department. PATHOLOGY

170.09. Clinicopathological Weekly Case. (1) W, Sp. Prerequisite: Pathology 101, enrolled in Pathology 102/103. Restriction: Second-year medical students. Seminar 1 hour.

Margaretten, Isenberg.

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.

McKerrow

An introductory course in immunopathology and clinical immunology that will review how basic immunological research is applied to diagnosing and understanding human disease. Topics will include transplant immunology, immunoparasitology, immune deficiency diseases, tolerance, and autoimmune diseases. PATHOLOGY

170.11. Problems of Medical Delivery in White Androcentric Society. (1) W. Seminar 1 hour.

Stern

Feminist readings: how language can be a tool of oppression; how power structure of society maintains hegemony by defining "pathology"; how women, people of color, and gays are marginalized in this context. Explores how doctor-patient dialogue interferes with medical care. 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 chairperson 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 chairperson of the department. PATHOLOGY

209. Applied Pathology. (3) § W. Prerequisite: Microbiology 126A-B and Pathology 126 or equivalents.

J. Greenspan

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

215. Laboratory Rotation. (3) § F,W, Sp. Prerequisite: Consent of instructor. Lab 9 hours.

Parslow

A laboratory rotation course, to familiarize students with various approaches to experimental pathology and research in the basic medical sciences, particularly in relationship to human disease processes. Intended primarily for new graduate students. PATHOLOGY

225. Connective Tissue Research Sem. (4) § F,W, Sp. Seminar 4 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

230. Experimental Pathology Seminar. (2) § F,W, Sp. Prerequisite: Permission of the graduate advisor of the department. Lecture 1 hour. Seminar 1 hour.

Parslow

Presentation of current research by graduate students. Topics in pathology and disease mechanisms. Faculty from basic and clinical sciences will discuss current research in a disease process. Advanced reading in that disease will be assigned before class. There will be formulation of test-hypothesis and discussion of an experimental design lead by a student leader at each session. PATHOLOGY

240. Concepts in Parasitic Diseases. (4) § W. Lecture 2 hours. Seminar 2 hours.

Bainton, Sakanari, Deneris

This course is for students interested in learning current issues on 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

250. Research. (1-8) § F,W, Sp. Staff

PATHOLOGY

297. Molecular Biology of Human Disease. (3) § Sp. Prerequisite: Open to graduate students, housestaff, and MSTP students. Lecture 1 hour, seminar 2 hours.

McKerrow

The course is designed to provide students with an up-to-date summary of our knowledge of atherosclerosis with particular emphasis on application of techniques of molecular and cell biology to understand both the pathogenesis and genetics of the disease. PATHOLOGY

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

Staff

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

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

Staff

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

301. Teaching Practicum. (3) § F,W, Sp. Prerequisite: Consent of instructor. Lecture 3 hours. Lab 2 hours.

Ferrell

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

Seminars 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

402. Pathology Research. (1-8) Su, F,W, Sp. Interns and residents.

Staff

Students, under supervision, pursue original investigation in pathology and allied subjects. Investigators review the literature, make observations, and correlate physiological 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.

Sagebiel

Survey of inflammatory and neoplastic skin diseases by study of histopathological changes and discussion with emphasis on clinical-pathologic correlations. PATHOLOGY

450. Pathologic Anatomy. (5-10) Su, F, W, Sp. Required for interns; elective for residents.

Staff

Theory and methodology of pathologic anatomy, interpretation and correlation of data, and study of literature. 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

495. Pathologic Anatomy. (1.5 per week) Su, F,W, Sp. Required for interns.

Staff

Theory and methodology of pathologic anatomy, interpretation and correlation of data, and study of literature. PATHOLOGY

Pediatric Dentistry

120. Introduction to Pediatric Dentistry. (1) Sp. Prerequisite: Enrollment and satisfactory standing in second-year dental class.

Lecture 10 hours per quarter.

Braham and Staff

An overview of the physical, psychological, and dental growth and development of the pediatric patient from birth through adolescence, emphasizing the importance of approaching the child as an individual in its own right rather than as a miniature adult. GR DEVEL

130. Introduction to Clinical Pediatric Dentistry. (1) Su. Prerequisite: Satisfactory completion of Ped Dent 120 and third-year standing. Lecture 9 hours per quarter.

Braham and Staff

An intensive review of clinical pediatric dental procedures and techniques. The course will stress the importance of sound diagnosis and treatment planning as a prerequisite to definitive comprehensive dental care. Specific attention will be paid to parent and patient management. GR DEVEL

139. Clinical Pediatric Dentistry. (0-4) Su, F,W, Sp. Prerequisite: Ped Dent 130 and third-year standing. Clinic 110 hours, seminar 5 hours per quarter.

Braham and Staff

A comprehensive introduction to clinical pediatric dentistry in general dental practice. Sound behavior management, examination, and treatment planning will be stressed. The complexity of cases will be increased as the students' skills develop. Clinical seminars will supplement clinical practice. GR DEVEL

186. Adv Pediatric Dent Seminars (1) F, W, Sp. Prerequisite: Completion of third-year Pediatric Dentistry Lecture Course 130. Approval of instructor in charge of course. Seminar 1 hour for 8-10 weeks.

Ramos

Seminars 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 interested in the specialty of Pediatric Dentistry. GR DEVEL

187. Pediatric Hospital Dentistry. (1-1.5) Su, F,W, Sp. Prerequisite: Completion of 3rd-year Pediatric Dentistry 130. Approval of instructor. 30-50 hours in O.R.

Braham

Experience is provided in history-taking, admissions procedures, hospital dental protocol, laboratory tests, and chart documentation. Opportunity to work with the instructor in the hospital operating room providing care for handicapped and other refractory management cases, using general anesthetic. GR DEVEL

406. Adv Pediatric Dentistry Seminar.

(1) F,W, Sp. Prerequisite: Enrollment in postdoctoral pediatric dentistry programs or consent of instructor. Seminar 10 hours.

Pang and Staff

This course involves discussion on all aspects of clinical practice of pediatric dentistry, case presentations by the students and faculty from other pediatric sub-specialties and dentally related fields. GR DEVEL

407. Literature Review. (1.5) Su, F,W, Sp. Prerequisite: Enrollment in postdoctoral pediatric dentistry programs or consent of instructor. Seminar 15 hours.

Pang and Staff

Students will review the basic literature that is the foundation for the clinical practice of pediatric dentistry. The course will assist students in developing skills to evaluate literature and analyze research methods critically. GR DEVEL

408. Pediatric Physical Diagnosis. (2) Su, F,W, Sp. Prerequisite: Enrollment in 1st or 2nd year of postdoctoral pediatric dentistry program or consent of instructor. Seminar 10 hours. Clinic 30 hours. Offered in alternate years. Not offered 1995-96.

Pang and Staff

This course is designed to provide knowledge of clinical pediatrics and will include didactic and clinical experience in history-taking and physical diagnosis. GR DEVEL

409. Pediatric Dentistry Clinic. (4-6) Su, F,W, Sp. Prerequisite: Enrollment in postdoctoral pediatric dentistry programs or consent of instructor. Clinic 120-180 hours.

Pang and Staff

This course will provide direct clinical care with the child patient in which the student will learn to diagnose the patient's problem, design a treatment approach, carry out the necessary records, treat the patient, and complete final records for discharge. GR DEVEL

409.10. Hospital Dentistry. (1-3) Su, F,W, Sp. Prerequisite: Enrollment in postdoctoral pediatric dentistry programs or consent of instructor. Clinic 30-90 hours.

Pang and Staff

The student will learn to prepare patients for treatment and perform dental rehabilitation under general anesthesia in the operating room in both inpatient and outpatient settings according to hospital protocols. GR DEVEL

409.20. Conscious Sedation. (1.5) Su, F, W, Sp. Prerequisite: Enrollment in postdoctoral pediatric dentistry programs or consent of instructor. Clinic 45 hours.

Pang and Staff

The course is designed to teach methods and rationale for administering medications, and the use of monitoring techniques during conscious sedation. The student will administer the medications and monitor the patients before, during, and after the procedure under the direct supervision of a member of the faculty. GR DEVEL

410. Advanced Pediatric Dentistry (1) F, Lecture 1 hour.

Ramos-Gomez

This lecture series will focus on behavior management of children in the outpatient and inpatient settings. GR DEVEL

411. Intro Advanced Pediatric Dentistry. (1) Su. Prerequisite: Enrollment in 1st-year postdoctoral pediatric dentistry program or consent of instructor. Seminar 10 hours.

Pang and Staff

This course is an introduction to the philosophies and techniques of rendering clinical treatment to patients in pediatric dentistry. GR DEVEL

412. Pediatric Dentistry for the Disabled. (1) F Prerequisite: Enrollment in 1st year of postdoctoral pediatric dentistry programs or consent of instructor. Seminar 10 hours.

Braham and Staff

Students will study the etiology, diagnosis, medical and dental management and prognosis of congenital and acquired disabilities in children and adolescents. GR DEVEL

413 Research Design. (1) Su, F Prerequisite: Enrollment in 1st year of pediatric dentistry program or consent of instructor. Seminar 10 hours.

Miller

The course discusses design of research projects, statistical methods leading to formulation of a pilot project and protocol. GR DEVEL

429. General Anesthesia Rotation-

CHMC. (4) Su, F,W, Sp. Prerequisite: Enrollment in 2nd year of postdoctoral pediatric dentistry programs or consent of instructor. Clinic 120 hours.

Pang and Staff

A practical rotation in the operating room under the supervision of a senior staff anesthesiologist. GR DEVEL

439. Practice Teaching. (2) Su, F,W, Sp.

Prerequisite: Enrollment in 3rd year of postdoctoral pediatric dentistry program or consent of instructor. Clinic 60 hours.

Pang and Staff

The student practices teaching dental students and works with students from other postdoctoral dental programs in the clinics. The student is also expected to prepare some lectures, presentations, or seminars on selected topics to enhance his/her teaching skills. GR DEVEL

Pediatrics

100. Medical Genetics. (2) Sp.

Shapiro

This course will explore the role of genetic factors in the causation of human diseases, particularly those genetically influenced disorders which are most frequent in occurrence, and approaches to the diagnosis, management, and counseling of genetic disorders. PEDIATRICS

110. Ped Core Clerkship-UC-SFGH-L-C. (1.5 per week) Su, F,W, Sp. Prerequisite: Core curriculum in basic sciences.

Loeser

Practical experience in the ward, newborn nursery, and outpatient clinics with emphasis on case assignments. Teaching and supervision by attending and resident staffs. Required seminars cover aspects of pediatrics, infectious diseases, and child psychiatry. PEDIATRICS

140.01A. Ambulatory Pediatrics-UC. (1.5 per week) F,W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Pantell

Students gain experience in well child care and in dealing with children with acute problems. Emphasis is placed on health maintenance, preventive care, and anticipatory guidance. Conferences focus on general pediatric issues and a review of patients seen in the emergency room. PEDIATRICS

140.01B. Ambulatory Pediatrics-SFGH (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Brown, Coulter, O'Connor

Students evaluate and treat children with a variety of acute and chronic conditions. Patients with a high degree of acuity. There are morning conferences and ER case reviews. Supervision is provided by senior residents, chief resident, and faculty. PEDIATRICS

140.01D. Outpt Pediatric Clerkship-CHMC. (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Consent of instructor.

Wright

Students are assigned patients. They are supervised by attending and resident staff. They attend conferences when their patients are being discussed. They rotate through a variety of specialty clinics as well as the General Medical Clinic and the Emergency Room. PEDIATRICS

140.01E. Adv Inpt Pediatric Clkshp-CHMC. (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Wright

Students are assigned patients. They are supervised by 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

140.01F. Outpt Pediatric Clkshp-KP. (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Consent of instructor.

Applebaum

Students are assigned patients under supervision of attending and resident staff. They present patients on wards, assist with procedures, and attend specialty conferences for discussion of patients. PEDIATRICS

140.01G. Inpatient Pediatric Clkshp-K. (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Applebaum, Mohr

Students are assigned patients under supervision of attending and resident staff. They present patients on wards, assist with procedures, and attend specialty conferences for discussion of patients. PEDIATRICS

140.01J. Intensive Care Nursery-UC. (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Phibbs, Sola

Students gain experience in evaluation and management of sick pre-term and term infants. Supervision is provided, and it is expected that students will assume the role of primary physician in matters of clinical decision-making as well as diagnostic and therapeutic procedures. PEDIATRICS

140.01K. Neonatology-SFGH. (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Sniderman

Students develop skills in assessment of newborns in the setting of a high-risk patient population. The experience involves care of patients, ranging from the healthy term newborn to the infant requiring intensive supportive care. PEDIATRICS

140.01M. Pediatric Critical Care-UC. (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. One student per rotation.

Soifer and Staff

Students follow selected patients in the Pediatric Intensive Care Unit and participate in patient presentations, management conferences, and teaching rounds. Emphasis is on cardiovascular and pulmonary physiology in management of critically ill pediatric patients. Students become familiar with relevant literature concerning problems of patients being followed. PEDIATRICS

140.01N. Adv Inpatient Pediatrics (1.5/wk) Su, F,W, Sp. Prerequisite: Pediatrics 110, Medicine 110. Restricted to 1-2 students per block.

Shapiro

To provide exposure to typical pediatric inpatients in a setting where the student assumes primary responsibility for initial evaluations, diagnostic procedures, and ongoing management of patients. Students are assigned patient work-ups, participate fully in team work and teaching rounds, attend conferences, and are on night call with the resident. PEDIATRICS

140.02. Off-Campus Clerkship. (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Shapiro

Clinical clerkship in off-campus hospitals approved by the chairperson of the department and the dean. PEDIATRICS

140.03. Outpatient Pediatrics-VMC. (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Bayatpour

Experience caring for sick and well children with 27,000 patient visits/year. Preventive medicine and anticipatory guidance along with principles of growth and development. All activities closely supervised by either senior residents or faculty. Daily morning conferences, chart rounds, assigned readings. PEDIATRICS

140.04. Pediatric Cardiology. (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Open to UCSF students only.

Brook

Experience in clinical evaluation of children with cardiac abnormalities is emphasized. Daily ward rounds on pediatric cardiology patients, attendance at designated cardiac surgical procedures, catheterization, weekly catheterization conference, extensive reading assignments, and daily attendance in private office setting are included. PEDIATRICS

140.05. Pediatric Private Practice. (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Consent of instructor. Open to UCSF students only.

L.P. Smith and Staff

Working experience with a pediatrician on the clinical faculty as the pediatrician sees patients in the office and in the hospital. Student may select time in small group, large group, or subspecialty practice, or a combination of these. PEDIATRICS

140.07. Developmental Pediatrics in Fresno. (1.5 per week) W, Sp. Prerequisite: Pediatrics 110.

D.M. Snyder

Students learn to identify children with developmental disabilities and direct their remediation to allow for achievement of their greatest potential. Various settings are used in acquiring skills in developmental assessment. PEDIATRICS

140.08. Ambulatory Pediatrics. (1.5 per week) F,W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

J.E. Anderson

Clinical experience in teaching hospital's busy pediatric clinic, working as member of health care team. Supervision from attending physicians with emphasis on developmental/behavioral approach to pediatric practice. Continuity of care is encouraged and opportunity exists to follow patients admitted to ward. PEDIATRICS

140.10. Pediatric Hematology/Oncology-UC-SFGH-CHMC. (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Consent of instructor. Open to UCSF students only.

Koerper, Lubin, Mentzer

The student will participate in outpatient clinics, ward rounds, and laboratory evaluation of blood and bone marrow specimens. The pursuit of special interests in the clinic or laboratory is encouraged. PEDIATRICS

140.11. Cardiology-CHMC. (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Gerdson, Hardy

Students participate in clinical experience including outpatient evaluation, instruction in the noninvasive methods of diagnosis, care of ward medical and surgical cardiac patients, cardiopulmonary laboratory, and cardiovascular conferences. Emphasis is on the physiological principles of diagnosis and management. PEDIATRICS

140.13. Endocrinology-UC. (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Consent of instructor.

Grumbach, S.L. Kaplan, F. Conte

Participation in the clinical and investigative aspects of endocrine and metabolic problems in children. Students spend time in the laboratory, on the wards, and in the clinics. PEDIATRICS

140.14. Juvenile Diabetes-VCF. (1.5 per week) Su. Prerequisite: Medicine 110, Pediatrics 110, and consent of instructor.

Simon

Students work in a Diabetes Summer Camp learning the clinical management of diabetes. Students have an opportunity to participate in the operation of the camp program and in the treatment of diabetes in children, adolescents, and young adults. PEDIATRICS

140.15. Oncology-UC. (1.5 per week) F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Consent of instructor.

Ablin, K. Matthey, Zoger

Participation in management of patients with solid tumors and leukemia; attendance at pediatric tumor board, ward rounds, and outpatient clinic. Special emphasis on psychosocial problems; supervised reading and discussion with preceptor. PEDIATRICS

140.16. Pediatric Nephrology-UC. (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Consent of instructor.

D.E. Potter

Introduction to general nephrology with children having nutritional problems, ESRD, and chronic renal failure. Post-transplant and dialysis consultations, new cases from the nursery, and cases requiring TPN. Research projects may be arranged with instructors. PEDIATRICS

140.17. Genetics-UC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Consent of instructor.

C. Epstein, M. Golabi, S. Packman

Evaluation and management of children and adults with hereditary (including cytogenetic) diseases, with particular emphasis on genetic counseling, patterns of human malformation, and the biochemical and genetic mechanisms involved in the pathogenesis and transmission of these conditions. PEDIATRICS

140.21. Pediatric Pulmonary & Allergy. (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Cropps, Shames

Students participate in the activities of the pulmonary and allergy service, in the outpatient and inpatient settings, as well as conferences, journal clubs, etc. The course will emphasize clinical experience with common pediatric pulmonary problems, e.g., asthma, cystic fibrosis. PEDIATRICS

140.22H. Developmental Cardiopulmonary Pathophysiology. (1.5 per week) W. Prerequisite: Fourth-year standing.

Soifer, Bristow, Froh

This course is designed to provide students with an understanding of the development of the cardiovascular and pulmonary systems by studying diseases in the premature (respiratory distress syndrome), newborn (pulmonary hypertension syndrome), infant (congenital heart disease), and child (cystic fibrosis). PEDIATRICS

140.26. Comprehensive Pediatric Care-KP. (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Shum

Within the country's largest prepaid health care program, students will participate in office visits, urgent ambulatory care, health education, and inpatient care. They will work with staff and resident physicians, nurse practitioners and health educators. PEDIATRICS

140.27. Inpatient Pediatrics-KP. (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Shum

Students will perform histories and physical examinations on the pediatric ward under supervision of resident and attending physicians. They will attend resident conferences, see urgent clinic cases with resident and participate in outpatient clinic for discharged patients. PEDIATRICS

140.30. Gastroenterology & Nutrition. (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Heyman, Thaler

Students participate with fellows and staff in the diagnosis and treatment of gastrointestinal and hepatic diseases, and nutritional deficiencies in infants and children. They present patients on wards and in the outpatient clinic, assist with procedures, and attend specialty conferences. PEDIATRICS

140.31. Inpatient Pediatric Clkshp-VMC. (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Bayatpour

Opportunity to develop and perfect skills in history-taking, physical examination, case write-ups, presentations, and procedures. Supervised problem-oriented learning/teaching environment fosters basic diagnostic and management skills. Conferences, case work-ups and presentation, night call with resident, and assigned reading. PEDIATRICS

140.33. Pediatric Immunology/Rheumatology. (1.5 per week) Su, F,W, Sp. Prerequisite: Pediatrics 110 and Medicine 110, and consent of instructor.

Wara, Emery

Evaluation and care of children with primary immunodeficiency diseases and rheumatologic disorders. Emphasis on ontogeny of immune response as it relates to immunodeficiency, immunologic dysfunction involved in pathogenesis of the disorders, laboratory studies required for diagnosis, and care of children with chronic disease. PEDIATRICS

140.34. Medical Genetics. (1.5 per week) Su, F,W, Sp. Prerequisite: 4th-year standing.

Curry

Experience will be gained in medical genetics, including dysmorphology, biomedical genetics and prenatal diagnosis. Rotation will provide general exposure to all these areas and give a basic understanding of methods used to reach specific genetic diagnoses and exact prenatal detection course for future pregnancies. PEDIATRICS

140.35. Infectious Disease-UC & SFGH (1.5 per week) Su, F,W, Sp. Prerequisite: Pediatrics 110.

S. Kohl

Students will learn principles of diagnosis and management of common infectious conditions, infectious complications in the immunocompromised host, and neonatal infections; will learn to properly interpret microbiologic data and use the microbiology laboratory. PEDIATRICS

140.37. Clinical Clerkship in Adolescent Medicine. (1.5 per week) Su, F,W, Sp. Prerequisite: Completion of basic clinical clerkships. Open to fourth-year medical students only.

Irwin, Shafer

Clinical rotation on outpatient/inpatient adolescent medical service. Clinical experience will include general adolescent clinic, adolescent gynecology clinic, and inpatient consultation on adolescent medical and psychiatric wards. PEDIATRICS

140.38. Behavioral & Developmental Pediatrics. (1.5/week) Su, F,W, Sp. Prerequisite: Pediatrics 110 and consent of instructor. Lecture 1 hour. Conference 10 hours. Clinic 4 hours.

Tanner

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 assessments as well as child and family interviews provide a truly biopsychosocial perspective. PEDIATRICS

140.39. Continuity Clinic. (1) Su, F,W, Sp. Prerequisite: Third year or Core Clerkship completed.

Loeser

Students see patients one half day per week over 6-9 months, following a primary care panel of patients. Approximately 4-6 positions are available: Parnassus, Mount Zion, SFGH, Kaiser-SF, East Bay Children's, Kaiser-Oakland, or community-based practice. This course is not scheduled through the elective lottery nor at individual sites; contact the Department of Pediatrics to schedule. PEDIATRICS

150.04. Research in Pediatrics-UC. (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Shapiro and Staff

Student research projects under guidance of faculty members. Programs must be approved by instructors. 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.

Shapiro

Students prepare case presentations weekly from patients on the pediatrics wards. Course correlates patients' problems with work in the required curriculum. Experience on the ward in the clinical setting. PEDIATRICS

170.01. Peds Devel Resource Overview. (1.5 per week) Su, F,W, Sp. Prerequisite: Consent of instructor.

L. Crain

Weekly seminar and reading assignments correlated with observation of the spectrum of community and institutional services; diagnostic, preventive, and program services for individuals with developmental disabilities included. PEDIATRICS

170.02. Chronic Illnesses. (1.5) F Seminar 1.5 hours.

Takayama

Introduction to chronic illnesses from the child's perspective. Topics include coping with a chronic illness, family dynamics, developmental aspects, impact of poverty, role of the health care provider, the team approach, community resources, and specific chronic illnesses. PEDIATRICS

180.01A-B-C-D. Adolescent Development. (2-2-2-2) § F,W,Sp,Su. Prerequisite: Consent of instructor. Seminar 2 hours.

Irwin

A four-quarter course covering the physiologic, psychologic, cognitive and social development of adolescence. 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.

Shapiro and Staff

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

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

Shapiro

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

400. Staff Conference. (1.5) Su, F,W,Sp. Interns and residents.

UC Rudolph

Conferences include house staff preparation and presentation of patient case histories with reference to the literature, laboratory work, and special studies. Faculty members and consultants from other departments as well as other universities discuss recent developments in their respective fields. PEDIATRICS

401. Pediatric-Roentgenology Conf. (1.5) Su, F,W,Sp. Interns and residents.

UC Gooding

Conferences include review and discussion of recent X-ray studies of pediatric cases in the wards and outpatient service. PEDIATRICS

402. Clinical Seminar. (1.5) Su, F,W,Sp. UC Rudolph

Seminar includes review and discussion of selected cases of unusual interest, reports on special topics with review of recent literature, and clinicopathological conferences on pediatric cases. PEDIATRICS

420. Family Interviewing Seminar. (1) Su, F,W,Sp. Prerequisite: Graduate-level student in health sciences health care providers only. Consent of instructor. Seminar 2 hours.

Baum and Staff

Seminar topics include family systems, communication patterns, family interviewing, presenting a difficult diagnosis, psychosomatic illness, chronic illness, and common behavioral problems. Teaching methods include group discussion, role play, and video taping. Emphasis is placed on learning through experience. PEDIATRICS

421. Behavioral Research Seminar. (1) F,W,Sp. Prerequisite: Graduate-level student in health sciences. Consent of instructor. Seminar 2 hours alternate weeks.

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-M.D. or graduate nursing students 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 applicability of behavioral pediatrics in clinical practice. Includes screening, temperament, attachment, and hospitalization. Supervised experiences at daycare centers and schools. Reading assignments. PEDIATRICS

423. Child Development Literature Seminar. (1) F,W,Sp. Prerequisite: Graduate-level student in health sciences and consent of instructor. Seminar 1.5 hours alternate weeks.

Tanner and Staff

This seminar presents classic theoretical and current research-based formulations of child development. Assigned literature readings are essential to seminar participation. Material covering pregnancy through school age years is presented over two-year cycle. PEDIATRICS

424. Neurodevelopmental Assessment and Therapy. (1) W. Prerequisite: By instructor approval; pediatric residents and fellows in behavioral/developmental pediatrics. Lecture 1 hour. Lab 1 hour.

Tanner and Staff

Overview of theories and principles of neuromotor development and treatment modalities available for children with developmental disabilities. Includes assessing normal and abnormal sensory-motor development, neurodevelopmental therapy, sensory integration, pre-speech, and feeding therapy. Lecture, discussion, audiovisual aids, and patient demonstration. PEDIATRICS

450. Clinical Pediatrics-UC. (1.5 per week) Su, F,W,Sp. Interns and residents.

UC Rudolph

Residents, under supervision, are responsible for patient care in the wards and outpatient clinic including history-taking, physical examination, laboratory tests, diagnosis and treatment. In addition, the chief resident has certain administrative, teaching, and clinical responsibilities. PEDIATRICS

451. Clinical Pediatrics-SFGH (1.5 per week) Su, F,W,Sp. Residents.

M. Grossman

Residents, under supervision, are responsible for patient care in the wards, communicable disease section, and outpatient clinic including history-taking, physical examination, laboratory tests, diagnosis, and treatment. Emphasis is on diagnosis and management of infection trauma, and pediatric emergencies. PEDIATRICS

462. Clinical Primary Care. (1.5 per week) Su, F,W,Sp.

Rudolph

Interns in the Primary Care Track of Pediatrics are responsible for patient care in a multispecialty primary care clinic. Other rotations include those common to the regular Pediatrics Internship Program as well as related clinical services such as dermatology, otolaryngology. PEDIATRICS

463. Clinical Primary Care. (1.5 per week) Su, F,W,Sp.

Rudolph

Residents in the Primary Care Track of Pediatrics are responsible for patient care in a multispecialty primary care clinic. Other rotations include those common to the regular Pediatrics Residency Program as well as related clinical services such as dermatology, otolaryngology. PEDIATRICS

490. Clinical Pediatrics-SFGH (1.5 per week) Su, F,W,Sp.

M. Grossman

Interns rotate through newborn nursery, pediatric wards and clinic, communicable diseases 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

495. Clinical Pediatrics. (1.5 per week) Su, F,W,Sp. Interns.

UC Grumbach

Interns, under supervision, are responsible for patient care in the wards and outpatient clinic including history-taking, physical examination, laboratory tests, diagnosis, and treatment. PEDIATRICS

Periodontology

130. Introduction to Periodontal Therapy. (1) Su. Prerequisite: Oral Biology 108.01, 108.02, 108.03. Lecture 10 hours per quarter.

Armitage

Introduction to the diagnosis and treatment of periodontal diseases. Emphasis will be placed on examination, diagnosis, and treatment planning. The rationale and techniques for treatment of gingivitis and early periodontitis will be discussed. STOMATOL

131. Principles of Periodontal Therapy. (1) F. Prerequisite: Perio 130. Lecture 10 hours per quarter.

Armitage

Principles of periodontal maintenance therapy. Role of local and systemic factors in the pathogenesis of periodontitis. Epidemiology and natural history of periodontal diseases. The rationale and techniques for the treatment of advanced periodontitis will be discussed. STOMATOL

132. Periodontal Therapy. (2) W. Prerequisite: Perio 131. Lecture 2 hours.

Levine

Surgical periodontics and rationale for periodontal therapy. Emphasis will be placed on the rationale for various surgical modalities of treatment for periodontal diseases. Discussion of controversial treatment programs and medicolegal aspects of periodontal therapy will be included. STOMATOL

139. Clinical Periodontal Therapy. (0-4) Su, F,W,Sp. Prerequisite: Perio 129. Clinic 3 hours. Seminar 1 hour.

Armitage

Treatment of a variety of periodontal diseases under the direct supervision of faculty. Small seminar and discussion groups will review diagnosis and treatment modalities. STOMATOL

162. Periodontal Therapy. (1) W. Prerequisite: Perio 161. Lecture 1 hour.

Levine

Surgical periodontics and rationale for periodontal therapy. Emphasis will be placed on the rationale for various surgical modalities of treatment for periodontal diseases. Discussion of controversial treatment programs and medicolegal aspects of periodontal therapy will be included. STOMATOL

170A-B-C. Histopathology of Periodontium. (2-2-2) F,W,Sp. Lecture 1 hour. Lab 3 hours.

Dienstein (F,W), Ryder (Sp)

Dynamics of inflammation and its role in the periodontal tissues. STOMATOL

177. Periodontal Surgery Seminar. (2) F,W,Sp. Prerequisite: D.D.S. degree and consent of instructor. Lecture 2 hours.

Raust

Study in depth with literature review and seminar discussions on surgical techniques used to treat lesions involving the hard and soft tissue of the periodontium. STOMATOL

180. Periodontics in General Practice. (1) W. Lecture 1 hour.

Nathan

Implementation of the skills and knowledge of periodontology in the private practice environment. STOMATOL

180.01. Advanced Perio Lit. (1) F. Prerequisite: Perio 130 and consent of instructor. Seminar 1 hour.

Abe

Study in depth, with literature review and seminar discussions of areas of periodontology having major clinical significance. STOMATOL

180.02. Advanced Perio Lit. (1) W. Prerequisite: Perio 131 and consent of instructor. Seminar 1 hour.

Abe

Study in depth, with literature review and seminar discussions of areas of periodontology having major clinical significance. STOMATOL

180.03. Advanced Perio Lit. (1) Sp. Prerequisite: Perio 132 and consent of instructor. Seminar 1 hour.

Abe

Study in depth, with literature review and seminar discussions of areas of periodontology having major clinical significance. STOMATOL

181. Periodontal Surgical Techniques. (1) F. Prerequisite: Perio 132 or 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 (1) W. Prerequisite: Periodontology 132. Two hours/week over 5 sessions.

Engert, Pasquelli

An introduction to the concept 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

189.01. Clinical Periodontics. (0-9) F,W,Sp. Prerequisite: Perio 139. Clinic variable.

Taggart

Continuation of clinical experience beyond the level of Periodontology 139 and Periodontology 149. Diagnosis, treatment planning, management and care of patients with advanced periodontal disease or the need for advanced therapy, including periodontal surgery. STOMATOL

198. Supervised Study. (1-5) Su, F,W,Sp. Armitage, Johnson, Richards, Bramanti, Levine, Taggart

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

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

Armitage

A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the division. STOMATOL

202A-B. Molec & Biochem Basis of Disease. (2-2) § F,W. Prerequisite: Biochemistry 100A-B or equivalent introduction to biochemistry. Lecture 2 hours.

Seminar 1 hour.

Bhatnagar

Course reintroduces 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

401.01 Clinical Periodontics: Examination and Treatment Planning. (1) Su. Prerequisite: Enrollment in postgraduate dental program. Seminar 10 hours.

Kao, Ancell, Zingale, Fagan

This is a didactic course that will introduce various aspects of recognizing, diagnosing, and managing patients with periodontal disease. Factors that influence the treatment and management of these patients will be reviewed. STOMATOL

401.02 Clinical Periodontics: Examination and Treatment Planning. (1) F. Prerequisite: Enrollment in postgraduate dental program. Seminar 10 hours.

Kao, Ancell, Zingale, Fagan

This course will review the diagnosis and management of periodontal disease patients in a clinical case presentation format. STOMATOL

401.03 Clinical Periodontics: Examination and Treatment Planning. (1) W. Prerequisite: Enrollment in postgraduate dental program. Seminar 10 hours.

Kao, Ancell, Zingale, Fagan

This course will review the diagnosis and management of periodontal disease patients in a clinical case presentation format. STOMATOL

401.04 Clinical Periodontics: Examination and Treatment Planning. (1) Sp. Prerequisite: Enrollment in postgraduate dental program. Seminar 10 hours.

Kao, Ancell, Zingale, Fagan

This course will review the diagnosis and management of periodontal disease patients in a clinical case presentation format. STOMATOL

404. Applied Anatomy. (1) Sp. Prerequisite: Enrollment in postgraduate specialty program. Lecture 1 hour.

Ryder

Course covers anatomy as it relates to anesthesia and periodontal surgery. STOMATOL

406.01. Hospital Anesthesiology. (6) Su. Prerequisite: Consent of instructor. Seminar 1 hour. Clinic 16 hours.

Taggart

Practical course in operating room anesthesia. Instruction in hospital administration, physical and preanesthesia evaluation of the patient, monitoring of vital signs, administration of intravenous psychosedation, general anesthesia, and handling of resultant medical emergencies. Clinical instruction is supplemented by seminars. STOMATOL

406.02. Hospital Periodontics. (4) F. Prerequisite: Perio 419.01. Lecture 4 hours.

Taggart

Clinical periodontics integrated into the regular medical and rehabilitative activities of MZ. 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

406.03. Hospital Periodontics. (4) W. Prerequisite: Perio 419.02. Lecture 4 hours.

Taggart

Clinical periodontics integrated into the regular medical and rehabilitative activities of MZ. 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) Sp. Prerequisite: Perio 419.03. Lecture 4 hours.

Taggart

Clinical periodontics integrated into the regular medical and rehabilitative activities of MZ. 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.

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 plan 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 plan and therapeutic procedure based on relevant literature and clinical experience. STOMATOL

413.03. Treatment Planning & Surgery. (1) Sp. 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 plan and therapeutic procedure based on relevant literature and clinical experience. STOMATOL

413.04. Treatment Planning & Surgery. (1) SS1. 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 plan and therapeutic procedure based on relevant literature and clinical experience. STOMATOL

416. Advanced Periodontology. (0-2) Su, F,W,Sp. Seminar 1 hour.

Levine

Each student will attend 20 literature-review sessions on topical issues in periodontology. STOMATOL

416.01. 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

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 therapy. STOMATOL

419.02. Clinical Periodontics. (5) W. Prerequisite: Enrollment in postgraduate specialty program. Clinic 15 hours.

Taggart

Clinical procedures in periodontology therapy. STOMATOL

419.03. Clinical Periodontics. (5) Sp. Prerequisite: Enrollment in postgraduate specialty program. Clinic 15 hours.

Taggart

Clinical procedures in periodontology therapy. STOMATOL

419.04. Clinical Periodontics. (5) SS1. Prerequisite: Enrollment in postgraduate specialty program. Clinic 15 hours.

Taggart

Clinical procedures in periodontology therapy. 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 will be responsible for defending their treatment plan and therapeutic procedures 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 will be responsible for defending their treatment plan and therapeutic procedures based on relevant literature and clinical experience. STOMATOL

423.03. Adv Treatment Planning & Surgery. (1) Sp. Seminar 1 hour.

Taggart

Students present and discuss management of their cases that are either planned for treatment or currently under treatment. They will be responsible for defending their treatment plan and therapeutic procedures based on relevant literature and clinical experience. STOMATOL

423.04. Adv Treatment Planning & Surgery. (1) SS1. Seminar 1 hour.

Taggart

Students present and discuss management of their cases that are either planned for treatment or currently under treatment. They will be responsible for defending their treatment plan and therapeutic procedures based on relevant literature and clinical experience. STOMATOL

429.01. Periodontal Therapy. (6) Su. Prerequisite: Perio 419.01 or 419.02 or 419.03 or 419.04. Clinic 18 hours.

Taggart

Clinical procedures in periodontal therapy. This course is an enlargement on earlier clinical experience. STOMATOL

429.02. Periodontal Therapy. (6) F. Prerequisite: Enrollment in postgraduate periodontal therapy. Clinic 18 hours.

Taggart

Clinical procedures in periodontal therapy. STOMATOL

429.03. Periodontal Therapy. (6) W. Prerequisite: Perio 429.02. Clinic 18 hours.

Taggart

Advanced surgical techniques in management of periodontal lesions. STOMATOL

170.02. Chronic Illnesses. (1.5) F Seminar 1.5 hours.

Takayama

Introduction to chronic illnesses from the child's perspective. Topics include coping with a chronic illness, family dynamics, developmental aspects, impact of poverty, role of the health care provider, the team approach, community resources, and specific chronic illnesses. PEDIATRICS

180.01A-B-C-D. Adolescent Development. (2-2-2-2) § F,W,Sp,Su. Prerequisite: Consent of instructor. Seminar 2 hours.

Irwin

A four-quarter course covering the physiologic, psychologic, cognitive and social development of adolescence. 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.

Shapiro and Staff

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

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

Shapiro

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

400. Staff Conference. (1.5) Su, F,W,Sp. Interns and residents.

UC Rudolph

Conferences include house staff preparation and presentation of patient case histories with reference to the literature, laboratory work, and special studies. Faculty members and consultants from other departments as well as other universities discuss recent developments in their respective fields. PEDIATRICS

401. Pediatric-Roentgenology Conf. (1.5) Su, F,W,Sp. Interns and residents.

UC Gooding

Conferences include review and discussion of recent X-ray studies of pediatric cases in the wards and outpatient service. PEDIATRICS

402. Clinical Seminar. (1.5) Su, F,W,Sp. UC Rudolph

Seminar includes review and discussion of selected cases of unusual interest, reports on special topics with review of recent literature, and clinicopathological conferences on pediatric cases. PEDIATRICS

420. Family Interviewing Seminar. (1) Su, F,W,Sp. Prerequisite: Graduate-level student in health sciences health care providers only. Consent of instructor. Seminar 2 hours.

Baum and Staff

Seminar topics include family systems, communication patterns, family interviewing, presenting a difficult diagnosis, psychosomatic illness, chronic illness, and common behavioral problems. Teaching methods include group discussion, role play, and video taping. Emphasis is placed on learning through experience. PEDIATRICS

421. Behavioral Research Seminar. (1) F,W,Sp. Prerequisite: Graduate-level student in health sciences. Consent of instructor. Seminar 2 hours alternate weeks.

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-M.D. or graduate nursing students 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 applicability of behavioral pediatrics in clinical practice. Includes screening, temperament, attachment, and hospitalization. Supervised experiences at daycare centers and schools. Reading assignments. PEDIATRICS

423. Child Development Literature Seminar. (1) F,W,Sp. Prerequisite: Graduate-level student in health sciences and consent of instructor. Seminar 1.5 hours alternate weeks.

Tanner and Staff

This seminar presents classic theoretical and current research-based formulations of child development. Assigned literature readings are essential to seminar participation. Material covering pregnancy through school age years is presented over two-year cycle. PEDIATRICS

424. Neurodevelopmental Assessment and Therapy. (1) W. Prerequisite: By instructor approval; pediatric residents and fellows in behavioral/developmental pediatrics. Lecture 1 hour. Lab 1 hour.

Tanner and Staff

Overview of the theories and principles of neuromotor development and treatment modalities available for children with developmental disabilities. Includes assessing normal and abnormal sensory-motor development, neurodevelopmental therapy, sensory integration, pre-speech, and feeding therapy. Lecture, discussion, audiovisual aids, and patient demonstration. PEDIATRICS

450. Clinical Pediatrics-UC. (1.5 per week) Su, F,W,Sp. Interns and residents.

UC Rudolph

Residents, under supervision, are responsible for patient care in the wards and outpatient clinic including history-taking, physical examination, laboratory tests, diagnosis and treatment. In addition, the chief resident has certain administrative, teaching, and clinical responsibilities. PEDIATRICS

451. Clinical Pediatrics-SFGH (1.5 per week) Su, F,W,Sp. Residents.

M. Grossman

Residents, under supervision, are responsible for patient care in the wards, communicable disease section, and outpatient clinic including history-taking, physical examination, laboratory tests, diagnosis, and treatment. Emphasis is on diagnosis and management of infection trauma, and pediatric emergencies. PEDIATRICS

462. Clinical Primary Care. (1.5 per week) Su, F,W,Sp.

Rudolph

Interns in the Primary Care Track of Pediatrics are responsible for patient care in a multispecialty primary care clinic. Other rotations include those common to the regular Pediatrics Internship Program as well as related clinical services such as dermatology, otolaryngology. PEDIATRICS

463. Clinical Primary Care. (1.5 per week) Su, F,W,Sp.

Rudolph

Residents in the Primary Care Track of Pediatrics are responsible for patient care in a multispecialty primary care clinic. Other rotations include those common to the regular Pediatrics Residency Program as well as related clinical services such as dermatology, otolaryngology. PEDIATRICS

490. Clinical Pediatrics-SFGH (1.5 per week) Su, F,W,Sp.

M. Grossman

Interns rotate through newborn nursery, pediatric wards and clinic, communicable diseases 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

495. Clinical Pediatrics. (1.5 per week) Su, F,W,Sp. Interns.

UC Grumbach

Interns, under supervision, are responsible for patient care in the wards and outpatient clinic including history-taking, physical examination, laboratory tests, diagnosis, and treatment. PEDIATRICS

Periodontology

130. Introduction to Periodontal Therapy. (1) Su. Prerequisite: Oral Biology 108.01, 108.02, 108.03. Lecture 10 hours per quarter.

Armitage

Introduction to the diagnosis and treatment of periodontal diseases. Emphasis will be placed on examination, diagnosis, and treatment planning. The rationale and techniques for treatment of gingivitis and early periodontitis will be discussed. STOMATOL

131. Principles of Periodontal Therapy. (1) F. Prerequisite: Perio 130. Lecture 10 hours per quarter.

Armitage

Principles of periodontal maintenance therapy. Role of local and systemic factors in the pathogenesis of periodontitis. Epidemiology and natural history of periodontal diseases. The rationale and techniques for the treatment of advanced periodontitis will be discussed. STOMATOL

132. Periodontal Therapy. (2) W. Prerequisite: Perio 131. Lecture 2 hours.

Levine

Surgical periodontics and rationale for periodontal therapy. Emphasis will be placed on the rationale for various surgical modalities of treatment for periodontal diseases. Discussion of controversial treatment programs and medicolegal aspects of periodontal therapy will be included. STOMATOL

139. Clinical Periodontal Therapy. (0-4) Su, F,W,Sp. Prerequisite: Perio 129. Clinic 3 hours. Seminar 1 hour.

Armitage

Treatment of a variety of periodontal diseases under the direct supervision of faculty. Small seminar and discussion groups will review diagnosis and treatment modalities. STOMATOL

162. Periodontal Therapy. (1) W. Prerequisite: Perio 161. Lecture 1 hour.

Levine

Surgical periodontics and rationale for periodontal therapy. Emphasis will be placed on the rationale for various surgical modalities of treatment for periodontal diseases. Discussion of controversial treatment programs and medicolegal aspects of periodontal therapy will be included. STOMATOL

170A-B-C. Histopathology of Periodontium. (2-2-2) F,W,Sp. Lecture 1 hour. Lab 3 hours.

Dienstein (F,W), Ryder (Sp)

Dynamics of inflammation and its role in the periodontal tissues. STOMATOL

177. Periodontal Surgery Seminar. (2) F,W,Sp. Prerequisite: D.D.S. degree and consent of instructor. Lecture 2 hours.

Raust

Study in depth with literature review and seminar discussions on surgical techniques used to treat lesions involving the hard and soft tissue of the periodontium. STOMATOL

180. Periodontics in General Practice. (1) W. Lecture 1 hour.

Nathan

Implementation of the skills and knowledge of periodontology in the private practice environment. STOMATOL

180.01. Advanced Perio Lit. (1) F. Prerequisite: Perio 130 and consent of instructor. Seminar 1 hour.

Abe

Study in depth, with literature review and seminar discussions of areas of periodontology having major clinical significance. STOMATOL

180.02. Advanced Perio Lit. (1) W. Prerequisite: Perio 131 and consent of instructor. Seminar 1 hour.

Abe

Study in depth, with literature review and seminar discussions of areas of periodontology having major clinical significance. STOMATOL

180.03. Advanced Perio Lit. (1) Sp. Prerequisite: Perio 132 and consent of instructor. Seminar 1 hour.

Abe

Study in depth, with literature review and seminar discussions of areas of periodontology having major clinical significance. STOMATOL

181. Periodontal Surgical Techniques. (1) F. Prerequisite: Perio 132 or 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 (1) W. Prerequisite: Periodontology 132. Two hours/week over 5 sessions.

Engert, Pasquinelli

An introduction to the concept 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

189.01. Clinical Periodontics. (0-9) F,W,Sp. Prerequisite: Perio 139. Clinic variable.

Taggart

Continuation of clinical experience beyond the level of Periodontology 139 and Periodontology 149. Diagnosis, treatment planning, management and care of patients with advanced periodontal disease or the need for advanced therapy, including periodontal surgery. STOMATOL

198. Supervised Study. (1-5) Su, F,W,Sp. Prerequisite: Perio 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

199. Laboratory Project. (1-5) Su, F,W,Sp. Prerequisite: Perio 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449,

429.04. Periodontal Therapy. (6) Sp. Prerequisite: Perio 429.03. Clinic 18 hours.

Taggart

Advanced surgical techniques in management of periodontal lesions. STOMATOL

Pharmaceutical Chemistry

111. Organic Chemistry. (2) F. Lecture 2 hours.

Ketcham

Survey of basic concepts and topics in pharmaceutical chemistry, including acid/base behavior, stereochemistry, reaction mechanisms, carbohydrates, amino acids, and peptides. PHARM CHEM

112. Organic Chemistry. (2) W. Prerequisite: PC 111. Lecture 2 hours.

Miller

Continuation of PC 111 with emphasis on oxidation/reduction reactions, lipids, heterocyclic compounds, molecules containing sulfur and phosphorus and biopolymers. PHARM CHEM

113. Bioanalytical Chemistry. (2) Sp. Lecture 1 hour. Lab 4 hours.

Kahl

Lecture and laboratory experiments in identification and quantification of drugs and metabolites in biological fluids. PHARM CHEM

120. Principles of Pharm Chem. (3) § F. Prerequisite: Chemistry 113. Lecture 3 hours.

Ortiz de Montellano

A study of physicochemical and biological factors which contribute to drug action; in vivo and in vitro biotransformations of drugs and related organic compounds. PHARM CHEM

121. Principles of Pharmaceutical Chemistry. (2) W. Prerequisite: Pharmaceutical Chemistry 120 and concurrent enrollment in Pharmacology 121. Lecture 2 hours.

Kahl

A systematic survey of the chemical features of synthetic drugs, including correlations between chemical structure and biological activity. Emphasis on steroids, prostaglandins, peptide hormones, and drugs for metabolic disorders. PHARM CHEM

122. Autonomic & Cardiovascular Drugs. (3) Sp. Prerequisite: Pharmaceutical Chemistry 120. Lecture 3 hours.

Wang

A systematic survey of the chemical features of synthetic drugs, including correlations between chemical structure and biological activity. Emphasis on drugs affecting the autonomic nervous and cardiovascular systems as well as renal function. PHARM CHEM

132. Drugs Acting on CNS. (3) W. Prerequisite: Pharmaceutical Chemistry 120. Lecture 3 hours.

Gibson

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. Antibiotics/Anticancer Drugs. (2) F. Prerequisite: Pharmaceutical Chemistry 120 and concurrent enrollment in Pharmacology 134. Lecture 2 hours.

Oppenheimer

A systematic survey of the chemical features of synthetic drugs, including correlations between chemical structure and biological activity. Emphasis on anti-infective and anti-neoplastic drugs. PHARM CHEM

157. Bioanalytical Theory & Techniques. (3) W. Lecture 2 hours. Lab 3 hours.

E. Lin, W. Sadee

Analytical theory and techniques for determining drugs and metabolites in biological fluids. PHARM CHEM

170. Group Studies. (1-4) § F/W, Sp. Prerequisite: Consent of instructor and adviser.

Agabian

Group studies of selected topics in pharmaceutical chemistry. PHARM CHEM

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

Staff

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

201A. Basic Principles of Medicinal Chemistry. (2) § F. Lecture 2 hours.

Burlingame

Introduction to basic principles of medicinal chemistry, with focus on physicochemical aspects of drug-target interactions, structure and biology of drug receptors, drug metabolism-bioactivation, and pharmacokinetics and drug targeting. PHARM CHEM

201B. Medicinal Chemistry & Pharmacology of Major Drug Classes. (2) § W. Lecture 2 hours.

Sadee

A review of major drug classes with application of the basic principles of medicinal chemistry and pharmacology. PHARM CHEM

202A. Topics in Protein Structure. (2) § W. Prerequisite: Consent of instructor. Offered in alternate years (alternates with 202B). Not offered 1995-96. Lecture 2 hours.

Kuntz, Cohen

Principles and recent advances in protein structure, including experimental and theoretical approaches. PHARM CHEM

202B. Topics in Nucleic Acid Structure. (2) § W. Prerequisite: Consent of instructor. Offered in alternate years (alternates with 202A). Offered 1995-96. Lecture 2 hours.

Shafer, Shetlar

Principles and recent advances in nucleic acid structure, including experimental and theoretical approaches. PHARM CHEM

204. Introduction to Computer Programming. (3) § W. Prerequisite: Consent of Instructor. Lecture 3 hours.

Ferrin

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) § Sp. Lecture 3 hours.

Craik, Hawkes, Lameh

The emphasis of the course will be on modern principles covering structural and functional aspects of nucleic acid and proteins; molecular biochemical methodologies that focus on topics of pharmaceutical interest; basic theories of molecular biology; plasmids, bacteriophage, nucleic acid and protein characterizations, site-directed mutagenesis, hybridomas and automated microchemical methods for protein and nucleic acid sequence determination. PHARM CHEM

206. Laboratory Rotation in Pharmaceutical Chemistry. (1-5) § F/W, Sp. Prerequisite: Consent of instructor. Lab 3-15 hours.

Staff

A laboratory rotation course to familiarize new departmental graduate students with various approaches to research in the pharmaceutical sciences. PHARM CHEM

213. Kinetics of Drug Absorption & Disposition. (3) § F. Prerequisite: Chemistry 115. Calculus background is recommended. Lecture 2 hours. Conference 2-3 hours.

Öie, Giacomini

A basic study of the concentration-time course of drugs in the body, methods of pharmacokinetic analysis and modeling, and discussion of pharmacokinetic/physiologic interrelationships. Conference/workshop emphasizes problem-solving in pharmacokinetics. PHARM CHEM

214. Adv Kinetics of Absorp & Disposn. (3) § W. Prerequisite: Pharmaceutical Chemistry 213 and Biochemistry 202 or equivalents. Lecture 2 hours. Lab 3 hours.

Benet and Staff

Advanced consideration of pharmacokinetics including multicompartment models, assessment of intrinsic absorption and disposition parameters, nonlinear kinetics, and correlation of pharmacological response with the concentration-time course of a drug. Conference involves problem-solving exercises. PHARM CHEM

215. Biotechnology Industrial Rotation. (1-4) § F/W, Sp. Prerequisite: Graduate student standing/maximum of 20 students/consent of instructor. Lab 3-12 hours.

Hunt and Staff

The primary research and scientific goals of this course are to develop relevant problem-solving skills by exposing students to the differences in research and academic and industrial settings. The student and the instructor will formulate written goals and objectives; the industrial mentor will provide evaluations to both the student and the instructor. PHARM CHEM

217. Fundamentals of Targeted Drug Delivery. (2) § Sp. Prerequisite: One quarter of physical chemistry, kinetics and pharmacology, or consent of instructor.

Hunt

The physical, chemical, 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

219A. Enzymology. (3) § W. Lecture 3 hours. Offered in alternate years. Not offered 1995-96.

Santi, Kenyon

Selected topics on enzyme mechanisms. General survey of enzyme catalysis; general acid-base catalysis, proximity effects, strain and conformational change. Covalent intermediates in enzyme catalysis. The role of cofactors in enzyme catalysis. Phosphate transfer reactions. PHARM CHEM

219B. Enzyme Mechanisms. (3) § Sp. Lecture 3 hours.

Santi, Kenyon

In-depth examination of specific enzyme reactions or systems, with emphasis on structure-function. PHARM CHEM

220. Research Conf in Pharmaceutics. (1) § F/W, Sp. Lecture 1 hour.

Hunt, Lameh

A program involving the presentation of core material in pharmaceutical chemistry in the pharmaceutics pathway. The presentations are made by graduate students and examination is by a series of cumulative examinations. PHARM CHEM

221. Research Conf in Pharm Chem. (1) § F/W, Sp. Prerequisite: Graduate standing in the Department of Pharmaceutical Chemistry. Lecture 1 hour.

Kollman

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, Sp. Prerequisite: Consent of instructor. Lecture 1 hour.

Kuntz and Staff

Topics of current research interest in physical and biophysical chemistry. PHARM CHEM

225A-B. Graduate Research Opportunities. (1-1) § F/W. Prerequisite: Graduate standing in the Department of Pharmaceutical Chemistry. Lecture 1 hour.

Craig

A series of weekly presentations of the research interests of the basic science faculty. The purpose is to acquaint new graduate students with the research in the Departments of Pharmacy and Pharmaceutical Chemistry. PHARM CHEM

230A. Spectroscopy. (3) § F, Sp. Prerequisite: Chemistry 162 or equivalent. Lecture 3 hours.

Shetlar

The theory and application of molecular electronic and vibrational spectroscopy; optical rotatory dispersion and circular dichroism. PHARM CHEM

230B. Spectroscopy. (3) § F or W or Sp. Lecture 3 hours. Offered in alternate years.

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.

Basus

Laboratory work in nuclear magnetic resonance. PHARM CHEM

231. Nuclear Magnetic Resonance. (3-4) § Sp. Prerequisite: undergraduate physics or physical chemistry. Chemistry 262 is recommended. Lecture 3-4 hours.

Basus

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.

Falick

Elucidation of molecular structure, characterizations of mixtures, and quantitative measurements. Presentation of basic tools, concepts, and strategies in the complementary usage of currently available techniques in present biochemical and biomedical research. PHARM CHEM

236. Transport & Reaction Processes. (3) § Sp. Prerequisite: Chemistry 260. Lecture 3 hours.

Guy, Siegel

Basic principles applicable to transport and reaction processes in model membrane and biological systems. PHARM CHEM

237. Membrane Transport and Biophysics. (2-3) § F. Prerequisite: Pharm Chem 236, Chemistry 260. Lecture 2-3 hours.

Szoka, Guy

Biophysical consideration of membrane structure; passive and active transport mechanisms and implications for targeted and controlled drug delivery. PHARM CHEM

238. Chemistry and Physics of Polymeric Systems. (2-3) § W. Prerequisite: Pharm Chem 236, Chemistry 260. Lecture 2-3 hours.

Siegel and Staff

Chemistry and physics of polymers relevant to the design and function of programmable drug delivery systems. PHARM CHEM

239. Biotechnology Seminar. (1) § F/W, Sp. Prerequisite: Graduate student standing/maximum of 20 students/consent of instructor. Seminar 1 hour.

Hunt and Staff

This course will include lectures at UCSF from faculty and visiting scientists on topics at the cutting edge of biotechnology research in the Bay Area. Students will be able to observe and participate in exchanges of information that have the potential to redirect their research and their careers. PHARM CHEM

250. Research. (1-8) § F/W, Sp.

Staff

PHARM CHEM

260. Introduction to Molecular Modeling. (3) Sp. Prerequisite: Familiarity with UNIX. Lecture 3 hours. Offered in alternate years. Not offered 1995-96.

Ferrin, Klein, Huang, Howard

Introduction to methods used in molecular modeling, including molecular visualization, molecular mechanical force fields and their application, structure-based drug design, and a review of the uses and limitations of molecular modeling tools. PHARM CHEM

266. Research Planning Conference. (1) § F/W, Sp. Prerequisite: Consent of instructor. Lecture 1 hour.

Staff

Discussion and practice in research problem formulation and design selection. Core classes and small group sessions are organized around students' interests by faculty within the area of specialization. PHARM CHEM

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

Staff

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

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

Staff

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

Pharmacology

100A. Medical Pharmacology. (2) F. Prerequisite: Medical school 1st-year standing or consent of instructor. Lecture 2 hours. Conference 1 hour.

Katzung, Benet, Trevor, Bourne, White, Masters

General principles of pharmacology, pharmacodynamics, and pharmacokinetics. Pharmacology of antimicrobial drugs. PHARMACOL

100B. Medical Pharmacology. (3) W.

Prerequisite: Pharmacology 100A or consent of instructor. Lecture 2 hours. Conference 2 hours.

Katzung, Bourne, Burkhalter, Boushey, Olson, Ives, Masters

Pharmacology of the autonomic nervous system, the cardiovascular-renal system, the airways, and the GI tract. Introduction to toxicology. PHARMACOL

100C. Medical Pharmacology. (3) Sp. Prerequisite: Pharmacology 100A and 100B or consent of instructor. Lecture 3-4 hours.

Conference 2 hours.

Katzung, Trevor, Mitchison, Vale, Masters

Pharmacology of the central nervous system and selected topics in endocrine and cancer drug therapy. PHARMACOL

121. Pharmacology. (1) W. Prerequisite: Concurrent enrollment in Pharmaceutical Chemistry 121. Lecture 1 hour.

Masters

Systematic survey of action and uses of drugs with emphasis on steroids, hormones, and drugs for metabolic disorders. PHARMACOL

125. Pharmacology & Toxicology. (4) Sp. Prerequisite: Biochemistry 120A-B and Physiology 120 and 125. Lecture 3 hours.

Conference 2 hours.

Masters

Systematic survey of action and uses of drugs acting on autonomic nervous and cardiovascular systems and the kidneys. PHARMACOL

126B-C. Dental Pharmacology. (2, 4) W, Sp. Prerequisite: Physiology 110. Lecture 2 hours W; 3 hours Sp. Lab 3 hours Sp.

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.

Burkhalter

The occurrence, mode of action, recognition, and treatment of poisoning by environmental chemicals and therapeutic agents. PHARMACOL

134. Pharmacology. (2) F. Prerequisite: Pharmacology 125 and concurrent enrollment in Pharmaceutical Chemistry 134. Lecture 2 hours.

Masters, Guglielmo

Systematic survey of action and uses of anti-infective and anti-neoplastic drugs. PHARMACOL

136. Pharmacology & Toxicology. (4) W. Prerequisite: Pharmacology 125 and concurrent enrollment in Pharmaceutical Chemistry 136. Lecture 3 hours. Conference 2 hours.

Masters

Systematic survey of action and use of drugs acting on the central nervous system. PHARMACOL

150.01. Pharmacology Research. (1.5 per week) Su, 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

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

Staff

Group studies of selected topics in pharmacology. PHARMACOL

198. Supervised Study. (1-5) § F/W, Sp.

Staff

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

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

Staff

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

206A. Mechanisms of Drug Action. (3) § W. Prerequisite: Consent of instructor. Students must register for both Pharmacology 206A and 206B to receive full credit after completion of both quarters. Seminar 3 hours.

Bourne and Staff

Lecture/seminar dealing with fundamental aspects of interactions between chemical compounds and components of biological systems. Mechanisms of drug action at molecular, biochemical, and membrane levels are considered. PHARMACOL

206B. Mechanisms of Drug Action. (3) § Sp. Prerequisite: Pharmacology 206A. Seminar 3 hours.

Lansman

Second quarter of 2-quarter lecture/seminar dealing with fundamental aspects of interactions between chemical compounds and components of biological systems. Mechanisms of drug action at molecular, biochemical, and membrane levels are considered. PHARMACOL

208. Oxidative Drug Metabolism. (2) § W. Prerequisite: Consent of instructor. Lecture 2 hours.

Correia, Ortiz de Montellano

The biochemical, regulatory, and chemical aspects of mixed function oxygenases with particular emphasis on cytochrome P-450. PHARMACOL

220. Seminar. (0) § F/W, Sp.

Correia

Presentations by guests and staff on current research in pharmacology. PHARMACOL

250. Research. (1-8) § F/W, Sp.

Staff

PHARMACOL

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

Staff

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

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

Staff

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

300A-B-C. Teaching Practicum. (1-3, 1-3, 1-3) § F/W, Sp. Prerequisite: Advancement to candidacy for the Ph.D. degree.

Staff

Opportunity is provided to participate in a formalized way in the teaching of pharmacology under the direction of the faculty. PHARMACOL

114. Biopharmaceutics & Biotechnology. (3) F. Prerequisite: Concurrent enrollment in Chemistry 115. Lecture 3 hours.

Cullander, Hoener

A study of the physical, chemical, and biological factors which interact and dominate the design of dosage forms as drug delivery systems. PHARMACY

117. Biostatistics. (2) Sp. Lecture 2 hours. Siegel, Verotta
Survey of basic statistical methods useful for evaluating pharmaceutical and medical experiments and literature. Elementary theories of probability and hypothesis testing, parametric and nonparametric tests, linear regression and correlation. PHARMACY

127. Biopharmaceutics & Dispensing. (4) F. Prerequisite: Pharmacy 116 and Pharmacy Administration 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 1-2 hours.

Hoener, Giacomini
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 1-2 hours.

Oie, Upton
Continuation of Pharmacy 128. PHARMACY

150. History of Pharmacy. (2-3) F. Lecture 2 hours. Project optional.

Sadee
The historical development of Pharmacy, its relationship to other health professions, and the personalities who significantly contributed to the advancement of health care. PHARMACY

152. Special Topics in Pharmaceutics. (2) Sp. Prerequisite: Pharmacy 116 or concurrent enrollment. Lecture 2 hours.

Szoka
An intermediate course offering an opportunity to explore, in greater depth, special drug delivery systems and some fundamental relationships involved in their design or action. PHARMACY

154. Percutaneous Absorption. (2) W. Prerequisite: First-year standing. Lecture 2 hours. Offered in alternate years. Offered 1995-96.

Guy, Potts
An elective course which presents material dealing with the penetration of drugs and other chemicals across the skin. PHARMACY

164. Veterinary Products. (3) Sp. Prerequisites: Microbiology 120, 127, Pathology 135, Pharmacology 136, and Pharmacy 116. Lecture 3 hours.

Staff
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 limitations on veterinary product dispensing. PHARMACY

168. Seminar in Clinical Pharmacokinetics-UC. (2) F, W, Sp. Prerequisite: Fourth-year standing or consent of instructor. Reports and conferences 6 hours. Enrollment limited.

Upton, Winter, Benet
Discussion and review of the literature in the clinical application of pharmacokinetic principles in drug therapy. PHARMACY

168.02. Clinical Pharmacokinetics-UCI. (2) F, W, Sp. Prerequisite: Fourth-year standing or consent of instructor. Reports and seminar 3 hours. Enrollment limited.

Shimomura
Discussion and review of the literature on the clinical application of pharmacokinetic principles in drug therapy. PHARMACY

170. Group Studies. (1-4) F, W, Sp. Prerequisite: Consent of instructor.
Murch
Group studies of selected topics in pharmacy. PHARMACY

170.07. Communication Skills. (1.5) Sp. Prerequisite: First-year standing. Lab 2 hours. Seminar 1 hour. Enrollment limited.

Lem
Aspects of communication which focus on skills pertinent to contemporary pharmacy settings. Discussion of principles of communication and practice of specific techniques in simulated practice situations. PHARMACY

198. Supervised Study. (1-5) F, W, Sp. Staff
Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. PHARMACY

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

Pharmacy Administration

111. Pharmacy Laws. (2) W. Lecture 2 hours.

J.R. Nielsen
Introduction to court systems and administration boards and their relationship to the health professions. Discussion of basic principles of criminal law, negligence, and business law with particular emphasis on the legal relationship and responsibility of the practitioner to the patient. PHARMACY

112. Pharmacy Laws. (2) Sp. Lecture 2 hours.

J.R. Nielsen
A detailed examination of federal and state drug, cosmetic, and narcotic laws; their promulgation, enforcement, and effect upon the practice of pharmacy. Course involves some administrative work. PHARMACY

150. Marketing. (4) W. Lecture 4 hours. Lucaccini

An analysis of the marketing functions that facilitate the flow of pharmaceutical products from production to consumption, and of the decision-making processes of marketing institutions. Emphasis is given to the environmental factors affecting marketing decisions. PHARMACY

154. Community Pharmacy Management. (4) Sp. Prerequisite: Basic economics or consent of instructor. Lecture 4 hours. Lucaccini

Principles of management, specially directed toward developing familiarity with current problems peculiar to community pharmacy operation. Emphasis is given to elements in locating, organizing, operating, and adapting a pharmacy. PHARMACY

155. Accounting. (3) F. Lecture 1 hour. Discussion 2 hours.

Lucaccini
Consideration of the fundamental concepts of accounting and its applied uses, with special emphasis on the accounting requirements of the community pharmacy. Problem cases and demonstrations are presented. PHARMACY

160. Hlth Prof Family & Business Law. (2) Sp. Lecture 2 hours.

J.R. Nielsen
A survey of laws relating to landlord-tenant dissolution, property division, support payments, probate and decedent's estates, with particular emphasis on how pharmacists may expect their practice to be affected by these laws, and some practical preventive legal techniques. PHARMACY

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

Staff
Group studies of selected topics in pharmacy administration. PHARMACY

180A-B-C. Legal Problems in Health Care. (2-2-2) F, W, Sp. Prerequisite: Third-year standing and consent of instructor.

J.R. Nielsen
Selected problems with directed readings and library research on current legal (statutory and case law) issues affecting the delivery of pharmacy services. Discussion and paper. PHARMACY

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

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

Physical Therapy

110. Ortho & Rehab Diag/Treatment. (2) F. Prerequisite: Completion of PT 200, PT 201, PT 202 and concurrent enrollment in Pathology 135.01 or by consent of program director. Lecture 2 hours.

Hoaglund
Course presents the diagnostic, medical, and surgical principles and techniques which guide decision making and management by the orthopedic surgeon. Contraindications, precautions, and prognosis are discussed to guide the decision making of the physical therapist. PHYS THER

111. Neurology & Rehab Diag/Treatment. (3) W. Prerequisite: completion of PT 200, Anatomy 103.01, and Pathology 135.01 or by consent of program director. Lecture 2 hours.

Garcia
Course presents the diagnostic and medical principles which guide decision making and clinical management by the neurologist. Contraindications, precautions, and diagnosis of the different neurological diseases are discussed to guide decision making by the physical therapist. PHYS THER

112. Pediatrics: Diagnosis & Treatment. (1) W. Prerequisite: Upper division coursework in human development and Pathology 135.01 or by consent of program director. Lecture 1 hour.

Kaufman
Course presents the diagnostic, developmental, behavioral, and medical principles of clinical management for normal youngsters and those with acute/chronic disease. Contraindications, precautions, and prognosis are discussed as they impact physical therapy management. PHYS THER

198. Supervised Study. (1-5) S, F, W, Sp. Prerequisite: Approval by instructor.

Staff
This course is designed to permit physical therapy students to do independent clinical research under the supervision of faculty. This course can be repeated as approved by faculty. It cannot be used as a substitute for core curriculum coursework. PHYS THER

199. Laboratory Project. (1-5) S, F, W, Sp. Prerequisite: Approval of student faculty adviser and project faculty or by consent of program director.

Staff
Student conducts a laboratory research project under direction of a faculty member with the approval of the chairperson of the department. PHYS THER

200. Neuromusculoskeletal Anatomy. (6) S, F. Prerequisite: Upper division human anatomy and human physiology or consent of instructor. Lecture 3 hours. Lab 9 hours.

McKenzie
Dissection and functional anatomy of the neuromusculoskeletal system from a developmental and biomechanical perspective, with vascular and lymphatic systems related in a 3-dimensional perspective. Principles and relationships reinforced through lecture, dissection laboratories, studies of presections, and weekly integrative clinical seminars. PHYS THER

201. Kinesiology & PT Assessment. (3) S, F. Prerequisite: Completion of prerequisite coursework in kinesiology, exercise physiology, anatomy, and physiology or by consent of program director. Lecture 1 hour. Lab 6 hours.

Richards, Byl
Application of surface anatomy, structural and biomechanical principles to normal trunk and extremity motion within the physical therapy assessment. Principles of measurement, instrumentation, administration, and interpretation of standardized and clinical evaluation techniques reviewed in a lecture and lab setting. PHYS THER

202. Therapeutic Exer and Modalities. (2) W. Prerequisite: Completion of prerequisite coursework in exercise physiology and human physiology or by consent of program director. Lecture 1 hour. Lab 3 hours.

Richards
In lecture and laboratory setting, physiological, theoretical, and administrative principles are applied to the application of therapeutic modalities and the design and implementation of therapeutic exercise programs to prevent disability, maintain positive health, and restore function. PHYS THER

204. Advanced PT Practice & Theory II. (5) W. Prerequisite: Concurrent enrollment in the Kaiser Orthopedic Physical Therapy and Clinical Residency Program or by consent of program director. Lecture 3 hours. Lab 6 hours.

Staff
Course includes prioritizing patient complaints, progressing treatment at optimal rates, discharge planning, home exercise programs, ergonomic analysis, function assessment and advanced treatment techniques for the neck, thoracic, lumbar spine, foot/ankle, wrist/hand, shoulder, sacroiliac, and lower extremity joints. PHYS THER

205. Functional Anatomy Review. (1.5) S, F. Prerequisite: PT 200 or equivalent. Lecture 1 hour. Lab 1.5 hours.

McKenzie
This course is designed for physical therapists. Using prosected (and/or dissected) cadavers, the student is expected to relate the structures to clinical kinesiology, biomechanics, and the pathological state. Students are expected to critically review research in applied anatomy. PHYS THER

206. PT Diagnosis of Physical Dysfunction. (1-4) F, W, Sp. Prerequisite: Consent of program director. Lab 3-12 hours.

Byl, Melnick, Richards, McKenzie, Radtka, Arriaga
Using clinical case examples, patient care situations, directed observation, screening, lectures, demonstrations, and clinical measurements, the students will learn how to apply the principles of problem solving and classifying problems of physical dysfunction. PHYS THER

210. Pharmacology & Radiology for PTs. (2) W. Prerequisite: Consent of program director. Lecture 2 hours.

Byl and Staff
Survey course of pharmacology and radiology of common psychological, social, and neuromusculoskeletal disability. Pharmacological topics include principles, indications, adverse reactions. Radiological topics include principles, indications, advantages and disadvantages of appropriate radiological techniques for assessing skeletal and soft tissue lesions. PHYS THER

218. Principles of Isokinetic Exercise. (3) W, Sp. Prerequisite: Permission of instructor. Lecture 2 hours. Lab 3 hours.

Sadowsky
Principles of isokinetic exercise applied to the identification, assessment, and significance of normal and abnormal muscle performance. Patient preparation, exercise and testing protocols, test result interpretation, and equipment maintenance will be emphasized. Variable lecture/laboratory ratio. PHYS THER

220. Current Topics (1) S, F, W, Sp. Seminar 2 hours.

Staff
Students, staff, or guest lecturers present selected topics, reflecting developing directions in physical therapy (e.g., pain control, rehabilitation engineering, mobilization, neuroplasticity, premature high-risk infants, TMJ problems, craniocervical therapy). May be repeated for credit when topics vary. PHYS THER

250. Research Seminar in Physical Therapy. (1-8) F. Prerequisite: Completion of PT research seminars through PT 253 or by consent of program director.

Byl
Problem solving, designs, methodologies, data analysis procedures for specific topics in basic and clinical physical therapy research. Implementation of one facet of an ongoing project, under guidance of the investigator. PHYS THER

251. Research Design and Applied Statistics. (2) F. Prerequisite: Introductory statistics and enrolled in the Graduate Program in Physical Therapy and in the second year.

Byl, Melnick
The functional application of parametric and nonparametric statistics to different types of research designs commonly used in physical therapy research. This course builds on an introductory level of statistics and provides the logic for selecting the proper tests for research in physical therapy. PHYS THER

252. Research Seminar: Critique of Physical Therapy Literature. (1) W. Prerequisite: Completion of a course in statistics or by consent of program director. Seminar 3 hours.

Byl, Sadowsky
The first seminar of a research series focusing on problems of research in physical therapy, practical statistics, writing abstracts and critiques of research publications, and learning how to organize a literature review for a research topic. PHYS THER

253. Research Seminar: Proposal Writing. (1) F, W, Sp. Prerequisite: grade B or better in PT 252 or by consent of program director. Seminar 3 hours.

Byl
Converting the research question to a research hypothesis, and proposal writing including preparation of a proposal for a research project. PHYS THER

254. Research Seminar: Data Analysis. (1) S, F. Prerequisite: Completion of PT research seminars 730, 252 and 253 or by consent of program director. Seminar 1 hour.

Byl
This is the last seminar in the research series, and includes data analysis, data interpretation, problem solving, manuscript preparation, and presentation of results to class and other professionals. PHYS THER

300. Practicum in Teaching. (1-4) F, W, Sp, SS3. Prerequisite: Enrolled in Graduate Program in Physical Therapy and satisfactory completion of PT 200. Consent of instructor.

Staff
Training in teaching in a course offered by the Graduate Program in Physical Therapy under the supervision of instructor in charge. Laboratory teaching, presentation of lecture material, experience in setting up and correcting of examinations, and participation in course. PHYS THER

410. Clinical Clerkship. (0) W. Prerequisite: Completion of academic coursework with overall B average or by consent of program director. Clinic 1 day/week.

S. Richards
Students observe and assist the physical therapy clinician in the provision of assessment, evaluation, and physical therapy treatment services in one practice setting, one day a week for 11 weeks. PHYS THER

411. Clinical Clerkship. (0) S, F. 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 Graduate Program, 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 treatment. PHYS THER

414. Clinical Clerkship. (0) S, F, W, Sp. Prerequisite: PT 410, PT 411. Open only to students enrolled in the Graduate Program. Forty hours/week for 6-12 weeks.

S. Richards
Students provide patient care under the guidance and supervision of a clinical preceptor in a clinical facility affiliated with UCSF. The student is expected to progress to increased independence of physical therapy practice. PHYS THER

418. Advanced Clinical Clerkship. (0) S, F, W, Sp.

S. Richards
This advanced clinical clerkship is specifically arranged to enable the student to develop advanced clinical skills under the supervision of a clinical preceptor in one clinical setting. Setting and emphasis will vary. PHYS THER

The following courses are offered at San Francisco State University and are part of the required core curriculum of the joint UCSF/SFSU Graduate Program in Physical Therapy. Please note that these courses are assigned semester units.

700. Comprehensive Physical Therapy Management. (3) Prerequisites: PT 201, 202, Path 135.01.

Principles of physical therapy management in acute care, emergencies, dermatological conditions, wound care, adaptive procedures and equipment, communication disorders, basic fitness testing and promotion, and rehabilitation of medical problems resulting in physical disabilities. Classwork, one unit; laboratory, two units.

701. Musculoskeletal Pathokinesiology I. (4) Prerequisites: PT 200, 201, Anatomy 103.

Normal/abnormal musculoskeletal function; therapeutic approaches to prevention, assessment, remediation of pathokinesiological conditions. Topics: overuse syndromes, traumatic conditions, fractures, arthritis patient management, therapeutic exercise, mobilization, techniques for soft tissue injuries, specialized equipment. Classwork, two units; laboratory, two units.

702. Musculoskeletal Pathokinesiology II. (3) Prerequisite: PT 701.

Advanced methods of assessment and therapeutic techniques in management of patients with musculoskeletal problems. Evaluation and application of current research. Emphasis on problem solving. Patient presentation; evaluation of new techniques. Individual and group projects. Classwork, two units; laboratory, one unit.

704. Education, Learning, and Memory in Physical Therapy. (2)

Principles of communication, attention, learning, and memory affecting physical therapist's role as an educator in individualized patient and caregiver instruction, staff development programs, community health promotion, and education. Emphasis on setting objectives, instructional strategies, documentation, measurement of progress and evaluation.

705. Administration and Organization in Physical Therapy. (2)

Specific administrative and planning skills required for physical therapy practice in various settings. Topics include: quality assurance, documentation, personnel and fiscal management, planning, contracting, health services administration, health care team, various professional and medical-legal issues affecting physical therapy.

710. Neurological Pathokinesiology I. (4)

Pathokinesiological and neuromotor principles applied to assessment and treatment of neurological dysfunction across the life span. Includes physical rehabilitation of patients with neurological impairments from trauma, infection, congenital defects, vascular and degenerative diseases. Classwork, two units; laboratory, two units.

711. Neurological Pathokinesiology II: Assessment, Prevention, and Remediation. (3) Prerequisite: PT 710.

Neuromotor and pathokinesiological principles applied to advanced techniques in management of patients with neurological disorders. Evaluation and application of research. Laboratory practice and patient demonstrations. Specialists invited to teach new techniques. Classwork, two units; laboratory, one unit.

720. Cardiopulmonary Pathokinesiology I. (2)

Principles of physical therapy in assessment and treatment of kinesiological/physiological dysfunction of cardiac and pulmonary systems. Physical rehabilitation or training for cardiac and/or pulmonary limitations arising from trauma, disease, congenital defect, or life style. Classwork, one unit; laboratory, one unit.

721. Cardiopulmonary Pathokinesiology II. (3) Prerequisites: PT 720; valid CPR certification credentials.

Principles of cardiopulmonary physical therapy applied to the identification, assessment, and significance of normal and abnormal responses to exercise. Emphasis on use of specific testing protocols, test result interpretation, and equipment maintenance. Classwork, two units; laboratory, one unit.

730. Scientific Inquiry and Research. (3)

Logic of inquiry, principles of research design, and methodologies appropriate to scholarly activity in physical therapy. Includes review and critical appraisal of current literature, problem solving in conception, design, and execution of research.

735. Psychosocial Aspects of Physical Disability. (3)

Psychosocial factors which may interact with physical therapy and affect independent functioning of disabled persons. Topics include: sexuality, loss, dependency, secondary gain, motivation, anger, providing constructive support to disabled persons, and coordination of services.

736. Ecological and Organizational Issues in Rehabilitation.

Cultural, environmental, and legislative issues affecting accessibility of physical therapy and related services. Sociocultural issues relative to quality of health as a right; influences of political and fiscal climates on trends in models of health care delivery.

737. New Dimensions in Physical Therapy. (2)

Prerequisites: PT 200 and 201. Topic to be specified in the Class Schedule. Selected topics reflecting developing directions in physical therapy (e.g., pain control, rehabilitation engineering, analysis of pathological movement, mobilization, neuroplasticity, premature high risk infants, TMJ problems, craniosacral therapy. May be repeated for a total of four credits when topics vary. CR/NC grading.

890. Research Seminar in Physical Therapy. (3) Prerequisite: PT 253.

Research designs, problem solving, methodologies, and data analysis for specific topics in basic and clinical physical therapy research. Implementation of one facet of an ongoing project, under guidance of the principal investigator. CR/NC grading only.

899. Special Study. (1-3) Prerequisite: consent of major adviser and supervising faculty member.

Independent study or research planned, developed, and completed under the direction of a faculty member. Open only to graduate students who have demonstrated ability to do independent work. May be repeated twice for a total of six units.

Physiology

100. Organ System Physiology. (6) § W. Prerequisite: Anatomy 100 and Interdepartmental Studies 100 and concurrent enrollment in Biochemistry 100; or by consent of instructor. Lecture 4 hours. Lab 4 hours. Conference 2 hours.

Bunnett
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. PHYSIOLOGY

101. Endocrinology & Gastroenterology. (5) § Sp. 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 physiologic principles. PHYSIOLOGY

110. Integrative & Nutritive Systems. (6) § Sp. 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. PHYSIOLOGY

120. Mammalian 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 mammalian organism, particularly the gastrointestinal and endocrine systems. PHYSIOLOGY

125. Mammalian Physiology. (6) F. Prerequisite: Consent of instructor. Lecture 4 hours. Lab 4 hours. Conference 2 hours.

Thrasher
Physiology of the human cardiovascular, respiratory and renal systems is stressed, with special attention to developing problem solving skills using the material. PHYSIOLOGY

125.01. Mammalian Physiology. (5) F. Prerequisite: Completion of course work in summer term or by consent of instructor. Lecture 4 hours. Conference 2 hours.

Thrasher
Physiology of the human cardiovascular, respiratory and renal systems is stressed, with special attention to developing problem solving skills using the material. PHYSIOLOGY

126. Neuroscience for Pharmacy. (4) W. Prerequisite: Physiology 125 or consent of instructor. Lecture 3 hours. Lab 1.5 hours. Conference 1 hour.

Korenbrod and Staff
Course is designed primarily for students in the School of Pharmacy. The course will present an integrated approach to the physiological operations of the nervous system and the morphological or anatomical substrates in which these occur. PHYSIOLOGY

150.01. Research in Physiology. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor. Lecture and lab to be arranged.

Staff
Individual research in endocrinology, respiratory physiology, neurophysiology, cardiovascular physiology, cell physiology, or other areas offered by individual staff members. PHYSIOLOGY

170.01. Medical Scholars Program Workshops. (1) W. Prerequisite: Consent of instructor (this course is offered as part of the UCSF Medical Scholars Program, which endeavors to encourage students to pursue careers in academic medicine).

Dallman.
Workshops in organ system physiology, offered concurrently to the first-year course, which 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. PHYSIOLOGY

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 chairperson of the department. PHYSIOLOGY

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. PHYSIOLOGY

201. Advanced Integrative Physiology. (4) § Sp. Prerequisite: Physiology 100 or equivalent. Lecture 2 hours.

Reid and Staff
The purpose of this course is to review in depth selected topics in regulatory and integrative physiology. The emphasis will be on cardiovascular, renal, and respiratory physiology, but other systems will also be covered. PHYSIOLOGY

203. Adv Topics in Cell Physiology. (4) § Sp. Seminar 4 hours.

Korenbrod, Verkman
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. PHYSIOLOGY

204. Topics in Physiology. (2-3) § Sp. Prerequisite: A minimum of six units of introductory physiology. Seminar 2 hours. Optional term paper for additional unit.

Rothman
This seminar discusses selected topics in cellular and integrative physiology. Readings are drawn from primary and secondary sources. PHYSIOLOGY

221. Molecular & Cellular Approaches to Cardiovascular Disease. (1.5) § W, Sp. Prerequisite: Physiology 100 or equivalent. Lecture 1 hour. Conference 0.5 hour.

Gold, Williams
Lectures will emphasize approaches to understanding mechanisms of disease at the molecular level. Focus will be on vascular biology and pathophysiology, and on molecular targets for therapeutics. PHYSIOLOGY

223. Physiology Research Seminar. (1) § F, W, Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

Hall
Seminar presentations by guest speakers, alternating with discussion by Physiology staff members of their current research. Each quarter, a different topic of physiological interest is the subject of guest presentations. Students may enroll for any number of quarters. PHYSIOLOGY

224. Molec Biol of Lipid Metabolism. (2) § Sp. Prerequisite: Consent of instructor. Lecture 2 hours. Offered in alternate years. Not offered 1995-96.

Taylor, Fielding
The structure and regulation of the genes and proteins that control lipid metabolism, including plasma apolipoproteins, receptors, and enzymes. Molecular and cellular biology of mammalian lipid metabolism examined with respect to regulation of various proteins involved in transport, binding, and utilization of lipids. PHYSIOLOGY

227. The Scientific Method. (2) § W. Prerequisite: Graduate or professional education in at least two of the following: biochemistry, microscopic anatomy, cellular physiology or biophysics, systems physiology, microbiology, or equivalent, or by permission of instructor. Seminar 2 hours. Offered in alternate years. Contact Oral Biology Office.

Rothman
Focus on the evaluation of modern research in the biological sciences, in terms of the consonance of particular experimental efforts with the historical and philosophic basis of scientific investigation. STOMATOL

228. Secretion. (2) § W. Lecture 1 hour. Offered in alternate years. Contact Oral Biology Office.

Rothman
Origins and experimental basis of vesicular and non-vesicular theories for the secretion 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. STOMATOL

250. Research. (1-8) § F, W, Sp. Prerequisite: Consent of instructor. Lab variable.

Staff
PHYSIOLOGY

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

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

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

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

300. Teaching Practicum. (0) § F, W, Sp. Prerequisite: Previous training in physiology and consent of instructor. Lecture and lab variable.

Staff
Practice in teaching physiology under faculty supervision. Students supervise laboratory work, conduct conferences, deliver lectures, and assist in preparing and grading examinations. Responsibilities are assigned according to the individual's stage of development. PHYSIOLOGY

301. Scientific Writing. (0) § W. Prerequisite: Consent of instructor. Seminar 4 hours.

Coleridge, Zeiger
A seminar designed to teach postdoctoral fellows and graduate students how to best put into words, tables and figures work done in the laboratory, and how to do so clearly, simply, precisely, convincingly, and briefly, so that others may understand. PHYSIOLOGY

302. Teaching Techniques. (0) § F, W. Prerequisite: Consent of instructor. Lecture 1.5 hours. Enrollment limited.

Staub
A course in teaching techniques. Students present short lectures, and videotapes of these presentations are analyzed by self- and group criticism. 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 one's identity as a physician also begins emerging in the process.

PGY I Courses—The Department of Psychiatry is currently developing new courses for PGY I residents. Please refer to the quarterly Schedule of Classes for a listing of those courses in the 400 series.

100A. Psychological Foundations of Medical Practice I. (2) F. Lecture 2 hours. Seminar 1 hour.

Cohen, Sharp
Introduction to psychological principles influencing health behaviors and the physician-patient relationship. The life cycle and cross-cultural factors are explored. PSYCHIATRY

100B. Psychological Foundations of Medical Practice II. (1) W. Prerequisite: Psychiatry 100A. Two hours per week total will vary with lectures, panels, and seminars.

Kaltreider, Cohen
The life cycle in health and illness, personality style, emotion and psychotherapy will be covered. PSYCHIATRY

110. Psychiatry Core Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 131A-B-C, Psychiatry 100A, 100B and 131A-B. Open to UCSF students only.

Kaltreider
Six-week assignment to a psychiatric service at UC 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

131A-B. Intro to Clinical Psychiatry. (2-2) W, Sp. Lecture 1 hour. Seminar 2-3 hours.

Elkin, Shuchman (A), Vinogradov, Marmar (B)
Introduction to clinical psychiatry with particular emphasis upon knowledge important in general medical practice. Course format includes lectures, small group teaching, interviewing patients, syllabus reading, and the use of clinical videotapes and film. PSYCHIATRY

140.01. Advanced Psychiatry Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Psychiatry 110 and consent of instructor.

P. Martin
Participation in psychiatric assessment and treatment, with supervision of attending and resident staff. Options include consultation-liaison service, or inpatient 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.

P. Martin
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
A 4-6 week elective rotation at the Behavioral Medicine Center and the Psychiatric Consult Service. Students given opportunity for comprehensive patient evaluation using the biopsychosocial treatment plan; participation in psychosomatic medicine research, work with interdisciplinary team. Housing provided by UCSE PSYCHIATRY

140.07. Advanced Adult Inpatient Forensic Psychiatry—AS. (1.5 per week) Su, F, W, Sp. Prerequisite: Completion of core curriculum in Psychiatry and approval of Dean's Office. Restriction: Must be by prior arrangement only. Make arrangements with Department of Psychiatry, UCSF Fresno, 2615 E. Clinton Avenue, Fresno, CA 93703. Lecture 5 hours. Seminar 2 hours. Library research 8 hours.

Leigh, Saunders
In world's largest forensic hospital, students will observe admissions, evaluations, interviews of patients with a wide spectrum of psychopathology. Will participate in treatment planning and forensic seminars. Emphasis on legal aspects of psychiatry. Room and board provided through Atascadero State Hospital. PSYCHIATRY

140.08 Consultation Clerkship—VMC. (1.5/wk) Su, F, W, Sp. Prerequisite: Psychiatry 110 and consent of Department of Psychiatry.

Ahles
Supervised evaluation and treatment of patients on the Psychiatry Consultation Service, Liaison Units, Psychosomatic Clinic, and Emergency Room. Learning opportunities include teaching rounds, consultation seminar, biopsychosocial rounds, and consultation syllabus. PSYCHIATRY

140.09 Combined Family Practice/Psychiatry Elective—VAF. (1.5/wk) F, W, Sp. Prerequisite: Psychiatry 110.

Blossom, Leigh
Integrated hands-on Family Practice and Psychiatric evaluation and treatment of patients in both Family Practice and Psychiatric Services. Geared to a comprehensive evaluation and treatment of patients. PSYCHIATRY

140.15 Continuity Clinic. (1) Su, F, W, Sp. Prerequisite: Fourth-year standing. Clinic 4 hours.

Martin
Students work in clinics/residential treatment centers 4 hours/week for 3-9 months. The specialty areas include outpatient psychotherapy, geriatrics, adolescence, substance abuse treatment, trauma, psychopharmacology. Please contact Dr. Martin for arrangements. PSYCHIATRY

150.01. Psychiatric Research. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of Department of Psychiatry.

Kaltreider, Jones
Participation according to students' level of experience in experimental work in areas such as neurophysiology, operant conditioning, psychophysiology, immunochimistry, and nonlexical communication. All work is under the close supervision of members of the faculty. PSYCHIATRY

170.02. Alcoholism. (1) F. Lecture 1 hour. P. Stewart

General issues in substance abuse as well as the pharmacologic, medical, and neurologic aspects of alcohol abuse. Treatment issues will be considered with emphasis on Alcoholics Anonymous. Family issues arising from alcohol abuse and special concerns for the health professional. PSYCHIATRY

170.17A. Issues in Psychiatry. (1-3) F, W, Sp. Prerequisite: Consent of Department of Psychiatry. Seminar 1-3 hours.

Kaltreider
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 designed according to faculty/student interests. PSYCHIATRY

170.17B. Issues in Psychiatry. (1-3) F, W, Sp. Prerequisite: Consent of Department of Psychiatry. Seminar 1-3 hours.

Kaltreider
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 designed according to faculty/student interests. PSYCHIATRY

170.17C. Issues in Psychiatry. (1-3) F, W, Sp. Prerequisite: Consent of Department of Psychiatry. Seminar 1-3 hours.

Kaltreider
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 designed according to faculty/student interests. PSYCHIATRY

170.18. Psychotherapy Research. (3) Sp. Prerequisite: Course in statistics and consent of Department of Psychiatry.

M. Horowitz
Participation in research activities at the Center for the Study of Neuroses. Lectures, laboratory, individual guidance to readings, and patient observation are included. PSYCHIATRY

170.19. Cultural Considerations in Health Care. (1) F, Sp. Lecture: 1 hour.

Lee
Introduction to the values and beliefs of various minority cultures regarding health and illness, with an emphasis on practical clinical skills in working with a diverse patient population, understanding particular psychosocial stressors relevant to minority patients, and an understanding of the historical factors which impact on the health of minority populations. PSYCHIATRY

170.20. Topics in the Psychology of Women: Feminist Persp. (1) W. 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. PSYCHIATRY

170.22. Life-Threatening Illness. (1) § W. Prerequisite: Seminar 4 hours.

Garfield
Seminar presents an effective clinical model for professionals caring for patients and families facing life-threatening illness. The format is interactive; the focus is on the sequence of events generally encountered by professional and patient from diagnosis through death. PSYCHIATRY

180. Sexual Issues in Medical Practice. (2) W. Lecture 2 hours. Prerequisite: Psychiatry 100A/B. Medical students only.

Bullard, Alperstein
Introduces sexual health as an integral part of general medical care. Course (22 hours) mandated by California legislature. Interdepartmental teaching. 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 supervision 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 interns in clinical social work. Lecture 1.5 hours.

H. Roth
This course aims at integrating developmental and clinical theories with clinical social work practice toward enhancing clinical, conceptual, and consultative knowledge and skills. PSYCHIATRY

400. Com Mental Health System. (1) Su, W. Required for first-year residents 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. PSYCHIATRY

401. Intro to Clinical Interviewing. (1) Su, W. Prerequisite: Required for first-year residents in Psychiatry. Seminar 1 hour.

Jacobs, Goldfinger
Course teaches the rudiments of interviewing psychiatric inpatients. PSYCHIATRY

402. Introduction to Psychopathology. (1) Su, W. Required for first-year residents in Psychiatry. Seminar 1 hour.

Lu
Course provides a grounding in phenomenology and descriptive diagnostic features of the major psychopathologies, including the following types of disorders: schizophrenic, affective, organic mental, severe personality, and substance abuse. PSYCHIATRY

403. Intro to Psychopharmacology. (1) Su, W. Required for first-year residents in Psychiatry. Seminar 1 hour.

Batki
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

404. Intro to Child Development. (1) Su, W. Required for first-year residents in Psychiatry. Seminar 1 hour.

Hanson
An introduction to developmental framework, with emphasis on ages 0-3 years. PSYCHIATRY

411. Forensic Psychiatry. (1.5) W. Required for second-year residents in Psychiatry. Seminar 1.5 hours.

Terr
An elective seminar discussing the major aspects of forensic psychiatry relevant to the practice of the clinician. Topics covered include competency, commitment, and criminal responsibility. PSYCHIATRY

413. Psychol Aspects of Psychr. (1) F,W. Prerequisite: Required for second-year residents in Psychiatry. Seminar 1 hour.

Marmar
Examination of neurotic and character disorders from a psychodynamic perspective. PSYCHIATRY

415. Intro to Clinical Research. (1) W. Prerequisite: Psychiatry Resident II standing. Seminar 1 hour.

Zegans, Temoshok
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 four broad paradigms: intrapsychic, sociocultural, behavioral psychological, and psychobiological. PSYCHIATRY

417. Child Psychopath/Psychotherapy. (1) Su, F. Prerequisite: Required for second-year residents in Psychiatry. Seminar 1 hour.

Binger, I. Philips
Seminar covers the theory and implementation of the technique of psychotherapy with children. Emphasis is placed on play therapy. The seminar will also cover psychopathology as manifested in children, including descriptions and possible ideologies. PSYCHIATRY

421. Psychoanalytic Psychotherapy. (1) F,W, Sp. Prerequisite: Required for third-year residents in Psychiatry. Seminar 1 hour.

Amini, Baumbacher
Course explores the application of psychoanalytic theory to psychotherapy. PSYCHIATRY

422. Social Psychiatry. (1.5) F,W, Sp. Prerequisite: Required for third-year residents in Psychiatry, or consent of instructor. Seminar 1.5 hours.

F.A. Johnson, Pearl
Course introduces residents to various aspects 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. Required for third-year residents in Psychiatry. Seminar 1 hour.

Zeitlin
Course provides a didactic introduction to the practice of outpatient group psychotherapy. PSYCHIATRY

431. Neurology. (1) W. Prerequisite: Required for fourth-year residents in Psychiatry. Lecture 1 hour.

Palatucci
Review of clinical neurology with emphasis on neurological disorders that may have psychiatric implications. PSYCHIATRY

451. Psychiatric Grand Rounds. (1.5) F, W, Sp. Lecture 1.5 hours.

Freimer
Members of the Department of Psychiatry and distinguished guests make clinically centered presentations reflecting diverse areas of the field. PSYCHIATRY

458. Research on Mental Processes. (1.5) Su, F,W, Sp. Prerequisite: Graduate standing in Psychology, or PGY 2-5 in Psychiatric Residency. Minimum commitment of one year, exception to some medical students for a one-quarter commitment. Seminar 1.5 hours.

Horowitz, Marmar, Weiss
Guided research using an apprenticeship model involving recorded information from psychotherapy, research interviews, and experimental procedures using cognitive science methods. Systematic readings in the literature on meaning structures and defensive processes, including issues of motivation, attention, learning, and emotion. PSYCHIATRY

459. Evaluation of Psychotherapies. (1.5) F,W, Sp. Prerequisite: Resident in Department of Psychiatry or consent of instructor. Seminar 1.5 hours.

Marmar
Course provides framework for residents which will enable them to take a systematic and rational approach in evaluation of various psychotherapies, including a method of assessing the conceptual consistency and validity of a given approach. PSYCHIATRY

460. Theories of Personality. (1) F,W. Prerequisite: Resident standing in Department of Psychiatry or consent of instructor. Seminar 1 hour.

E. Burke
Focus is on personality theories other than Freudian, such as Piaget, Skinner, and Rogers. Course includes an examination, study, and discussion of contemporary personality theories, their concepts, systematic application to the behavioral sciences, and research potentials. Parallel reading is required. PSYCHIATRY

462. Psychol Aspects Medication Usage. (1) F,W. Prerequisite: Consent of instructor. Seminar 1 hour.

Nevins
Course explores the psychological implications of prescribing medications. PSYCHIATRY

465. Psychobiography & Creativity. (2-5) F,W, Sp. Prerequisite: Consent of instructor. Lecture 2-5 hours.

Ostwald
Course emphasizes the effects of mental illness on the lives of artists, scientists, statesmen, and other public figures. Biographical, autobiographical, and clinical studies of exceptional people will be compared. Students will be encouraged to select individual subjects for research. PSYCHIATRY

466. Behavioral Sciences Research. (1.5) Su, F,W, Sp. Prerequisite: Consent of instructor. Lab 4.5 hours.

Callaway, Halliday, and Staff
Course consists of supervised clinical and basic research in behavioral abnormalities, psychopathology, and experimental psychiatry. Specific subjects for research are chosen in conjunction with members of the staff. PSYCHIATRY

481. Child Observation. (1) Su. Prerequisite: Required for first-year child and adolescent residents, or consent of instructor. Seminar 1 hour. Child observation 2 hours.

Hanson
Provides knowledge and experience in systemic child observation. Observe child behavior/development at Child Care/Study Center. Seminar presentation of observation and experiences. PSYCHIATRY

482. Growth & Development Seminar. (1) F,W, Sp. Prerequisite: Required for first-year child psychiatry fellows, or consent of instructor. Seminar 1 hour.

Siegel, Lieberman
Provides theoretical understanding of normal growth and development. Format is primarily presentations and group discussions. PSYCHIATRY

483. Interviewing Techniques and Psychotherapy of Children. (1) Su, F,W, Sp. Prerequisite: Required for first-year child and adolescent psychiatry residents, or consent of instructor. Seminar 1 hour.

Hanson
This course will consist of observation of interviews of children with instructor's comments; pertinent readings will be discussed. Presentations on specific topics will be made by faculty and trainees. PSYCHIATRY

484. Family Therapy Techniques. (1) SS1, SS2, Su, F,W, Sp. Prerequisite: Required for first-year child and adolescent psychiatry residents, or consent of instructor. Lecture 1.5 hours.

Hanson, Epstein
Family therapy seminar focuses on teaching the history, theory, and practice of family therapy. The course includes didactic material, videotape of past and current cases and teaching with families using the one-way mirror. PSYCHIATRY

485. Psychopathology Literature Sem. (1) F,W, Sp. Prerequisite: Required for first-year child psychiatry fellows, or consent of instructor for others. Seminar 1 hour.

Rubenstein and Staff
Extensive review of pertinent readings in child and adolescent psychiatry. PSYCHIATRY

486. Devel Disabilities Seminar. (2) Su. Prerequisite: Required for first-year child psychiatry fellows, or consent of instructor. Seminar 2 hours.

Hanson
Lectures focus on mental retardation, deafness, blindness, and cerebral palsy, with emphasis on the developmental, family, and social aspects. PSYCHIATRY

487. Adolescent Continuous Case Seminar. (1.5) F,W, Sp. Prerequisite: Required for second-year child psychiatry fellows, or consent of instructor for others. Seminar 1.5 hours.

Gelber
Participation with senior staff member to discuss ongoing dynamics of psychotherapeutic work with adolescents. PSYCHIATRY

488. Child Psychiatry Clinical Conf. (1.5) F,W, Sp. Prerequisite: Required for first- and second-year child psychiatry fellows, or consent of instructor for others. Conference 1.5 hours.

Sikorski
The Child and Adolescent Service has developed a continuing education program of distinguished speakers in the field of child psychiatry and related disciplines. Clinical problems and mini-courses are presented. PSYCHIATRY

489. Social & Legal Issues: Their Impact on Clinical Practice. (1) W, Sp. Prerequisite: Required for first-year child psychiatry fellows; others with the consent of the instructor. Seminar 1 hour.

Hanson, Simpson
Covers current social and legal issues, policy questions, mental health legislation, and major court decisions which have impact on clinical practice and services. Areas included: divorce and child custody/support, domestic violence, day care, juvenile justice, schools, and cross-cultural psychiatry. PSYCHIATRY

490. Psychological & Educational Evaluation. (0.5) Su. Prerequisite: Required for first-year child psychiatry fellows or consent of instructor for others.

D. Morrison
Seminar is focused on the most common and prevalently used methods of assessing intelligence, educational achievement, perceptual-motor integration, and personality in children. Actual testing materials as well as supporting research are covered. Participation is required. PSYCHIATRY

491. Res Methodology in Child Psychr. (1) F,W, Sp. Prerequisite: Required for second-year child psychiatry fellows, or consent of instructor. Seminar 1 hour.

D. Morrison
Review of basics of experimental design and methodology such as reliability and validity of measuring techniques, statistical inference, control group designs, and pre- and post-test designs. Clinical research with children provides a focus for discussion of relevant issues. PSYCHIATRY

492. Ped Consultation Orientation. (1.5) Su. Prerequisite: Required for second-year child psychiatry fellows, or consent of instructor. Seminar 1.5 hours.

Shatkin
Discussion of goals, attitudes, and skills required in child psychiatry consultation/liason work. PSYCHIATRY

493. Pediatric Consultation Seminar. (1.5) F. Prerequisite: Required for second-year child psychiatry fellows, or consent of instructor. Seminar 1.5 hours.

Shatkin
Discussion of formal consultations of cases requested by the Pediatric Inpatient Service, Child Study Center, Family Medicine Clinic, etc. PSYCHIATRY

494. Com Consultation Literature Sem. (1) Su. Prerequisite: Required for second-year child psychiatry fellows, or consent of instructor. Seminar 1 hour.

Reece, Sikorski
Review of literature and discussions on community consultation. PSYCHIATRY

495. Child Continuous Case Seminar. (1.5) F,W, Sp. Prerequisite: Required for second-year child psychiatry fellows, or consent of instructor for others. Seminar 1.5 hours.

Amini
Participation with senior staff member to discuss ongoing dynamics of psychotherapeutic work with a preschool or latency-aged child. PSYCHIATRY

496. Teaching & Supervision Seminar. (1) Su, F,W, Sp. Prerequisite: Required for second-year child psychiatry fellows, or consent of instructor. Seminar 1 hour.

O'Byrne
Discussion of supervision of general psychiatry residents and medical students. PSYCHIATRY

497. Adolescent Psychiatry. (1) F,W, Sp. Prerequisite: Required for second-year child psychiatry fellows, or consent of instructor. Seminar 1 hour.

M. Schwartz
Discussion of clinical problems of adolescents. PSYCHIATRY

498. Biological Basis of Child & Adolescent Psychiatry. (1) SS2. Prerequisite: Required for first-year child psychiatry fellows. Seminar 1 hour.

Binger, Lowe
Review of biological bases and psychopharmacological approaches to child and adolescent psychiatry. PSYCHIATRY

499. Child and Adolescent Forensic Seminar. (0.75) Su. Prerequisite: Required for second-year child psychiatry fellows. Seminar 2 hours.

Terr
A seminar discussing the major aspects of forensic child and adolescent psychiatry relevant to the practice of the clinician. Topics covered include childhood sexual abuse, trauma, court evaluations, and custody issues. Required for Child Psychiatry Fellows. PSYCHIATRY

Psychology

180.05. Stress among Hlth Professionals. (2) § F. 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. Requires prior consent of instructor. Lecture 2 hours. Seminar 1 hour.

Galín and Staff
An extensive survey of techniques and strategies emphasizing critical appreciation rather than how-to-do-it. Topics include clinical lesion studies, microscopic anatomy, neuro-radiology, neurochemistry, psychopharmacology, autonomic psychophysiology, scalp electrophysiology, behavioral genetics, neuropsychological assessment. PSYCHIATRY

180.09. Neuropsychology of Dissociation. (3) § F. Prerequisite: Prior consent of instructor. Seminar 3 hours.

Galín
Topics in Neurological Disconnection and Psychological Dissociation: an advanced seminar considering cognitive and neuropsychological aspects of integration and fragmentation of the whole person. Topics will vary from year to year. Examples are split-brain syndromes, hypnosis, and multiple personality disorder. PSYCHIATRY

181.02. Cerebral Hemispheric Specialization. (2) § Sp. Prerequisite: Background in neurophysiology, anatomy, cognitive psychology; intended for advanced students.

Requires prior consent of instructor. Seminar 2 hours.

Galín
Group discussions of readings in seminar format of neuropsychology of hemispheric specialization and integration; developmental, psychiatric, and educational implications; evaluation of data from study of brain lesions, electrophysiological recordings, and behavioral testing. PSYCHIATRY

181.07. Coping with Stress in Med School. (1) § F,W, Sp. Seminar 1 hour. Enrollment limited. Priority given to medical students.

Blackwell
Consideration of psychological processes utilized under stress and of alternative constructive methods for coping, with practice in using these techniques. Course is designed to help students handle stress and apply such principles to management of patients. PSYCHIATRY

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

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

212. Psychological Stress & Coping. (4) § Sp. Prerequisite: Consent of instructor. Seminar 4 hours. Offered in alternate years. Not offered 1995-96.

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

230. Physiology for Health Psychologists. (4) § F. Prerequisite: Graduate standing in Health Psychology program or consent of instructor. Lecture 4 hours. Offered in alternate years. Not offered 1995-96.

Naifeh
An overview of major organ systems of the human body stressing psychological impacts on their functioning and psychological consequences of abnormality. Course will prepare student for reading medical literature and interacting effectively with health professionals in planning research. PSYCHIATRY

236A-B-C. Human Neurophysiology. (1-1-1) § F,W, Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

Yingling
A journal club format seminar course which will examine the current literature in human EEG and evoked potentials, with emphasis on identification of cerebral sources. Students will make oral class presentations. PSYCHIATRY

237. Neurophysiological Mech of EEG. (3) § W. Prerequisite: At least one course in physiological psychology or neurobiology, or consent of instructor. Lecture 1 hour. Seminar 2 hours.

Yingling
Course will examine the neuroanatomical and neurophysiological mechanisms underlying the generation and regulation of EEG and Event-related Potentials, their measurement and clinical uses. Emphasis on the nature and limitations of inferences concerning brain activity obtainable from scalp recordings. PSYCHIATRY

248. Independent Study. (1-6) § F,W, Sp. Prerequisite: Consent of instructor.

Staff
Independent study under the supervision of a member of the faculty. PSYCHIATRY

250. Research. (1-8) § F,W, Sp. Staff

PSYCHIATRY
254A. Research Methods. (4) § Sp. Prerequisite: Consent of instructor. Lecture 4 hours. Offered in alternate years. Not offered 1995-96.

N. Adler
An overview of research strategies and their associated strengths and weaknesses, experimental and quasi-experimental designs, correlational approaches, interview techniques, survey and questionnaire construction, uses of archival data, and observational techniques. PSYCHIATRY

254B. Research Methods. (4) § Sp. Prerequisite: Consent of instructor. Lecture 4 hours. Offered in alternate years. Not offered 1995-96.

N. Adler
An in-depth study of the research process with emphasis on quasi-experimental design, ethics of research and grant writing. PSYCHIATRY

260. The Health System. (4) § W. Prerequisite: Graduate standing in Health Psychology Program, or consent of instructor. Lecture 2 hours. Seminar 2 hours. Offered in alternate years. Offered 1995-96.

Attkisson
Function and tasks of the health system with emphasis on the study of health service organizations and health services delivery from the perspective of living systems theory and organizational psychology. PSYCHIATRY

265. Stress & Bodily Disease. (4) § Sp. Prerequisite: Consent of instructor. Seminar 4 hours. Offered in alternate years. Offered 1995-96.

F. Cohen
Examination of the psychological and physiological models and empirical research linking stress and other psychological factors to the development of bodily disease. PSYCHIATRY

266. Reproductive Behavior. (3) § Sp. Prerequisite: Consent of instructor. Seminar 3 hours. Offered in alternate years. Offered 1995-96.

N. Adler
Examination of the role that psychological and social factors can play in a variety of reproductive behaviors: pregnancy, obstetrical complications, postpartum reactions, infertility, contraceptive use and nonuse, spontaneity and induced abortion. PSYCHIATRY

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

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

300. Teaching Practicum. (0) § F,W, or Sp. Prerequisite: Consent of instructor. Lecture and lab variable.

Staff
Supervised classroom or tutorial teaching experience. PSYCHIATRY

Radiation Oncology

140.01. Radiation Oncology Clerkship-UC. (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 131A-B-C.

Larson
Participation in examination of cancer patients under treatment in radiation oncology. Students participate in rounds, conferences, and clinics, and see demonstrations on the use of newer radiotherapeutic techniques. RADIOLOGY

140.06. Radiation Oncology Clerkship-MZ. (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 131A-B-C.

Margolis, Meyler
Participation in examination of cancer patients under treatment in the Claire Zellerbach Saroni Tumor Institute at MZ. Students participate in rounds, conferences, and clinics, and see demonstrations on the use of newer radiotherapeutic techniques. RADIOLOGY

403. Radiation Oncology Grand Rounds. (1) Su, F,W, Sp. Lecture 1 hour.

T. Phillips
Rounds include presentation of problem cases with discussions of diagnosis and treatment as well as biologic implications. Frequent guest lectures are used to cover important aspects of oncology. RADIOLOGY

404. Cancer Specialty Seminar. (3) Su, F, W, Sp. Seminar 3 hours.

T. Phillips
Seminars include discussions of the diagnosis, treatment, and results of specialty oncology problems, including head and neck, gynecologic, otolaryngologic, pediatric, dermatologic, lymphomatous, and general malignancies. RADIOLOGY

423. Therapeutic Treatment Planning. (10) Su, F,W, Sp. Prerequisite: Residents assigned to therapeutic radiology. One-month workshop course.

V. Smith
A workshop course to provide residents in therapeutic radiology with the elements of treatment planning and dose calculations. RADIOLOGY

424. Therapeutic Radiology Physics. (1) F,W, Sp. Prerequisite: Residents assigned to therapeutic radiology. Lecture-seminar 1 hour.

Weaver
A lecture-seminar course with practical sessions to provide the resident with a basic knowledge of radiological physics with special reference to those aspects relating to therapeutic radiology. RADIOLOGY

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. RADIOLOGY

Radiology

100. Intro to Clinical Radiology. (2) W. Prerequisite: Anatomy 100, 100B, 103, and Pathology 102. Concurrent enrollment in Medicine 131A-B-C. Lecture 2 hours. Lab 1 hour.

J. LaBerge

Course provides instruction in basic aspects of therapeutic and diagnostic radiology and nuclear medicine. Illustration of diagnostic and therapeutic modalities in specific disease states provides instruction in use of radiologic resources. RADIOLOGY

140.01. Advanced Roentgen Diagnosis. (1.5 per week) Su, F, W, Sp. Prerequisite: Radiology 140.03 or 140.09 or 140.17. Consent of instructor.

H. Goldberg

Advanced clinical clerkship for students interested in a career in academic radiology. Students observe clinical work, observe or participate in research, and write a term paper. RADIOLOGY

140.02. Off-Campus Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 131A-B-C.

H. Goldberg

Clinical clerkship in approved hospital by special arrangement and approval of the chairperson of the department and the dean. RADIOLOGY

140.03. Diagnostic Radiology. (1.5 per week) Su, F, W, Sp. Prerequisite: Third-year Medicine 131A-B-C. Fourth-year Medicine 110 and Surgery 110.

H. Goldberg

Clerkship in radiology for third- and fourth-year students. Observation of procedures, review of pathology, pathophysiology, diagnosis, and natural history of selected diseases through study of roentgenograms with case histories. Potentials and limitations of radiologic method included. RADIOLOGY

140.04. Nuclear Medicine. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 131A-B-C.

Hatner

Observation of basic nuclear medicine procedures and participation in diagnostic tests employing radioisotopic tracers. RADIOLOGY

140.09. Diagnostic Radiology-SFGH. (1.5 per week) Su, F, W, Sp. Prerequisite: Fourth-year standing or consent of instructor.

Minagi

Students serve a clerkship in the Diagnostic Section of the Department of Radiology. They observe performance of radiologic procedures and interpretation of films, attend conferences, and learn basic philosophy of conducting radiologic examinations and the basic rules of interpretation. RADIOLOGY

140.14. Diagnostic Radiology-VAF & VMC. (1.5 per week) Su, F, W, Sp. Prerequisite: Fourth-year standing, or third-year standing with consent of instructor.

M. Anderson, J.L. Williams, and Staff Acquaints students with available techniques in diagnostic radiology, including nuclear medicine, ultrasound, computed tomographic scanning, angiography, other special procedures, conventional X-ray examination, fluoroscopy, and provides an introduction to "routine" film interpretation. Students have assignments at VAF, VMC, community hospitals. RADIOLOGY

140.16. Basic Nuclear Medicine-STA. (1.5 per week) Su, F, W, Sp. Prerequisite: Fourth-year standing.

Bobba

Imaging techniques including nuclear cardiology, single photo emission tomography, and computerized processing at St. Agnes Medical Center, Fresno. RADIOLOGY

140.17. Clinical Radiology. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor.

McCowan

Students may be involved in clinical diagnostic procedures such as body and neuro computed tomography, ultrasound, fluoroscope, chest, bone, and interventional radiography, with concentration on any one of these areas. Clinical or research projects may be undertaken with permission of the instructor. RADIOLOGY

140.22A. Cardiovascular Imaging Problems. (1.5 per week) F Restriction: 4th-year medical students only. Lecture, seminar, and independent study 40 hours per week.

Lull, Lim

Lectures, student observation of imaging procedures, library research, case discussion, seminars, and problem-oriented student reports and presentations are used to demonstrate the physiological basis for logical selection of imaging procedures to solve clinically common cardiovascular problems. RADIOLOGY

150.01. Research in Radiology. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and approval of instructor. For students seriously interested in a career in academic medicine.

H. Goldberg

A research project under the direction of a member of the faculty. RADIOLOGY

170.01. Clinical Application of Anatomy & Pathology. (1-2) F, W, Sp. First-year standing. Lecture 1-2 hours.

S. Ross, Colangelo

Course demonstrates anatomy in the living through the use of radiographs. Objectives are to show the usefulness of knowing anatomy, to begin acquiring a medical vocabulary, the elements of clinical thinking, and useful habits in learning. RADIOLOGY

170.02. Clinical Application of Anatomy & Pathology. (1-3) F, W, Sp. Second-year standing. Lecture 1-3 hours.

S. Ross, Colangelo

A lecture course limited to small groups, with active participation on selected aspects of pathological anatomy and its usefulness in understanding disease, its origins, development, and clinical manifestations. RADIOLOGY

170.08. Nuclear Medicine Physics & Imaging. (2) F, W. Prerequisite: B.A. or M.D. degree. Given concurrently with Radiology 170.09. Lecture 2 hours a week for 6 weeks. Independent study 10 hours.

Perez-Mendez

Introduction to the physics of radioactivity, nuclear instrumentation and gamma-ray imaging techniques. RADIOLOGY

170.09. Introduction to Nuclear Medicine. (3.5) Su, F, W, Sp. Prerequisite: Given concurrently with Radiology 170.08. Lecture 5 hours a week for 6 weeks. Independent study 10 hours.

D. Price

Introduction to basic nuclear medicine diagnostic procedures, both in vivo and in vitro, and therapy with radiopharmaceuticals. RADIOLOGY

170.10. Radiologic Aspects of Surgery. (1) Su, F, W, Sp. Prerequisite: Third-year surgery. Seminar 1 hour.

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

170.11. Emergency Radiology. (1) Su. Lecture 1 hour.

Minagi

An elective course for fourth-year medical students. Consideration of the role of the radiologist as a consultant in the emergency room. Topics covered include head injuries, fractures, dislocations, chest, abdominal and genito-urinary trauma, and management of contrast reactions. RADIOLOGY

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

J. LaBerge

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

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

J. LaBerge

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

220. Radiol Physics for Physicists. (2) § F, W, Sp. Prerequisite: Bachelor's or higher degree in the physical sciences.

Staff

Seminars provide physicists with an in-depth knowledge of radiological physics. RADIOLOGY

400. Diagnostic Radiology Seminar. (1) Su, F, W, Sp. Lecture 1 hour.

Thoeni

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

401. Diagnostic Case Rounds. (2) Su, F, W, Sp.

Thoeni

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

402. Diagnostic Specialty Seminar. (3) F, W, Sp. Required for UC residents in diagnostic radiology.

Thoeni

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 orthopaedics. RADIOLOGY

403. Emergency Radiology. (1) F, W. Prerequisite: Required for first-year residents in radiology. Lecture 1 hour.

Minagi

Role of radiologist as consultant in the emergency room; head injuries, fractures, dislocations, blunt and penetrating chest trauma, blunt and penetrating abdominal trauma, trauma to genito-urinary system; management of contrast reactions; indications for, conduction of, interpretation of special radiologic procedures. RADIOLOGY

405. Radiological Research. (1-8) Su, F, W, Sp. Elective.

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

408. Radiology Specialty Seminar-SFGH. (3) Su, F, W, Sp.

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, clinicopathological conferences, and other department grand rounds. RADIOLOGY

409. Radiology Specialty Seminar-VA. (3) Su, F, W, Sp. Seminar 3 hours.

Akin

Interdepartmental seminars in which the radiological picture of problem cases either of diagnostic or therapeutic nature is presented. These include medical-surgical, clinicopathological, chest, medical X-ray, rheumatology, neurology, and neurological surgery conferences; consultative tumor board; and surgical and orthopaedic grand rounds. RADIOLOGY

410. Radiat 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 intragenic and intergenic mutations that give insight into the structure of chromosomes and interaction of radiation with biological material. RADIOLOGY

412. Pathology. (1) Su, F, W, Sp.

VA Hinchcliffe

Course includes review of surgical pathology material and attendance at autopsy rounds. RADIOLOGY

414. Physics of Diagnostic Radiology. (2) W, Sp. Lecture 1.5 hours. Lab 2 hours.

R. Gould

Course is designed to acquaint residents with the physical principles of diagnostic radiology. Topics include generation and extraction of radiologic information, image conversion, recording methods, and special-purpose equipment. CT and ultrasound physics are discussed. RADIOLOGY

419. 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 biochemistry, and experimental methods for studying cell proliferation in vivo and in vitro. RADIOLOGY

420. Nuclear Medicine Seminar. (1) F, W, Sp.

Hatner and Staff

Rotating assignments of topics for discussion by residents in nuclear medicine training programs in all affiliated hospitals. Critical reviews of available information in limited areas are used to provide a broad review of nuclear medicine for all trainees. RADIOLOGY

450. Clinical Nuclear Medicine. (1.5 per week) Su, F, W, Sp.

Hatner 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

451. Clinical Diagnostic Radiology. (1.5 per week) Su, F, W, Sp. Prerequisite: Radiology 450.

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 duties relative to the resident training program. RADIOLOGY

452. Clinical Diagnostic Radiology. (1.5 per week) Su, F, W, Sp. Prerequisite: Radiology 450.

VA Akin

Residents, under supervision, are responsible for the diagnostic activities of the department, including diagnostic consultations and reports, history-taking, and physical examinations. In addition, the chief resident has certain administrative duties relative to the resident training program. RADIOLOGY

453. Clinical Radiology. (1.5 per week) Su, F, W, Sp. Prerequisite: Radiology 450.

SFGH Minagi

Residents are responsible for the diagnostic activities of the department under the direction of staff radiologists including diagnostic consultations and reports, history-taking, and physical examinations. RADIOLOGY

Removable Prosthodontics

400. Approaches to Maxofac Prosthod.

(1) F, W, Sp. Lecture 1 hour.

Sharma

Course is designed to acquaint residents with multidisciplinary aspects of maxillofacial prosthetics. Lectures will be given on maxillofacial prosthetic techniques, oncology, head and neck surgery, plastic surgery, oral surgery, therapeutic radiology, psychology and related oral biology. RESTOR DENT

489.01. Clinical Maxillofacial Prosthod. (1-6) F, W, Sp. Lab variable.

Sharma

Residents and advanced prosthodontic students will observe and perform maxillofacial prosthodontic services for patients in the Maxillofacial Clinic. A detailed case history will be required each quarter. Attendance at related tumor board conferences and field trips to other therapy centers. RESTOR DENT

Restorative Dentistry

110A. Introduction to Dental Morphology. (1) F Prerequisite: Concurrent enrollment in RD 115A. Lecture 1 hour.

Douglas

Introductory lecture topics include tooth morphology, development and form of primary and permanent dentition. RESTOR DENT

110B. Diseases Affecting Tooth Morphology. (1) W. Lecture 10 hours per quarter.

Hume

The morphological consequences of dental caries on tooth structure, risk factors in dental caries related to tooth morphology, and general concepts of restoration of carious defects in teeth. RESTOR DENT

112. Procedures in Operative Dentistry. (0-2) W, Sp. Restriction: Concurrent enrollment in RD 115.10. Lecture 20 hours.

D. Graham

Lectures on the fundamentals of preparing teeth to receive restorations with emphasis on the placement of amalgam restorations. RESTOR DENT

113B. Occlusion. (1) W. Prerequisite: RD 110A, RD 115A. Lecture 1 hour.

C. McNeill

Introductory lecture course. Topics include the application of individual tooth and arch forms to interarch relationships. RESTOR DENT

113C. Occlusion. (1) Sp. Prerequisite: RD 113B. Lecture 1 hour.

C. McNeill

Continuation of introductory lectures on the topic of the application of individual tooth and arch forms to interarch relationships. RESTOR DENT

114 Introductory Biomaterials Science. (1) Sp. Lecture 1 hour.

S. Marshall

Lectures focus on characteristics of the oral environment, basic properties of materials and teeth, and study of simple materials used to restore intracoronal defects in teeth to function. RESTOR DENT

115A-B. Dental Morphology. (0-3) F, W. Lab 90 hours.

Mendoza

Laboratory course to study tooth morphology, occlusion, and the relationship of tooth form and function. RESTOR DENT

115C. Dental Morphology. (1) Sp. Concurrent enrollment in RD 113C required. Lab 3 hours.

Douglas

Continuation of RD115A/B to include laboratory experience in mounting dental casts, centric relation, and adjustments of cast to appropriate anatomical relationships. RESTOR DENT

115.10. Operative Dentistry Laboratory. (0-2) W, Sp. Concurrent enrollment in RD 112B/C required. Lab 60 hours.

Graham

Laboratory course provides the fundamentals of preparing teeth to receive restorations emphasizing proper placement of amalgam restorations. RESTOR DENT

120A. Procedures in General Restor Dent. (4) F Prerequisite: RD 111C, RD 112C, RD 113C, RD115.10C. Concurrent enrollment in RD 125A required. Lecture 6 hours/week for 4 weeks Pre-F; 2 hours/week for 10 weeks F.

Davis, Braly, Kahl, Graham

Lecture course on the materials and procedures used in the dental casting process and how to use the casting process to fabricate high-quality cast restorations. Additional lectures will provide information on the materials and procedures for tooth-colored restorations. RESTOR DENT

120B. Procedures in General Restor Dent. (1) W. Prerequisite: RD 120A, RD 125A. Concurrent enrollment in RD 125B. Lecture 1 hour.

Kahl, Mendoza

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 selection, and construction of pontics for fixed partial dentures. RESTOR DENT

120C. Procedures in General Restor Dent. (1) Sp. Prerequisite: RD 120B, 125B. Concurrent enrollment in RD 125C. Lecture 1 hour.

Kahl, Mendoza

Lectures on the composition, physical properties, and appropriate selection of porcelains used in PBM restorations, the basis for shade selection and control when using PBM porcelains, and esthetic alternatives to PBM restorations. RESTOR DENT

121B. Introduction to Removable Prosthodontics. (1) W. Lecture 10 hours.

Traweck

Lectures introduce the second-year dental student to the theory and clinical rationale of complete dental prosthodontics and prepare the student for the clinical practice phase of dentistry. RESTOR DENT

121C. Introduction to Removable Prosthodontics. (2) Sp. Prerequisite: RD 121B. Concurrent enrollment in RD 125.10C required. Lecture 2 hours.

Traweck

Continuation of introductory lectures on the theory and clinical rationale of complete denture prosthodontics. RESTOR DENT

123. Occlusion. (1) Sp. Prerequisite: RD 120B, RD 122B. Concurrent enrollment in RD 125C required. Lecture 1 hour.

McNeill

Course goal is to gain knowledge of the field of temporomandibular disorders, and the current state of the art of occlusion and TMJ. RESTOR DENT

124.01 Biomaterials Science. (1) F Lecture 1 hour. Prerequisite: RD 114.

Marshall

Lectures on adhesion and bonding to tooth structure, enamel and dentin bonding, glass ionomer materials, and porcelain fused to metal bonding. Introduction to metal alloys for intracoronal and extracoronal castings; discussion of methods for hardening and manipulation of properties. RESTOR DENT

124.02 Biomaterials Science. (1) W. Lecture 1 hour. Prerequisite: RD 124.01.

Marshall

Lectures focus on failure mechanisms of restorative materials and biocompatibility. Polymerization reactions and polymer properties will be discussed as related to impression materials and acrylic systems cement and materials used in removable partial and full dentures. RESTOR DENT

125A. Techniques in General Restorative Dentistry. (5) F

Kahl, Braly, Davis, Graham

Laboratory instruction on preparing teeth to receive restorations, the basic principles of cavity design and preparation for amalgam, tooth-colored, and cast gold inlay and onlay restorations, preparing teeth for single unit partial and full metal crowns, design and fabrication of metal pontics, techniques in assembly and soldering of components of fixed partial dentures. RESTOR DENT

125B-C. Fixed Prosthodontics Laboratory. (3) W, Sp. Prerequisite: Concurrent enrollment in RD 120B and 120C (Sp). Lab 3 hours spring, 6 hours winter.

Kahl, Mendoza

Laboratory instruction on preparation for and construction of maxillary posterior fixed partial denture and a provisional bridge; preparing anterior teeth for partial crowns; casting metal copings for porcelain bonding; applying porcelain to metal copings. RESTOR DENT

125.10B. Introduction to Removable Prosthodontics. (2) W. Lab 60 hours.

Traweck

Laboratory course introduces second-year dental students to the clinical rationale and laboratory procedures of complete denture prosthodontics and prepares the student for the clinical practice of this phase of dentistry. RESTOR DENT

125.10C. Removable Prosthodontics Lab, Complete Dentures. (2) Sp. Prerequisite: RD 121B, 125.10B. Concurrent enrollment in RD 121C required. Lab 6 hours.

Traweck

Continuation of introductory laboratory instruction on the fabrication and repair of complete dentures. RESTOR DENT

126.01. Introduction to Endodontics. (2) F. Lecture 1 hour. Lab 3 hours.

Goods

Introductory lectures and laboratory in endodontics. Lectures discuss nonsurgical endodontics and the rationale of endodontic treatment. Laboratory introduces students to the armamentarium and clinical techniques of nonsurgical endodontics. RESTOR DENT

126.02. Introduction to Endodontics. (2) W. Lecture 1 hour. Lab 3 hours.

Goodis, Braly

Lectures discuss selection of appropriate treatment for the build-up of missing tooth structures in vital and pulpless teeth, identification and removal of caries from infected teeth, and selection of appropriate bases, liners, and interim restorations. Laboratory provides experience with the armamentarium and clinical techniques. RESTOR DENT

127. Tooth-Colored Restorations. (1.5) Sp. Lecture 10 hours. Lab 15 hours.

Graham

Lectures describe esthetic alternatives in dentistry including indications and contraindications for various materials and procedures, emphasizing porcelain veneers and conservative posterior restorations. Laboratory instruction demonstrates tooth preparation for esthetic restorations and familiarizes students with various materials and clinical techniques. RESTOR DENT

130.01. Clinical Procedures in General Restor Dent. (2) Su/S1, SS2. Prerequisite: RD 120C, 121C, 123, and 126C. Lecture 1 hour.

Pelzner

Lecture taken concurrently with RD 139 intended to supplement the beginning clinician's knowledge of materials, techniques, and management of the situations most frequently encountered early in the student's clinical experience. RESTOR DENT

130.02. Clin Procedures in General Restor Dent. (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 using composite resin, recurrent caries and bonding to tooth structure, and clinical considerations in using dental amalgam. RESTOR DENT

130.03. Clin Procedures in General Restor Dent. (1) W. Prerequisite: RD 130.02. Lecture 1 hour.

Eakle

Lecture series covering the basic procedures and materials used for single-tooth restorations using direct filling gold and cast gold. RESTOR DENT

130.04. Clin Procedures in General Restor Dent. (1) Sp. Lecture 1 hour. Prerequisite: RD 130.03.

Lacy

Survey of new dental materials and clinical techniques in esthetic restorative dentistry, i.e. esthetic posterior restorations, anterior veneers, bonded bridges, and intraoral porcelain repair. Discussion includes advantages, disadvantages, indications, and contraindications of treatment options presented. RESTOR DENT

131. Biomaterials Science. (1) F. Prerequisite: RD 130.01. Lecture 1 hour.

Lacy

Lectures 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. (2) Su. Prerequisite: RD 121C and 125.10C. Lecture 20 hours per quarter.

Finzen

This course introduces clinical procedures of complete denture diagnosis, treatment planning, and fabrication. It draws background information from concepts presented in the second-year preclinical prosthodontics courses, but the emphasis is on the clinical management of edentulous patients. RESTOR DENT

131.02. Clin Procedures in Removable Prosthodontics. (1) F. Prerequisite: RD 131.01. Lecture 1 hour.

Finzen

Course continues topics pertinent to 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. Clin Procedures in Removable Prosthodontics. (1) W. Prerequisite: RD 131.02. Lecture 1 hour.

Yonemura

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. Clin Procedures in Removable Prosthodontics. (1) Sp. Prerequisite: RD 131.03. Lecture 1 hour.

Curtis

Course presents various topics in the field of prosthodontics. Areas pertinent to removable partial dentures are covered along with the subjects of dental implants, maxillofacial, and geriatric prosthodontics. RESTOR DENT

132.01. Endodontics: Theory. (1) F. Prerequisite: RD 130.01. Lecture 1 hour.

Goodis

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 pulpal and periapical pathological entities, and correlates those entities with diagnostic methods. RESTOR DENT

132.02. Endodontics: Theory. (1) Sp. Prerequisite: RD 132.01. Lecture 1 hour.

Barkhordar

Course is designed to expose third-year dental students to adjunctive endodontic procedures necessary to supplement their knowledge of endodontic procedures. RESTOR DENT

133.01. Clin Procedures in Fixed Prosthodontics. (1) F. Prerequisite: RD 130.01, 131.01. Lecture 1 hour.

Giblin

Lecture series designed to assist the student in the clinical management of patients undergoing fixed partial denture construction. The lectures will amplify, extend, and update the theoretical and laboratory experience and provide clinical relevance to the material covered in the previous two years. RESTOR DENT

133.02. Clin Procedures in Fixed Prosthodontics. (1) W. Prerequisite: RD 133.01. Lecture 1 hour.

Giblin

Lecture series designed to assist the student in the clinical management of patients undergoing fixed prosthodontic treatment. Topics will include technical and biologic considerations for completing the clinical and laboratory steps of shade selection, impressions, fabricating provisional restorations, and cast articulation. RESTOR DENT

133.03. Clin Procedures in Fixed Prosthodontics. (1) Sp. Prerequisite: RD 133.02. Lecture 1 hour.

Giblin

Continuation 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

135. Removable Partial Dentures Laboratory. (2) Su. Lab 60 hours per quarter.

Dellings

Laboratory course introduces third-year dental students to the clinical rationale and laboratory procedures of removable partial denture prosthodontics and prepares the student for the clinical practice of this phase of dentistry. RESTOR DENT

137. Endodontics Clinic. (0-4) Su, F, W, Sp. Prerequisite: RD 126.01 and 126.02. Clinic 120 hours per quarter.

Goodis

Clinical instruction and practice in the discipline of endodontics. Students will provide endodontic diagnosis, emergency care, and treatment of teeth with single and multiple root canal systems. RESTOR DENT

138. Prosthodontics Clinic. (0-7) Su, F, W, Sp. Prerequisite: RD 120C, 125C, 126C. Concurrent enrollment in RD 130 lecture series required. Clinic 210 hours per quarter.

Finzen

Clinical instruction and practice in the discipline of prosthodontics. RESTOR DENT

170A-B-C-D-E-F-G-H. Prosthodontics Literature Review. (0-4) A, E: Su, B, F: F, C, G: W, D, H: Sp. Prerequisite: Enrollment in Postgraduate Prosthodontics Program. Seminar 1-4 hours. Two-year course.

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

171A-B-C-D-E-F-G-H. Prosthodontic Treatment Planning. (0-2) A, E: Su, B, F: F, C, G: W, D, H: Sp. Prerequisite: Enrollment in Postgraduate Prosthodontics Program. Lecture 1 hour. Seminar 1 hour. Two-year course.

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

172A-B-C-D-E-F-G-H. Prosthodontic Procedures. (0-2) A, E: Su, B, F: F, C, G: W, D, H: Sp. Prerequisite: Enrollment in Postgraduate Prosthodontics Program. Lecture 1 hour. Seminar 1 hour. Two-year course.

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

174. Nutrition. (1) SS1. Prerequisite: D.D.S., D.M.D. or equivalent degree. Enrollment in a postdoctoral specialty program. Seminar 1 hour.

M. Wilkins

Course will emphasize the dietary requirements for the geriatric prosthodontic patient. A dietary analysis of the student and a prosthetic 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 postgraduate 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 physical and biological properties. Current research and new restorative materials will be discussed. RESTOR DENT

176. Craniofacial Pain-TMJ Seminar. (0-8) Su, F, W, Sp. Prerequisite: Enrolled postdoctoral specialty students. Fourth-year dental students may take this course as an elective with permission of the instructor. Seminar 2 hours.

McNeill

Allows residents to finish their training with a basic ability to recognize, diagnose, and treat craniofacial pain and TMJ dysfunction in an interdisciplinary environment. The treatment team will include medical and dental specialties. RESTOR 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.

McNeill

Participation in the Temporomandibular Joint Clinic applying knowledge of history-taking and differential diagnosis and utilizing such diagnostic techniques. RESTOR DENT

180. New Applic in Restor Dent: Materials & Techniques. (1) F, W, Sp. Prerequisite: Fourth-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 intraoral repair of fixed restorations, esthetic posterior restorations, alternative designs for fixed bridge-work, and newly introduced products. RESTOR DENT

180.05. Prosthodontic Procedures. (1) W, Sp. Lecture 1 hour.

Brigante

An elective course offering instruction in procedures and materials other than those normally used in the clinic. RESTOR DENT

181. Scientific Writing in Dentistry. (2) W. Prerequisite: Registered dental student in good standing. Limited to 20 students. Conference 2 hours.

White, Goodis

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. RESTOR DENT

181.02. Advanced Endodontics Concepts. (1) W. Lecture 1 hour.

Barkhordar

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. RESTOR DENT

182.03. Senior Restorative Elective. (1) F. Prerequisite: Fourth-year standing. Lecture 1 hour.

Meli

Advanced clinical restorative elective. Lectures describe the restorative general practice. Topics include office layout, laboratory relations, treatment limitations, financial arrangements, scheduling, and treatment failures. RESTOR DENT

182.05. Advanced Partial Denture Design. (1) Sp. Prerequisite: Completion of three removable partial dentures. Consent of instructor. Enrollment limited to 5 students. Seminar 1 hour.

Finzen and Staff

Seminar 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. RESTOR DENT

183. Lasers in Dentistry. (1) SS1, SS2. 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 intraoral hard and soft tissue. Laboratory exercises provide hands-on experience. RESTOR DENT

183.05. Advanced Complete Prosthodontics. (1) F. Prerequisite: Fourth-year standing. Seminar 1 hour.

Finzen

Seminar to discuss concepts of complete denture fabrication and maintenance reviewing the rationale for procedures normally used in the clinic, and the selection of the appropriate alternate procedures where indicated. RESTOR DENT

186. CAD/CAM: Application to Dentistry. (1) Sp. Prerequisite: Second-, third-, or fourth-year dental student. Limit 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. RESTOR DENT

186.04. Restorative Materials Procedures. (1) F, W, Sp. Prerequisite: Open to fourth-year students with the approval of the chairperson of the division. Enrollment limited. Clinic 3 hours.

Birtcil

Techniques and procedures for Class II, III, and V gold foil restorations using 24-karat direct filling gold. Students learn to use various direct filling gold materials such as fibrous gold foil, goldent, and electroloy. RESTOR DENT

187.04. Adv Clinical Operative Dentistry. (0-4) Su, F, W, Sp. Prerequisite: Fourth-year standing and permission of instructor. Clinic 3-12 hours.

Hume

Concepts and techniques of care for patients at high risk of caries, abrasion, or erosion. RESTOR DENT

188. Orofacial Pain. (1) F, W. Prerequisite: Third and fourth-year standing. Seminar 10 hours per quarter.

Plesh

Discussion of various clinical problems associated with the differential diagnosis of orofacial pain. The course will also review new scientific information on trigeminal pain. RESTOR DENT

188.02. Advanced Clinical Endodontics. (0-4) Sp. Prerequisite: Fourth-year standing. Clinic variable.

Barkhordar

Advanced instruction in the field of clinical endodontics. RESTOR 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. RESTOR DENT

199.02. Endodontics Laboratory Project. (1-5) F, W, Sp. Prerequisite: Consent of instructor and approval of the chairperson of the department. Lab 3-15 hours.

Goodis, Barkhordar, Srinivasan

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

199.03. Fixed Pros Laboratory Project. (1-5) F, W, Sp. Prerequisite: Consent of instructor and approval of the chairperson of the department. Lab 3-15 hours.

Tueller, Davis

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

199.05. Remov Pros Laboratory Project. (1-5) F, W, Sp. Prerequisite: Consent of instructor and approval of the chairperson of the department. Lab 3-15 hours.

Finzen, Hutton

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

210. Advanced Concepts in Biomaterials. (1) § Sp. Prerequisite: DDS, DMD, or equivalent degree. Must be enrolled in a postdoctoral specialty program. Lecture 1 hour.

Marshall

This graduate core course in biomaterials science introduces the student to the broad scope of the biomaterials field. A basic knowledge of dental materials is assumed and biomaterials principles are emphasized during discussion of current methods and problems in the field as related to dentistry. RESTOR DENT

401. Concepts of Occlusion. (2.5) Su. Must be enrolled in postdoctoral prosthodontics program. Lecture 2 hours. Clinic 2 hours.

Hong

A review of various concepts of occlusion. Clinical diagnostic procedures and treatment modalities will be reviewed and demonstrated. RESTOR DENT

410. Advanced Fixed Prosthodontics. (1) F. Lecture 1 hour.

Kinsel

The lectures will present the rationale and methodology in the use of fixed appliances to restore the dentition of patients with missing teeth or malocclusion. RESTOR DENT

411. Advanced Endodontics Seminar. (1) F. Lecture 1 hour.

Sheldon, Casanova

The lecture series will focus on the diagnosis and management of complex endodontic problems. RESTOR DENT

412. Advanced Removable Prosthodontics. (0-2) Su, F, W, Sp.

Green

The series will cover the rationale and methodology in using removable prosthetics in the care of patients with complex oral problems. RESTOR DENT

416. Emergency Dental Care. (0-2) Su, F, W, Sp. Must be first-year student in the AEGD program.

Nakahara, Kirkland

A seminar series will provide information on the diagnosis and management of dental and medical emergencies. The trainee will provide consultations and care for patients presenting at the Emergency Room in the Dental Clinics Building. RESTOR DENT

418. Prosthodontics Clinic. (0-40) Su, F, W, Sp. Prerequisite: Must be 1st-year student in the postgraduate prosthodontics program. Clinic rotation 300-1200 hours.

Finzen

Advanced prosthodontic clinical treatment utilizing a variety of treatment philosophies, articulating instruments, and techniques. RESTOR DENT

419. Advanced Comprehensive Dental Care. (0-41) Su, F, W, Sp. Must be enrolled in the AEGD program. Clinic 24 hours/week for 50 weeks.

Kirkland, Nakahara, Chin

Residents will provide advanced comprehensive dental care. RESTOR DENT

426. Advanced Endodontics for the Generalist. (2.5) Su, F. Must be second-year student in the AEGD program. Seminar 1.5 hours. Clinic 4 hours.

Casanova

This seminar and clinical course will focus on the diagnosis and management of advanced endodontic problems. RESTOR DENT

427. Advanced Restorative Dentistry for the Generalist. (0-5) F, W, Sp. Must be second-year student in the AEGD program. Seminar 1 hour. Clinic 2 hours.

Lacy

This seminar and clinical demonstration course will provide instruction and supervision in the most recent advances in the management of restorative dental problems. RESTOR DENT

428. Prosthodontics Clinic. (0-40) Su, F, W, Sp. Prerequisite: Must be 2nd-year student in the postgraduate prosthodontics program. Clinic 300-1200 hours.

Finzen

Advanced prosthodontic clinical treatment utilizing a variety of treatment philosophies, articulating instruments, and techniques. RESTOR DENT

429. Complex Comprehensive Dental Care. (0-16.5) Su, F, W, Sp. Must be second-year student in the AEGD program. Clinic 10 hours.

Nakahara, Kirkland

Provision of comprehensive dental care for patients with complex medical and dental needs. RESTOR DENT

438. Prosthodontics Clinic. (0-40) Su, F, W, Sp. Prerequisite: Must be 3rd-year student in the postgraduate prosthodontics program. Clinic 300-1200 hours.

Finzen

Advanced prosthodontic clinical treatment utilizing a variety of treatment philosophies, articulating instruments, and techniques. RESTOR DENT

486. TMD & Facial Pain. (0-11.5) Su, F, W, Sp. Must be first-year student in the AEGD program or by permission of instructor.

McNeill, Becker

The seminar will focus on the rationale and techniques used in the diagnosis and treatment of patients with TMD or facial pain. This will include history-taking, imaging techniques, and behavioral modification. RESTOR DENT

489. Advanced TMD for the Generalist. (0-12) Su, F, W, Sp. Must be second-year student in the AEGD program.

McNeill

This experience will allow the second-year AEGD trainee to provide direct services to patients with temporomandibular dysfunction (TMD). RESTOR DENT

Sociology

203. Social Psychology of Chronic Illness. (2-3) § Sp. Prerequisites: Consent of instructor. Seminar 2 hours. Field work 0-3 hours.

G. Becker
Course provides discussion of problems faced by chronically ill persons and their families including crisis management, handling symptoms, managing regimens, social isolation, phases of disease, temporal difficulties, normalization, dying, as well as policy issues confronting health care personnel and the general public. SOC BEH SC

205. Health Professions, Occupations, and Work. (3) § W. Lecture 2 hours. Lab 3 hours.

C. Harrington
Course examines the nature of occupations and professions; their constellation in hospitals and clinics, the medical division of labor, specialties and specialization, professional and occupational ideologies, the sociology of work relationships, careers. SOC BEH SC

207. Sociology of Health & Medicine. (3) § Sp. Seminar 2 hours. Lab 3 hours.

C. Estes
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 sociology. SOC BEH SC

208. Social Psychol of Hlth & Illness. (3) § F. Prerequisites: Required for doctoral students in sociology. Restriction: Doctoral-level students in nursing or sociology. Lecture 2 hours. Lab 3 hours.

Staff
Course examines the relationship of social class, ethnic identification, group membership, family structure, occupation, and life style to health and illness, and therapeutic interaction of lay persons and health professionals. SOC BEH SC

209. Sociology of Power. (2-4) § F,W,Sp. Prerequisites: A graduate-level sociological theory course. Restrictions: Doctoral students only. Lecture 2-4 hours.

C. Estes
Course surveys the classical and contemporary sociological issues in theoretical and empirical work on power; explores underlying assumptions and paradigms emerging and reflecting a sociopolitical milieu. The student will analyze literature and debates on power structure research and theory. SOC BEH SC

212A. Sociological Theory: Classical. (5) § F. Prerequisites: Doctoral students only. Lecture 2 hours. Lab 9 hours.

B. Powers
Course examines and evaluates classical and recent contributions to sociological theory. The main objective is the generation of a critical capacity with respect to received theory in both its formal and substantive varieties. SOC BEH SC

212B. Sociological Theory: Contemporary. (5) § W. Prerequisites: S212A and must be a doctoral student. Lecture 2 hours. Research 9 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 theory in both its formal and substantive varieties. SOC BEH SC

212C. Sociological Theory: Symbolic Interactionism. (5) § Sp. Prerequisites: S212AB or permission of instructor. Doctoral students only. Lecture 2 hours. Research 9 hours.

A. Clarke
Course consists of readings and discussions on interactionist theory in sociology, with emphasis on the origins and development of the Chicago School of Sociology, as well as an examination of the link between philosophy of pragmatism and interactionism. SOC BEH SC

214A. Field Research. (5) § F,Sp. Prerequisites: Doctoral level. Lecture 2 hours. Field work 9 hours.

V. Olesen, J. Kayser-Jones
Course offers sociological perspectives on the dimensions and properties of research in natural, social settings. Focus is upon developing skills in negotiating entry, watching, listening, and recording of data. Emphasis is upon developing conceptual schemata in preparation for analysis. SOC BEH SC

214B. Qualitative Analysis. (5) § W. Prerequisites: Doctoral level; Sociology 214A. Lecture 2 hours. Field work 9 hours.

V. Olesen, J. Kayser-Jones
Course examines modes of analysis applicable to qualitative data; emphasis on dimensions and properties exhibited in student-presented data. SOC BEH SC

214C. Qualitative Analysis. (3) § F,W,Sp. Prerequisites: 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 conceptualization. SOC BEH SC

215. Organizational Research. (2-4) § F,W,Sp. Prerequisites: Sociology 216 encouraged but not required and consent of instructor. Lab 3-9 hours. Conference 1 hour.

E. Lurie
Course will place students in organizations to provide opportunities to conduct research; apply and develop organizational theory; develop applied sociological, practical, and administrative skills and experience for students; and make sociologists attractive and salient to organizations outside academic settings. SOC BEH SC

216. Comparative Organizations: Intl Perspec. (3) § Sp. Prerequisites: S225. Seminar 2 hours. Independent study 3 hours.

R. Newcomer
Course is a comparative review of contributions to the sociology of formal organizations of health care. A variety of organizational forms will be considered with special emphasis on international health care comparisons. SOC BEH SC

217. Future of the Family Seminar. (3) § F,W,Sp. Lecture 2 hours. Lab 3 hours.

R. Staples
Course explores changing dating, sexual, sex-role, marital, and familial patterns in the United States. Discussion of futuristic models of family life as affected by sociocultural forces. Special emphasis given to changing sex-role behavior as affecting male-female relationships. SOC BEH SC

218. Adv Topics in the Socio-Analysis of Aging. (2-4) § W. Prerequisites: 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 examinations. Topics to be analyzed will vary each year, but will be focused upon a specific area. Laboratory assignments are for research activities on special topics in the area of aging. SOC BEH SC

219. Social Policy & Aging. (2-4) § W,Sp. Prerequisites: 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 America; will examine social policy in the public and private sectors including health, income, and social services; and consider prospects for social change and political movements. SOC BEH SC

220. Seminar in Sociology. (1-3) § F,W,Sp. Prerequisites: None. Restrictions: Doctoral students only. Lecture 1 hour. Lab 0-6 hours.

C. Harrington, P. Fox
Doctoral student seminar to discuss methods and problems in current research. Course may be repeated for credit. SOC BEH SC

221. Qualifying Examination. (1-8) § F,W,Sp. Prerequisites: Completion of preliminary examinations. Open to Sociology students only.

C. Harrington, C. Estes, A. Clarke, R. Newcomer, V. Olesen
Course will offer preparation for the specialty area qualifying examination. SOC BEH SC

222. Health Care Economics and Policy. (3) § F,Sp. Prerequisites: None. Lecture 3 hours.

C. Estes, C. Harrington
Course provides a critical analysis of economic, sociological, and political factors that affect health care. Examines U.S. health policies that impact on access, quality, costs, delivery systems, professional practices, and reform. SOC BEH SC

223. Perspectives on Public Policy. (3) § W,Sp. Prerequisites: Consent of instructor. Lecture 2 hours. Lab 3 hours.

R. Newcomer
Course offers systematic overview of health policy in American government—its scope, 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. Health Care Institutions. (2-5) § F,W,Sp. Lab 0-9 hours. Seminar 2 hours.

R. Newcomer, P. Fox
Course examines formal organizational theory, structure, and processes for health care organizations. The focus is on how organizations function within the socioeconomic and political environment in the United States. SOC BEH SC

230. Sociocultural Issues in AIDS. (3) § W,Sp. Lecture 2 hours. Lab 3 hours.

C. Harrington
Course examines the history and social psychology of AIDS in relation to health, illness, disease, and death. Includes demographic trends, the cost burden, and special problems of minorities, women, and caregivers, along with policy issues. SOC BEH SC

233. Sociology of Aging. (3) § W,Sp. Lecture 2 hours. Lab 3 hours.

P. Fox, S. Kaufman
Course reviews theories of aging including a review of theories of aging, current and historical trends in aging, factors related to aging, effects of aging on individuals and families, and formal and informal service systems for an aging population. SOC BEH SC

234. Introduction to Geriatrics and Aging. (2-3) § F,W,Sp. Lab 3 hours. Seminar 1-2 hours.

G. Becker, S. Kaufman
Course examines health status of the aged in the United States in light of relevant biological, behavioral, sociocultural, and political factors. Topics relevant to health care professionals working with the elderly will be discussed. SOC BEH SC

236. Race/Class Factors in Hlth Care Delivery. (3) § W. Prerequisites: Consent of instructor. Graduate standing. Lecture 2 hours. Lab 3 hours.

H. Pinderhughes
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

238. Feminist Theory. (2-4) § F,W,Sp. Prerequisites: Some background in social theory. Doctoral students only. Lecture 2 hours. Field work 0-6 hours.

Staff
Course provides in-depth overview and examination of 20th-century feminist theories from sociology, anthropology, and interdisciplinary perspectives. Emphasis is on current contributions and debates, with attention to relations between feminist theories and issues for research in women's health and healing. SOC BEH SC

239. Evaluation Research Methods. (3) § F,W,Sp. Prerequisites: Sociology 214A and 214B. Non-doctoral students may enroll upon approval of instructor. Lecture 2 hours. Lab 3 hours.

R. Newcomer
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 evaluative research, and relationship with audiences, such as policymakers, analyzed. SOC BEH SC

240. Older Women's Issues. (2-4) § F,W. Lab 0-6 hours. Seminar 2 hours.

C. Estes
Course analyzes postmenopausal women's socioeconomic status and changing social roles. Topics include demographic issues, economic trends, individual social and 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.

J. Weinberg
How sociocultural systems place women in work roles, the implications for their health, their part in illness prevention and care of the sick. Analyzes "hidden careers," work and health in developing societies, relationship between work and morbidity-mortality patterns. SOC BEH SC

242. Women's Health: Res. (2-4) § Sp. Prerequisites: 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.

Staff
An advanced survey of quantitative research methods in analysis of women's health issues. Will focus on data sources, design types, evaluation methods, data analysis, and proposal and report writing. Exploration of current research controversies. SOC BEH SC

243. Qualitative Research in Women's Health. (2-4) § W. Prerequisites: 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. Olesen
An advanced survey of qualitative research methods in analysis of women's participation in health and healing systems. Will review epistemological assumptions, analytic strategies, design and modes to assure credibility, plausibility. Will focus on data sources and analysis of data. SOC BEH SC

244. Advanced Methods for Survey Analysis. (3) § Sp. Prerequisites: Introductory statistics through multivariate analysis. Lecture 2 hours. Lab 3 hours.

M. LaPlante
Course teaches analytical methods to analyze large, complex, multi-stage stratified cluster sample surveys, i.e., National Health Interview Survey, Current Populations Survey, health/demographic surveys. Covers sampling theory for multi-stage stratified cluster samples and applied instruction in using appropriate software (SUDAAN). SOC BEH SC

245. Gender and Science. (3) § Sp. Seminar 3 hours.

A. Clarke
Course is a study of historical and contemporary issues in the social construction of biological and medical sciences, epistemological problems, and feminist perspectives. Focus is on 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) § Sp. Prerequisites: 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 politics of health and examines health professionals' roles in developing strategies to influence legislative and political processes that affect planning and delivery of care. SOC BEH SC

248. Group Independent Study. (1-4) § F,W,Sp. Prerequisites: Consent of instructor. Seminar 1-4 hours.

Staff
Groups of two or more students select special problems to investigate on a collaborative basis. These studies may be conducted through readings, the collection or analysis of empirical data, or the development of conceptual analysis or of methodologies. SOC BEH SC

249. Special Studies. (1-8) § F,W,Sp. Prerequisites: 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 or analysis of empirical data, or the development of conceptual analysis or of methodologies. SOC BEH SC

251. Women's Health: Sociocultural. (2-4) § Sp. Prerequisites: Consent of instructor. Lab 0-6 hours. Seminar 2 hours.

Staff
Exploration of relationship between culture and health for women in non-Western societies. Effects of modernization and migration on utilization of traditional and cosmopolitan health care and on women's roles as providers will be discussed, and contemporary controversies will be analyzed. SOC BEH SC

252. Women's Health: Socio-Historical. (2-4) § W. Prerequisites: Consent of instructor. Lab 0-6 hours. Seminar 2 hours.

A. Clarke
Sociological analysis of women's health status, roles as providers and patients, and the development of medical ideas about women from a historical perspective. Emphasis on 19th- and 20th-century developments in industrialized societies. SOC BEH SC

253. Sociology of Reproduction. (2-4) § Sp. Lab 0-6 hours. Seminar 2 hours. Offered in alternate years. Not offered 1995-96.

A. Clarke
Course focuses on recent theoretical and substantive developments concerning female sexuality, birth control, population control, abortion, reproductive technologies, and pregnancy/childbirth. Examines race and class relations and concerns of the state, science, and medicine. SOC BEH SC

254. Women's Health: Policy Issues. (2-4) § W. Prerequisites: Consent of instructor. Lab 0-6 hours. Seminar 2 hours.

Staff
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

256. Introduction to Survey Research. (3) § Sp. Prerequisites: 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, sample development, 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,Sp (offered once yearly). Lecture 2 hours. Field work 0-3 hours.

V. Jones
Course explores the diversity of racial and ethnic variation and examines the health and aging experience of minority elderly within the context of families, communities, and the nation. SOC BEH SC

260. Policy and Politics of Health. (2-5) § W,Sp. Lecture 2 hours. Field work 0-9 hours.

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

270A. Quantitative Methods I. (3) § F. Restriction: Doctoral students in Sociology or consent of instructor. Lecture 2 hours. Lab 3 hours.

R. Newcomer, E. Froelicher
Course examines quantitative research methods used in sociological inquiry. The focus is on scientific models, problem formulation, use of theoretical frameworks, levels of analysis, settings and strategies, specification of constructs, and selection of indices. SOC BEH SC

270B. Quantitative Methods II. (3) § W. Prerequisites: S270A (Quantitative Methods I). Restriction: Doctoral students in Sociology or consent of instructor. Lecture 2 hours. Lab 3 hours.

R. Newcomer, E. Froelicher
Course examines quantitative research methods including issues of sampling, reliability and validity, data collection, analysis, and inference. The course examines experimental, quasi-experimental, ex-post-facto, and correlational research, as well as survey and evaluation methods. SOC BEH SC

270C. Advanced Quantitative Methods. (3) § Sp. Prerequisites: S270A and S270B or equivalent course in quantitative methods. Restriction: Doctoral students. Seminar 2 hours. Lab 3 hours.

Staff
Advanced seminar in research methods. Students will be able to appreciate the complexity of issues and challenges of advanced quantitative research in measurement models, complex survey analysis, longitudinal design and analysis, and meta-analysis. SOC BEH SC

271. Professional Issues Seminar. (1) § F,W,Sp. Restriction: Doctoral students in Sociology or consent of instructor. Seminar 1 hour.

R. Newcomer
Seminar addresses professional and career issues for sociologists, including teaching, research, writing for publication, and presentation of papers at professional meetings. Focuses on career and educational planning, résumé development, internships, mentorships, and job interviews. SOC BEH SC

272. Dissertation Research Seminar. (1-3) § F,W,Sp. Restriction: Doctoral students in Sociology or consent of instructor. Seminar 1 hour. Lab 0-6 hours.

C. Harrington
Course addresses logic of research design and execution for students. Clarification of research question, delineation of work plan, and orientation to relevant theoretical literature or empirical data available. SOC BEH SC

273. Demography of Health and Aging. (3) § W,Sp. Prerequisites: 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. Soc of Human Sexual Behavior. (3) § F,W,Sp. Prerequisites: None. Restriction: Doctoral program in Sociology or consent of instructor. Seminar 2 hours. Lab 3 hours.

R. Staples
Course examines contemporary sexual problems from a sociological perspective focusing on issues and their relationship to social structure. Topics will include sexually transmitted diseases, teenage pregnancy, sexual violence, sexual harassment, and incest. SOC BEH SC

275. Mental Illness and the Elderly. (2-3) § W,Sp. Prerequisites: Consent of instructors. Lab 3 hours. Seminar 2 hours.

E. Lurie
Course considers current research, policy, and funding issues with regard to the mentally ill aged, within the context of the epidemiology, treatment options, utilization patterns, formal and informal treatment systems, and special issues of the mentally ill elderly. SOC BEH SC

276. Multidisciplinary Geriatric Assessment. (1-3) § F,W,Sp. Lab 3-9 hours.

G. Becker, S. Kaufman
Course provides clinical experience in multidisciplinary assessment for sociologists, nurses, physicians, and other clinicians. Course involves application of social, psychological, economic, and other factors in assessment. SOC BEH SC

277. Seminar on Disability. (1-3) § F,W,Sp. Prerequisites: Doctoral students. Lab 3 hours. Seminar 1-2 hours.

M. LaPlante
Course covers social and medical models and theories of disability and handicap. Areas covered include definitions, utility of role theory, models of identification and causation, and social perspectives on disability policy. SOC BEH SC

278. Sociology of Alcohol and Drugs. (2-3) § F. Lab 0-3 hours. Seminar 2 hours. Offered in alternate years. Not offered 1995-96.

K. Fillmore

Course examines alcohol and drug use from multiple theoretical perspectives in various historical and cultural contexts. Examines the distribution of alcohol and drug use across and within societies and various policies and their consequences for the control and management. SOC BEH SC

280. Meta-Analysis in Health Research.

(3) § F. Prerequisites: Basic research statistics and Research Methods (S270AB or N295). Lab 3 hours. Seminar 2 hours. Offered in alternate years. Not offered 1995-96.

K. Fillmore

Course introduces meta-analysis techniques and applications in health research, including research design, sampling and data collection, and analytical techniques and software. Uses examples from drug and alcohol studies, and other health care evaluation studies. SOC BEH SC

281. Justice, Equity, and Health Care.

(2-3) § F. Lab 0-3 hours. Seminar 2 hours. Offered in alternate years. Not offered 1995-96.

J. Weinberg

Course examines how health care, a scarce resource, is divided among members of society, including theories from philosophy, medical ethics, economics, political science, sociology, and psychology. Examines justice and equity issues for different groups and among different health policies. SOC BEH SC

282. Sociology of Science/Technology.

(2-4) § W. Lab 0-6 hours. Seminar 2 hours. Offered in alternate years. Not offered 1995-96.

A. Clarke

Course examines early functionalist and Marxist theories, Kuhn's work, social constructionist, ethnomethodological, interactionist, neo-functionalist, critical, and neo-Marxist perspectives. Focuses on laboratory, controversy, technological, and representational studies and organization and funding. Links history and philosophy. SOC BEH SC

283. Selected Topics/Health Economics. (2-3) § W. Prerequisites: S262 (Health Care Economics). Lab 0-3 hours. Seminar 2 hours.

R. Miller

Course examines selected topics in health care economics, with attention to basic economic theory of supply and demand for health care services and health insurance. Includes national health insurance proposals and the Canadian health care system. 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 practices among diverse groups in the United States, with implications for nursing practice. SOC BEH SC

285A. Qualitative Methods I. (5) § F.

Prerequisites: Second-year doctoral students. Seminar 3 hours. Field work 6 hours.

A. Clarke, J. DeJoseph, J. Kayser-Jones, H. Pinderhughes

Course reviews many of the types of qualitative research methods, emphasizing assumptions, approaches. Focus on design, entree, ethics, data-gathering techniques (interviewing, observing), data recording and management. Introduction to data analysis.

285B. Qualitative Methods II. (5) § W.

Prerequisites: N285A/S285A and second-year doctoral students. Seminar 3 hours. Field work 6 hours.

A. Clarke, J. DeJoseph, J. Kayser-Jones, H. Pinderhughes

Course compares and contrasts modes of qualitative analysis. Examines issues in establishing plausibility, credibility, adequacy. Intensive data analysis and examination of the problems of presentation of findings with focus on questions of authority and preparation of text.

285C. Qualitative Analysis. (3) § F,W, Sp.

Prerequisites: S285AB/N285AB. Restriction: Doctoral students in Sociology. Lecture 2 hours. Lab 3 hours.

A. Strauss, A. Clarke, V. Olesen

In-depth experience with specific type of qualitative research guided by instructor trained and experienced in that approach. Styles of work offered by various instructors will include advanced grounded theory analysis, ethnography, hermeneutic analysis, narrative analysis. SOC BEH SC

286. Introduction to Women's Health.

(2-4) § F,W, Sp. Prerequisites: None. Lecture 2 hours. Field work 0-6 hours.

A. Clarke

Course examines women's participation in formal/informal health and healing systems, emphasizing health problems, recruitment to health professions, images of women in health and illness, and women as providers. Health issues of women of color in the U.S. are highlighted. SOC BEH SC

287. Black Families in America. (2-3) § W, Sp.

Lecture 2 hours. Lab 0-3 hours.

R. Staples

Course provides a sociological interpretation of the black family institution in the United States of America. It examines black family culture, values, roles, socialization processes and class and gender variations. Emphasis is on changes in the last thirty years. SOC BEH SC

288. Advanced Seminar on HIV/AIDS.

(1) § F,W, Sp. Prerequisites: Doctoral students in HIV/AIDS. Seminar 1 hour.

C. Harrington, R. Stall, W. Holzemer
Doctoral seminar for presentations and critiques of student work in progress on HIV/AIDS. SOC BEH SC

289A. Advanced Quantitative Research Methods I. (3) § F. Prerequisites: N209 and N212 or equivalent, B187 and Doctoral students only. Lecture 2 hours. Lab 3 hours.

R. Newcomer, E. Froelicher
Course addresses theoretical basis of advanced quantitative methods. Fundamental issues of causality, and design issues pertinent to causality, are addressed using randomized clinical trials as models for experimental designs. Methods of sampling and issues in data collection and measurement are explored. SOC BEH SC

289B. Advanced Quantitative Research Methods II. (3) § W. Prerequisites: S289A and Doctoral students only. Lecture 2 hours. Lab 3 hours.

E. Froelicher, R. Newcomer

Course covers continuing analysis of quantitative research methods including selected survey, longitudinal study designs. Focus compares and contrasts research designs, proposes strategies for maximizing strengths of various designs. Explores fit of research questions, methods, and statistical approaches. Examples of methods include questions answered by time series analysis, life table and survival analysis.

299. Dissertation. (0) § F,W, Sp. Prerequisites: Advancement to candidacy and permission of the graduate adviser.

Staff
For graduate students engaged in writing the dissertation for the Ph.D. degree. SOC BEH SC

Speech and Hearing Science

201. Basic Hearing Mechanisms. (4) § F.

Prerequisite: Consent of instructor. Lecture 3 hours. Lab 1 hour. Offered in alternate years. Offered 1995-96.

Staff

Lectures and laboratory demonstrations reviewing surgical and comparative anatomy of the ear; cochlear development and mechanics; hair cell transduction; comparative physiology of hearing; bases of hearing loss; and strategies for objective evaluation of inner ear function in animals and man. OTOLARYN

202. Auditory Coding. (4) § W. Prerequisite: Consent of instructor. Lecture 3 hours. Lab 1 hour. Offered in alternate years. Offered 1995-96.

Staff

Lectures and laboratory demonstrations covering such topics as physiology and psychoacoustics of sound and speech coding; cochlear prostheses; central auditory system organization; physiology of binaural hearing in avians and mammals; and evaluation of auditory brainstem function in animals and man. OTOLARYN

203. Forebrain Mechanisms. (4) § Sp.

Prerequisite: Consent of instructor. Lecture 3 hours. Lab 1 hour. Offered in alternate years. Offered 1995-96.

Staff

Topics include forebrain representation of complex spectra (including speech) and of sound localization (including echolocation in bats and whales); cognitive development related to hearing; auditory consequences of such pathologies as brain lesions and autism; and objective assessment of forebrain mechanisms. OTOLARYN

204. Speech Production and Perception.

(4) § F. Lab 2 hours. Seminar 3 hours.

Turner

This course is part of a two-year core curriculum covering the communicative neurosciences. It is the first course in the sequence which considers speech and language. It will cover basic acoustics, acoustic phonetics, the anatomy and physiology of speech production, and theories of speech perception. OTOLARYN

205. Language Science. (3) § Sp. Lecture 2.5 hours. Lab 2 hours. Offered in alternate years. Not offered 1995-96.

Turner

This is the final course in a 2-year sequence (201, 202, 203, 205). The objective of the core curriculum is to provide students with a fundamental knowledge of the speech and hearing sciences. This course covers basic language science with emphasis on the cortical processing of language. OTOLARYN

210. Fundmnd of Auditory Neurobiol.

(1) § F,W, Sp. Prerequisite: Consent of instructor. Lecture 1-3 hours.

Schreiner

Reading and critical discussion of selected original research papers on the anatomy and physiology of the auditory system. Each level of the auditory nervous system from the periphery to the cortex will be considered in turn. OTOLARYN

211. Sound and Sound Analysis. (4) § F.

Prerequisite: Consent of instructor. Lecture 3 hours. Lab 2 hours. Offered in alternate years. Offered 1995-96.

Staff

Review of the physics of sound as it applies to the study of speech and hearing. Theoretical and practical approaches to the analysis of signals and the fundamentals of system analysis. Practical application of acoustic research equipment. OTOLARYN

215. Laboratory Rotation. (1-4) § F,W, Sp. Prerequisite: Consent of instructor. Lab 3-12 hours.

Staff

For students who arrange a rotation in the research laboratory of a faculty member. Students will participate in an ongoing research project and review relevant literature. OTOLARYN

220. Speech and Hearing Science. (1) § F, W, Sp. Seminar 1 hour.

Staff

This seminar series will consist of weekly presentations by the faculty, students, research personnel in the department, and visiting scientists. Topics will cover the range of speech and hearing sciences, including anatomy, physiology, psychophysics, speech, clinical diagnosis, and rehabilitation. OTOLARYN

221. Electrophysiology & Audiology. (4) § F. Prerequisite: Consent of instructor. Lecture 3 hours. Lab 3 hours.

Gardi and Staff

Review of the development of electrophysiological approaches to studying auditory functions with particular emphasis on auditory-evoked response measurement. Lectures and laboratory exercises will stress equipment design and calibration, data collection, analysis, and interpretation. OTOLARYN

222. Auditory Psychophys & Physiol. (3) § Sp. 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, VIII nerve physiology, thresholds, masking, pitch, loudness, temporal adaptation, frequency analysis, binaural perception, and processing are included. OTOLARYN

224. Animal Psychophysics. (3) § Sp.

Seminar 3 hours.

Jenkins

Reading and discussion of 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. OTOLARYN

225. Inner Ear Form and Function. (3) § F, Sp. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours.

Leake

This course will consider the gross morphology, histology, ultrastructure and function of the mammalian cochlea and vestibular sensory organs. Instruction will include lectures, demonstrations, dissections and student presentations. OTOLARYN

247. Special Studies. (1-5) § F,W, Sp. Prerequisite: Consent of instructor.

Staff

Directed reading and laboratory work in the auditory process and its disorders. OTOLARYN

249. Independent Study. (1-5) § F,W, Sp. Prerequisite: Consent of instructor.

Staff

Students and instructor develop jointly a study plan involving tutorials, reading, and laboratory work. Students engage in intensive exploration of specific topics related to the anatomic, physiologic, psychophysical, and behavioral aspects of the speech and hearing sciences. OTOLARYN

250. Research. (1-8) § F,W, Sp. Prerequisite: Consent of instructor.

Staff

Students participate in ongoing research or initiate independent research project under guidance of supervising instructor. Assignments include literature review, design of research, execution of research, data reduction and analysis, and reporting. OTOLARYN

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

Staff

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

Stomatology

100. HIV/AIDS: A Current Review. (2)

W. Prerequisite: Dental I, Dental Hygiene I. Lecture 2 hours.

Bartnof, D. Greenspan, Levy

An overview of the HIV/AIDS pandemic, with a selected focus on basic and clinical sciences, and social/psychosocial aspects. Sixteen hours are presented in lecture format, two hours as panel presentations, and two hours as emphasized review sessions. STOMATOL

419. Practice Teaching. (1-2) Su, F,W, Sp.

Prerequisite: DDS degree. Clinic 30-60 hours.

Taggart

Practical teaching experience in selected courses under the supervision of members of the staff. STOMATOL

429. Practice Teaching. (1-2) Su, F,W, Sp.

Prerequisite: DDS degree. Clinic 30-60 hours.

Taggart

Practical teaching experience in selected courses under the supervision of members of the staff. STOMATOL

439. Practice Teaching. (1-2) Su, F,W, Sp.

Prerequisite: DDS degree. Clinic 30-60 hours.

Taggart

Practical teaching experience in selected courses under the supervision of members of the staff. STOMATOL

Surgery

110. Clinical Clerkship in General Surgery.

(1.5 per week) Su, F,W, Sp. Prerequisite: Core curriculum in basic sciences; third-year standing.

Macho

A basic course 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. SURGERY

140.01A. Advanced Clerkship in General Surgery—UCSF Blue Service.

(1.5 per week) Su, F,W, Sp. Prerequisite: Surgery 110, Medicine 110.

Reilly, Mulvihill

Senior clinical clerks participate in clinic, ward, and operating room with direct involvement in post- and pre-operative care. SURGERY

140.01B. Advanced Clerkship in General Surgery—UCSF Gold Service.

(1.5 per week) Su, F,W, Sp. Prerequisite: Surgery 110, Medicine 110.

Reilly, Schrock

Senior clinical clerks participate in clinic, ward, and operating room with direct involvement in post- and pre-operative care. SURGERY

140.01D. Advanced Clerkship in General Surgery—VAH General/Vascular Service.

(1.5 per week) Su, F,W, Sp. Prerequisite: Surgery 110, Medicine 110.

Reilly

Senior clinical clerks participate in clinic, ward, and operating room with direct involvement in post- and pre-operative care. SURGERY

140.01E. General Surgery. (1.5 per week)

Su, F,W, Sp. Prerequisite: Surgery 110.

Siperstein, O. Clark, R. Allen

Senior clinical clerks participate in clinic, ward, and operating room with direct involvement in post- and pre-operative care. SURGERY

140.02. Off-Campus Clerkship. (1.5 per week)

Su, F,W, Sp. Prerequisite: Core curriculum in basic sciences and Medicine 110 or Surgery 110 and 111.

Schrock

Clinical clerkship in approved hospitals in other universities by special arrangement and approval of the chairperson of the department and the dean. SURGERY

140.03. General Surgery—PMC. (1.5 per week)

Su, F,W, Sp. Prerequisite: Surgery 110. Russell

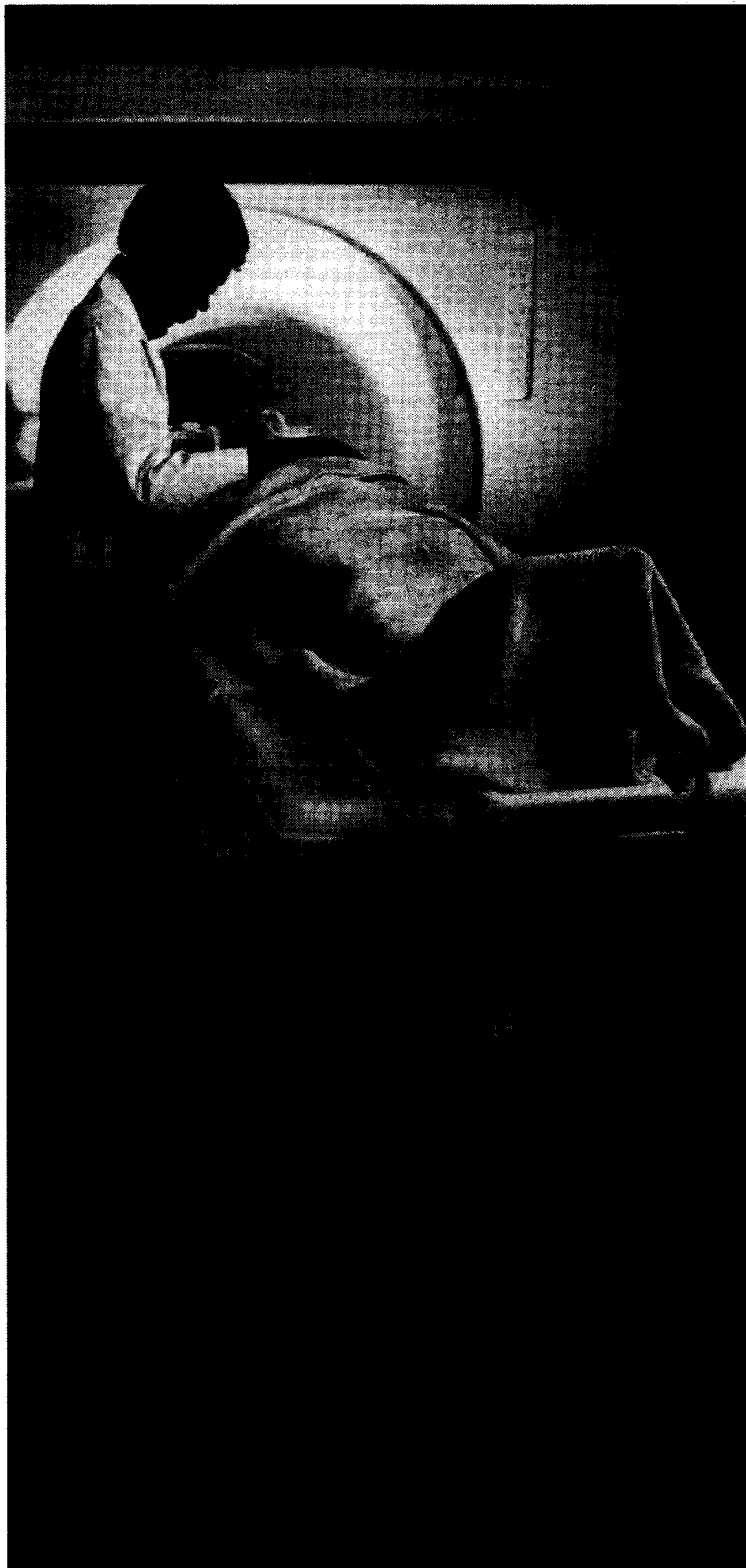
Students serve as acting interns on general surgical service; participate in preoperative assessment, interoperative management and postoperative care of patients; participate in outpatient clinics as well as selected physicians' offices; participate in daily ward rounds and teaching conferences. SURGERY

140.04. Vascular Surgery Clerkship. (1.5 per week)

Su, F,W, Sp. Prerequisite: Medicine 110, Surgery 110 and 111.

Goldstone

Students serve as acting interns on the vascular surgery team, participating in preoperative, intraoperative, and postoperative management of patients, as well as in clinics, rounds, and conferences. SURGERY



140.05. Operable Heart Disease. (1.5 per week) Su, F,W, Sp. Prerequisite: Core curriculum in basic sciences and Medicine 110 or Surgery 110 and 111.

Hanley
Ward rounds and conferences on patients with operable, congenital, or acquired heart disease. Details of selection, differential diagnosis, and results of surgery are discussed. SURGERY

140.06. Emergency Medicine—SFGH. (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 110 or Surgery 110 and 111.

Neighbor
Students care for patients in the Emergency Department at SFGH as acting interns, and care for all medical and surgical problems. The rotation focuses on wound-care techniques (including suturing), didactic conferences, and bedside one-to-one instruction by senior residents and faculty. SURGERY

140.07. Shock & Trauma Research. (1.5 per week) Su, F,W, Sp. Prerequisite: Core curriculum in basic sciences and Medicine 110 or Surgery 110 and 111.

Schecter
Course involves clinical and laboratory investigation and a detailed study of specific patients with trauma and shock. SURGERY

140.08. General Surgery—C. (1.5 per week) Su, F,W, Sp. Prerequisite: Surgery 110 & Medicine 110.

V. Richards
Students work as interns on Surgical Service; they evaluate general surgical patients preoperatively; work with patients in operating room; assume graduated, increasing responsibility in postoperative management. Rounds and conferences enhance clinical experience; interaction with staff in patient care emphasized. SURGERY

140.10. Cardiothoracic Surgery. (1.5 per week) Su, F,W, Sp. Prerequisite: Surgery 110 and 111.

Ratcliffe
As an integral member of the cardiothoracic team, the student directly and actively shares in preoperative evaluation, operative procedures, and postoperative care. Cardiac and thoracic conferences 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.

Horn
Clinical rotation on a large Burn Center service. Pathophysiology of thermal injury including pulmonary aspects will be stressed. Students act as integral members of the team and participate directly in patient care. SURGERY

140.12A. Adv Clerkship in Plastic/Reconstr Surgery—UC. (1.5 per week) Su, F,W, Sp. Prerequisite: Surgery 110, Medicine 110.

Mathes
Students act as advanced clerks, taking part in operative procedures as well as postoperative management of the patient. Students will be exposed to patients with general reconstructive problems; trauma to the head and neck, hand surgery, and congenital anomalies. SURGERY

140.12B. Adv Clerkship in Plastic/Reconstr Surgery—SFGH. (1.5 per week) Su, F,W, Sp. Prerequisite: Surgery 110, Medicine 110.

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

140.14. Surgical Intensive Care Clerkship—VMC. (1.5 per week) Su, F,W, Sp. Prerequisite: Surgery 110 and 111. Fourth-year students only.

Javis, Gladen
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 students only.

Dominic
Presents a clinical spectrum in critical-care medicine: burn wound infection control, resuscitative management, hemodynamic monitoring, with emphasis on appropriate nutritional and metabolic support. Also stressed are psychological and emotional needs of patients. Students participate as full members of the Burn Team. SURGERY

140.16. Nutritional Support Service—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 subclavian catheters; the management of metabolic/nutritional 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 as acting intern on a busy pediatric surgical service assisting in pre- and postoperative management and in the operation. An interesting, wide variety of problems is encountered. SURGERY

140.18. Liver Transplantation. (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 110, Surgery 110.

Ascher and Staff
Students will participate in evaluation of potential liver recipient (including HLA-typing, crossmatch, immune monitoring), observe the liver transplant procedure, participate in postoperative care (including immunosuppressive management and mechanisms of graft rejection). Student will attend pertinent conferences, clinics, and daily rounds. SURGERY

140.19. Advanced Clinical Surgery—VMC. (1.5 per week) Su, F,W, Sp. Prerequisite: Surgery 110 and 111. 4th-year standing.

Parks
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

140.21. Clinical Trauma Surgery—VMC. (1.5 per week) Su, F,W, Sp, SS1, SS2. Prerequisite: Surgery 110.

S. Parks, J. Davis
Subinternship responsibilities are to participate on a busy patient care trauma service emphasizing resuscitation, evaluation of injury, operating room participation, postoperative followup. There is also experience with non-operative management of trauma. The student will participate in departmental conferences. SURGERY

140.22. Trauma and General Surgery—SFGH. (1.5 per week) Su, F,W, Sp. Prerequisite: Surgery 110 and Medicine 110. Lecture 4 hours. Clinic 4 hours. Patient contact 24 hours.

Schecter
Senior clinical clerks participate in the clinic, ward, and operating room with direct involvement in pre- and postoperative care. There is also work at the intern-clerk level as an integral part of the Trauma Service. 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 by arrangement with the instructor. SURGERY

160.05. Advanced Surgery Reading. (2) F, Sp.

F. Lewis
A weekly seminar where previously assigned papers are discussed and critiqued. Papers representing the classical and current concepts in general surgery are covered. SURGERY

160.06. Total Parenteral Nutrition. (5) Su, F,W, Sp. Prerequisite: Surgery 110 and consent of instructor. Lecture 3 hours. Lab 6 hours.

Hickey
Course emphasizes nutritional and metabolic requirements of injured, ill, and malnourished patients. Clinical rotation involves methods of preparation, administration, and assessment of patients receiving caloric protein or amino acid support as part of specific therapy. SURGERY

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

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

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

Schrock and Staff
A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. SURGERY

400. General Surgery Staff Conf. (1.5) F, W, Sp.
UC Schrock, SFGH Lewis, VA L. Way
Conferences include presentation of case studies with reference to the literature, case records, laboratory tests, and special studies. Faculty and occasional guest lecturers discuss surgical problems. Death and complications are reviewed weekly. SURGERY

402. General Surgery Pathology Sem. (1) F,W, Sp. Interns and residents.

McKerrow
Seminars include case reports and demonstrations of the currently available gross and microscopic surgical pathological material from the operating rooms and pathology laboratories. SURGERY

403. General Surgery Seminar. (2) Su, F, W, Sp. Interns and residents.
DMC Heer, SFGH Lewis, UC Debas, 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

450. Clinical Surgery. (1.5 per week) Su, F, W, Sp.

UC Debas, SFGH Lewis, VA L. Way, DMC Heer, CV Richards, PMC Russell
Residents, under supervision, are responsible for the preparation of case records, laboratory work, preoperative patient preparation, assistance at operations, postoperative care, and attendance at follow-up clinic. Senior residents have certain additional administrative, teaching, and clinical responsibilities. SURGERY

452. Experimental Surgery Laboratory. (1.5 per week) Su, F,W, Sp. Restriction: Surgery 450 and 452 may not be taken concurrently.

Debas and Staff
Course includes experimental investigations of general surgical problems and the development of technical and laboratory methods to be applied in general surgery. SURGERY

453. Clinical Experimental Surgery. (10) Su, F,W, Sp.

Schrock
Assistant residents in off-campus hospitals approved by the chairperson 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

495. Clinical Surgery. (1.5 per week) Su, F, W, Sp.

Schrock
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

170. Educational Technology. (1) F,W, Sp. Prerequisite: D.D.S. degree. Seminar 2 hours.

Staff
Course provides resource information in the form of a systematic overview of educational technology. This information is introduced in conjunction with the development by the individual student of an actual microcourse, teaching a single skill. GEN DENT

186.01A-B-C. Practice Teaching. (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. (4) § Sp. Prerequisite: Consent of instructor. Lecture 4 hours.

Meehan, Hawkes, Benet
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, assistance at operations, and participation in residents' seminars.

140.01. Advanced Urology Clerkship—UC. (1.5 per week) Su, F,W, Sp. Prerequisite: Surgery 110.

Tanagho
Students work as interns on the Urology Service at UC. They also attend rounds and scheduled seminars with residents and visiting staff. UROLOGY

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

Tanagho
Clinical clerkship in off-campus hospitals approved by the chairperson of the department and the dean. UROLOGY

140.03. Advanced Urology Clerkship—VA. (1.5 per week) Su, F,W, Sp. Prerequisite: Surgery 110.

Presti
Students work as interns on the Urology Service at VA. They also attend rounds and scheduled seminars with residents and visiting staff. UROLOGY

140.04. Advanced Urology Clerkship—SFGH. (1.5 per week) Su, F,W, Sp. Prerequisite: Surgery 110.

McAninch
Students work as interns on the Urology Service at SFGH. They also attend rounds and scheduled seminars with residents and visiting staff. UROLOGY

150.01. Research in Urology. (1.5 per week) Su, F,W, Sp. Prerequisite: 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

170.01. Fundamentals of Urology. (2) F, W, Sp. Prerequisite: Consent of instructor.

Tanagho and Staff
Seminar and library research. UROLOGY

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

Tanagho and Staff
A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. UROLOGY

400. Urology Seminar. (1.5) Su, F,W, Sp.

Tanagho
Seminar includes study of the basic sciences and urologic roentgenology with members of the attending staff. UROLOGY

402. Urologic Clinical Seminar. (2) Su, F, W, Sp. **Tanagho**
Seminar includes discussion of diagnosis and treatment of patients in the urology wards with the attending staff. UROLOGY

490. Clinical Urology—SFGH. (1.5 per week) Su, F,W, Sp.

McAninch
Interns rotate through urological wards. Under the direction of the attending staff they are responsible for the care of patients, including history-taking, physical examination, laboratory tests, and consultation. UROLOGY

Nondiscrimination/Affirmative Action

The University of California, San Francisco, in conformance with applicable laws and regulations, does not discriminate on the basis of race, color, national origin, sex, handicap, or age in any of its policies, procedures, or practices; nor does the University discriminate on the basis of sexual orientation. This non-discrimination policy covers admission and access to, and treatment and employment in, University programs and activities, including, but not limited to, academic admissions, financial aid, educational services, and student employment.

Inquiries regarding the University's equal opportunity policies may be directed to: Director—Affirmative Action/Equal Opportunity, 145 Irving Street, UC San Francisco, CA 94143-0988, 415/476-4752.

Accreditation

UC San Francisco is accredited by the Western Association of Schools and Colleges. In addition, the professional curricula are accredited by the following specialized accrediting agencies:

Dentistry: Commission on Dental Accreditation of the American Dental Association.

Medicine: Liaison Committee on Medical Education representing the Council on Medical Education of the American Medical Association and the Executive Council of the Association of American Medical Colleges.

Nursing: Board of Review for Baccalaureate and Higher Degree Programs of the National League for Nursing.

Pharmacy: American Council on Pharmaceutical Education.

Physical Therapy: Commission on Accreditation in Education of the American Physical Therapy Association.

Interested students may contact the Financial Aid Director for additional information on accreditation procedures.

University Publications #3866, August 1995. Published by UC San Francisco, 1855 Folsom, San Francisco, CA 94103-4232. Care is taken to ensure the accuracy of information contained in this publication. The information is subject to changes or deletions without notification.

Photography: Aero Photographers, David Powers, and Kaz Tsuruta.

Copies of the *General Catalog* can be purchased from: Millberry Union Bookstore, UCSF, 500 Parnassus, San Francisco, CA 94143-0230, 415/476-1666. In California, call 800/846-2144. Fax: 415/661-1731. mubk490@ucsfvm.ucsf.edu

Price: \$2.95 (\$6.45 by mail, California residents please add 8.5% sales tax). Please make checks payable to UC Regents.

UCSF

University of California San Francisco

...A Health Sciences Campus