Courses

This chapter is a compendium of the courses of instruction offered by the University of California, San Francisco. Additional courses are offered by the schools (see Addresses section) under their programs of Continuing Education. Courses are arranged in numerical order under alphabetically listed subject headings. As these headings do not in every case correspond to a department, the responsible department or other instructional unit is indicated at the end of the course description for each course. Abbreviations used for these departments or instructional units are spelled out in the list below. Inquires 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. Faculty rosters may also be found in the bulletins of the four schools.

Course Description: Course information is arranged in two paragraphs with periods separating items. The first paragraph includes course number, title, units in parentheses, session offered, prerequisite, format and breakdown of hours per week, and instructor in charge. The second paragraph 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 meanings of the second (tens) and first (units) digits vary among the schools. A detailed explanation of course numberings 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

<table>
<thead>
<tr>
<th>Department/Division</th>
<th>School/Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANATOMY</td>
<td>Department of Anatomy, School of Medicine.</td>
</tr>
<tr>
<td>ANESTHESIA</td>
<td>Department of Anesthesia, School of Medicine.</td>
</tr>
<tr>
<td>BIOCHEM</td>
<td>Department of Biochemistry and Biophysics, School of Medicine.</td>
</tr>
<tr>
<td>CL PHARM</td>
<td>Division of Clinical Pharmacy, School of Pharmacy.</td>
</tr>
<tr>
<td>DENT PUB HLTH</td>
<td>Department of Dental Public Health and Hygiene, School of Dentistry.</td>
</tr>
<tr>
<td>DERMATOL</td>
<td>Department of Dermatology, School of Medicine.</td>
</tr>
<tr>
<td>EPID &amp; BIOSTAT</td>
<td>Department of Epidemiology and Biostatistics, School of Medicine.</td>
</tr>
<tr>
<td>FAM CM MED</td>
<td>Division of Family and Community Medicine, School of Medicine.</td>
</tr>
<tr>
<td>FAM HLTH</td>
<td>Department of Family Health Care Nursing, School of Nursing.</td>
</tr>
<tr>
<td>GR DEVEL</td>
<td>Department of Growth and Development, School of Dentistry.</td>
</tr>
<tr>
<td>HIST HL SC</td>
<td>Department of History of Health Sciences, School of Medicine.</td>
</tr>
<tr>
<td>LAB MED</td>
<td>Department of Laboratory Medicine, School of Medicine.</td>
</tr>
<tr>
<td>MEDICINE</td>
<td>Department of Medicine, School of Medicine.</td>
</tr>
<tr>
<td>MENT HLTH COM ADM</td>
<td>Department of Mental Health, Community, and Administrative Nursing, School of Nursing.</td>
</tr>
<tr>
<td>MICROBOL</td>
<td>Department of Microbiology and Immunology, School of Medicine.</td>
</tr>
<tr>
<td>NEURO SURG</td>
<td>Department of Neurological Surgery, School of Medicine.</td>
</tr>
<tr>
<td>NEUROLOGY</td>
<td>Department of Neurology, School of Medicine.</td>
</tr>
<tr>
<td>OB GYN RS</td>
<td>Department of Obstetrics, Gynecology and Reproductive Sciences, School of Medicine.</td>
</tr>
<tr>
<td>OPHTHALMOL</td>
<td>Department of Ophthalmology, School of Medicine.</td>
</tr>
<tr>
<td>ORAL &amp; MAX SURG</td>
<td>Department of Oral and Maxillofacial Surgery, School of Dentistry.</td>
</tr>
<tr>
<td>ORTHO SURG</td>
<td>Department of Orthopaedic Surgery, School of Medicine.</td>
</tr>
<tr>
<td>OTOLARYN</td>
<td>Department of Otolaryngology, School of Medicine.</td>
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<tr>
<td>PATHOLOGY</td>
<td>Department of Pathology, School of Medicine.</td>
</tr>
<tr>
<td>PEDIATRICS</td>
<td>Department of Pediatrics, School of Medicine.</td>
</tr>
<tr>
<td>PHARM CHEM</td>
<td>Department of Pharmaceutical Chemistry, School of Pharmacy.</td>
</tr>
<tr>
<td>PHARMACOL</td>
<td>Department of Pharmacology, School of Medicine.</td>
</tr>
<tr>
<td>PHARMACY</td>
<td>Department of Pharmacy, School of Pharmacy.</td>
</tr>
<tr>
<td>PHYS THER</td>
<td>Curriculum in Physical Therapy, School of Medicine.</td>
</tr>
<tr>
<td>PHYSIOL NURS</td>
<td>Department of Physiological Nursing, School of Nursing.</td>
</tr>
<tr>
<td>PHYSIOLOGY</td>
<td>Department of Physiology, School of Medicine.</td>
</tr>
<tr>
<td>PSYCHIATRY</td>
<td>Department of Psychiatry, School of Medicine.</td>
</tr>
<tr>
<td>RADIOLOGY</td>
<td>Department of Radiology, School of Medicine.</td>
</tr>
<tr>
<td>RESTOR DENT</td>
<td>Department of Restorative Dentistry, School of Medicine.</td>
</tr>
<tr>
<td>SOC BEH SC</td>
<td>Department of Social and Behavioral Sciences, School of Nursing.</td>
</tr>
<tr>
<td>STOMATOLOGY</td>
<td>Department of Stomatology, School of Dentistry.</td>
</tr>
<tr>
<td>SURGERY</td>
<td>Department of Surgery, School of Medicine.</td>
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<tr>
<td>UROLOGY</td>
<td>Department of Urology, School of Medicine.</td>
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### Hospitals

<table>
<thead>
<tr>
<th>Hospital/Center</th>
<th>Location</th>
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<tbody>
<tr>
<td>AB</td>
<td>Alta Bates Hospital, Berkeley.</td>
</tr>
<tr>
<td>AS</td>
<td>Atascadero State Hospital, Atascadero.</td>
</tr>
<tr>
<td>C</td>
<td>Children’s Hospital of San Francisco, San Francisco.</td>
</tr>
<tr>
<td>CHMC</td>
<td>Children’s Hospital Medical Center of Northern California, Oakland.</td>
</tr>
<tr>
<td>CHS</td>
<td>Community Hospital of Sonoma, Santa Rosa.</td>
</tr>
<tr>
<td>CM</td>
<td>Emory V. Cowdell Memorial Hospital, Berkeley.</td>
</tr>
<tr>
<td>CSP</td>
<td>Center for Special Problems, San Francisco.</td>
</tr>
<tr>
<td>DCH</td>
<td>Davis Community Hospital, Davis.</td>
</tr>
<tr>
<td>FCH</td>
<td>Fresno Community Hospital and Medical Center, Fresno.</td>
</tr>
<tr>
<td>GS</td>
<td>Good Samaritan Hospital of Santa Clara Valley, San Jose.</td>
</tr>
<tr>
<td>H</td>
<td>Highland General Hospital, Oakland.</td>
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<tr>
<td>K</td>
<td>Kaiser Foundation Hospital, San Francisco.</td>
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<tr>
<td>KP</td>
<td>Kaiser Foundation Hospital, Oakland.</td>
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<tr>
<td>KSF</td>
<td>Kaiser Foundation Hospital, South San Francisco.</td>
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<tr>
<td>KHDW</td>
<td>Kaweah Delta District Hospital, Visalia.</td>
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<tr>
<td>L</td>
<td>Letterman Army Medical Center, San Francisco.</td>
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<tr>
<td>LPPF</td>
<td>Langley Porter Psychiatric Institute, San Francisco.</td>
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<tr>
<td>MG</td>
<td>Marin General Hospital, Greenbrae.</td>
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<tr>
<td>MHLB</td>
<td>Memorial Hospital Medical Center of Long Beach, Long Beach.</td>
</tr>
<tr>
<td>MM</td>
<td>Mills Memorial Hospital, San Mateo.</td>
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<tr>
<td>MZ</td>
<td>Mt. Zion Hospital and Medical Center, San Francisco.</td>
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<tr>
<td>NAT</td>
<td>Natividad Medical Center, Salinas.</td>
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<tr>
<td>NRMC</td>
<td>Naval Regional Medical Center, Oakland.</td>
</tr>
<tr>
<td>NS</td>
<td>Napa State Hospital, Imola.</td>
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<tr>
<td>OC</td>
<td>O’Connor Hospital, San Jose.</td>
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<tr>
<td>PHAL</td>
<td>Peralta Hospital, Oakland.</td>
</tr>
<tr>
<td>PC</td>
<td>Peninsula Hospital and Medical Center, Burlingame.</td>
</tr>
<tr>
<td>PMC</td>
<td>Pacific Medical Center, San Francisco.</td>
</tr>
<tr>
<td>RDMC</td>
<td>Ralph K. Davies Medical Center, San Francisco.</td>
</tr>
<tr>
<td>RLA</td>
<td>Rancho Los Amigos Hospital, Downey.</td>
</tr>
<tr>
<td>S</td>
<td>Stanford University Medical Center, Palo Alto.</td>
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<tr>
<td>SCC</td>
<td>Santa Clara Valley Medical Center, San Jose.</td>
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<tr>
<td>SFCH</td>
<td>San Francisco General Hospital Medical Center, San Francisco.</td>
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<tr>
<td>SGH</td>
<td>Sausalito General Hospital, Sausalito.</td>
</tr>
<tr>
<td>SJH</td>
<td>Silas B. Hays Army Community Hospital, Fort Ord.</td>
</tr>
<tr>
<td>SJ</td>
<td>San Joaquin General Hospital, Stockton.</td>
</tr>
<tr>
<td>SM</td>
<td>Samuel Merritt Hospital, Oakland.</td>
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<tr>
<td>SMC</td>
<td>Sears Medical Center, Daly City.</td>
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<tr>
<td>SRM</td>
<td>Santa Rosa Memorial Hospital, Santa Rosa.</td>
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<tr>
<td>SS</td>
<td>Sonoma State Hospital, Eldridge.</td>
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<tr>
<td>SSF</td>
<td>Shriners Hospital for Crippled Children, San Francisco.</td>
</tr>
<tr>
<td>STA</td>
<td>St. Agnes’ Hospital and Medical Center, Fresno.</td>
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<tr>
<td>STF</td>
<td>St. Francis Memorial Hospital, San Francisco.</td>
</tr>
<tr>
<td>STL</td>
<td>St. Luke’s Hospital, San Francisco.</td>
</tr>
<tr>
<td>STM</td>
<td>St. Mary’s Hospital and Medical Center, San Francisco.</td>
</tr>
<tr>
<td>UC</td>
<td>University of California Hospitals and Clinics, San Francisco (includes Long, Moffitt, and Ambulatory Care Center).</td>
</tr>
<tr>
<td>UCD</td>
<td>University of California, Davis.</td>
</tr>
<tr>
<td>UCI</td>
<td>University of California Irvine Medical Center, Orange.</td>
</tr>
<tr>
<td>UCLC</td>
<td>UCLA Center for Health Sciences, Los Angeles.</td>
</tr>
<tr>
<td>UCSF</td>
<td>University Hospital, University of California Medical Center, San Diego.</td>
</tr>
<tr>
<td>VA</td>
<td>Veterans Administration Medical Center, San Francisco.</td>
</tr>
<tr>
<td>VAF</td>
<td>Veterans Administration Medical Center, Fresno.</td>
</tr>
</tbody>
</table>
115. **Histology.** (3) 5 W. Lecture 2 hours. Lab 3 hours. 

**Martin and Staff**

A study of the microscopic structures of the tissues and organs of the human body by means of lectures, demonstrations, and microscope slides. Functional aspects of the structures are stressed. Intended for students in the School of Pharmacy. ANATOMY

116. **Gross Anatomy.** (3) 5 W. 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. Fishler**

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. STOMATOLOGY

117.02. **Head & Neck Anatomy.** (4) F. Prerequisite: First-year Dentistry standing. Lecture 2 hours. Lab 6 hours. 

**S. Fishler**

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. STOMATOLOGY

117C. **Neuroanatomy.** (2) W. Prerequisite: First-year Dentistry standing. Lecture 1 hour. Lab 3 hours. 

**H. Ralston**

The structure and function of the nervous system studied by means of lectures, laboratory exercises, and demonstrations. ANATOMY

118. **General Histology.** (4.5) 5 W. Lecture 4 hours. Lab 2 hours. 

**R. H. Kramer**

The microscopic structure of tissues and organs of the body are studied with histophysiologic considerations. STOMATOLOGY

150.01. **Gross & Regional Anatomy.** (0.5 per week) 5 Ws, F. Prerequisite: Program must be approved by department and advisor during quarter prior to enrollment. 

**Adler**

Individual or group dissection; advanced review of gross anatomy. Intended as a block elective course for advanced medical or graduate students. ANATOMY

150.09. **Language of Anatomy.** (1) 5 W, F. Prerequisite: Consent of instructor. ANATOMY

156.01. **Gross Anatomy & Embryology.** (2.5) F. Prerequisite: Dental Hygiene standing. Lecture 5 hours, Lab 4 hours. 

**S. Fishler**

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. STOMATOLOGY

156.02. **Head & Neck Anatomy.** (3) F. Prerequisite: Dental Hygiene standing. Lecture 2 hours. Lab 3 hours. 

**S. Fishler**

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. STOMATOLOGY

156C. **Neuroanatomy.** (2) W. Prerequisite: Dental Hygiene standing. Lecture 1 hour. Lab 3 hours. 

**H. Ralston**

The structure and function of the nervous system studied by means of lectures, laboratory exercises, and demonstrations. STOMATOLOGY

170. **Advanced Head & Neck Anatomy.** (1-5) 5 W. Prerequisite: General histology, gross anatomy of the head and neck, and oral histology. Lecture 1 hour Lab 0-12 hours. 

**Staff**

Designed for postgraduate specialty certificate students enrolled in the clinical specialty training program in the School of Dentistry. Seminar presentations and demonstrations of head and neck anatomy are correlated with their application to clinical dentistry. DENTOR DENT

170.01. **Medical Students Program Workshops.** (3) F. Prerequisite: Consent of instructor. Seminar 1 hour, Lab 3 hours. 

**H. Ralston**

Workshops in anatomy and neuroanatomy, offered concurrent to the first-year course, will present challenging material in the form of problem sets with 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) Prerequisite: Consent of instructor and anatomy and consent of instructor. Lecture 2 hours. Offered in summer or spring of even-numbered years. 

**McKenzi**

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

170.09. **Language of Anatomy.** (1) 5 W, F. Prerequisite: Consent of instructor. ANATOMY

170.01. **Adler**

A three-component elective, focusing vocabulary-building in anatomical-medical terminology, reflecting history of medical and cultural themes influencing development of anatomical nomenclature, and through student oral reports on etymological terms introducing some major figures in anatomy. ANATOMY

172. **Clinic Anatom through Cross-Sections.** (2) 5 W. Prerequisite: Anatomy 100. Not open to first-year medical students. Lecture 1 hour, Lab 1 hours. 

**Adler**

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

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

**Staff**

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

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

**Staff**

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

210. **Radiation Effects in Genus & Chrom.** (2) W. 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

203. **Techniques in Cell Biology.** (3) 5 W. Prerequisite: Consent of instructor, Lecture 3 hours. 

**S. Rosen, Werb**

Course introduces the literature and provides training in topics such as lipid, carbohydrate, protein, general enzyme histochemistry, and microtubular structure. Immunohistochemistry, immunofluorescence, immunoelectron microscopy; cell fractionation. Content of course will vary from year to year depending upon students' needs and interest. ANATOMY

204. **Cytogenetic Techniques.** (3) 5 W. 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. **Neural Neuroanatomy.** (3) W. Prerequisite: Basic Human Neuroanatomy or consent of instructor. Lecture 3 hours. 

**Garrouste**

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

Week staff
A laboratory rotation course to familiarize new de- greed students with various approaches in research. ANATOMY


Staff
Students, staff, or guests present selected topics con- cerning with current research in anatomy for criticism and discussion. 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. Not offered 1990-91.

M. LaVall, B. Stolz, J. LaVall, B. Stolz
Lectures and laboratory projects on the principles and experimental methods of analyzing the neural organi- zation of the central and peripheral nervous systems. Topics include neurocytology, axon transport, neural degeneration, inrnmunocytochemistry, autoradiogra- phy, electron microscopy, quantitative data acquisition methods, and photomicrography. ANATOMY


Calame, Pedersen
Principal of development presented with an empha- sis on cell and molecular research approaches. Topics to be included are early development, cell-cell interac- tions, and neural differentiation. Lectures and student discussion of current and classical research approaches. ANATOMY


Calame
Molecular and cellular events relating to differ- entiation and development. A variety of developmental phenomena are surveyed and related, where possible, to genetic and epigenetic control mechanisms. ANATOMY


Pedersen
Course focuses on procedures for producing mam- malian 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


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


Staff
ANATOMY


J. Long and Staff
Principles of scanning electron microscopy including tissue preparative techniques and applications. Lab- oratory 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 gradu- ate 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 De- partment of Anatomy under the supervision of in- structor in charge. Laboratory teaching, presentation of lecture material, experience in setting up and cor- recting of examinations, and participation in course are included. ANATOMY

400. Clin Anat through Cross-Section. (2) Su. Prerequisite: Open to house staff members of UC hospitals. Lecture 1 hour. Lab 3 hours.

Asling, Ross
Claustrophile, cross-sectional 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


Staff
Instruction and experience in operating room anes- thesia including preoperative and postoperative evaluation and care. Cardiopulmonary resuscitation and care of the unconscious patient are stressed. The course is given at SFGH, UCS, VCA, C. FR, and A. B. hospitals. ANESTHESIA

140.01. Advanced Anesthesia Clerkship. (1-5 per week) F, W, Sp. Prerequisite: Anesthesiology 110. Shapiro
Clinical clerkship in operating room anesthesia, care of the unconscious patient, and management of pa- tients in the recovery room. Not scheduled through elective lottery. Contact Department of Anesthesiology, extension 63234, to schedule.

140.02. Off-Campus Clerkship. (1-5 per week) Su, F, W, Sp. Prerequisite: Anesthesiology 110. Shapiro
Off-campus clinical clerkships in approved hospitals by special arrangement and approval of the Director of Medical Student Education, Department of Anesthesiology. ANESTHESIA

140.03A. Intensive Care Clerkship-SFGH. (1.5 per week) Su, F, W, Sp. Prerequisite: Anesthesiology 110, Medicine 130, and Surgery 110.

Schlobohm, Luce, Katz, Schacter
Clinical clerkship on techniques of intensive care with primary emphasis on respiratory, cardiovascular, and renal pathophysiology. Patient population in- cludes adult and pediatric patients with medical and surgical illnesses, a significant portion of whom have been severely traumatized.

ANESTHESIA

140.03B. Intensive Care Clerkship-U.C. (1.5 per week) Su, F, W, Sp. Prerequisite: Anesthesiology 110, Medicine 130, and Surgery 110.

Cohen, N., Mathay
Clinical clerkship on techniques of intensive care with primary emphasis on respiratory, cardiovascular, and renal pathophysiology. Patient population in- cludes adult and pediatric patients with medical and surgical illnesses, a significant portion of whom have been severely traumatized.

ANESTHESIA

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

M. Ross
Course covers anesthesia and analgesia for vaginal delivery and cesarean section. Emphasis is placed on effects of anesthetic techniques and drugs on normal physiology, changes in labor and delivery, placental transfer of drugs, and resuscitation of the newborn. Not scheduled through elective lottery. Contact Department of Anesthesiology, extension 63234, to schedule. ANESTHESIA

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

Bozetti
Students will gain familiarity with the operation of an ambulatory surgery unit, patient and procedure selec- tion, psychological preparation of children for sur- gery, anesthesia techniques for ambulatory surgery, sedation and analgesia for regional anesthesia, and assessment of recovery and discharge criteria. Not scheduled through elective lottery. Contact Depart- ment of Anesthesiology, extension 63234, to schedule. ANESTHESIA

150.01. Research in Anesthesia. (1.5 per week) Su, F, W, Sp. Prerequisite: Anesthesiology 110. Eger
Students conduct research projects under guidance of faculty members. Projects must be approved by in- structor involved in supervising student. Students may initiate or become involved in established re- search programs under faculty guidance. Requires approval of the Dean and Department. ANESTHESIA

160.01. Basic CPR. (0.5) F, W, Sp. Lecture 1 hour. Lab 2 hours.

Cohen, Cahalan, Strong
Two-week CPR skills course training students in basic life support skills; cardiac compression and ventila- tion, management of airway obstruction, and assess- ment of need to initiate or terminate CPR. Sessions include presentations by Anesthesiology faculty and skills practice for students. ANESTHESIA

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


Eger
A laboratory project under direction of a member of the faculty with the approval of the chair- person of the department. ANESTHESIA


R. D. Miller
Course includes didactic lectures in sciences basic to the specialty of anesthesia, as well as case reviews, clinical discussions, and reviews 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 out- patient departments, under immediate supervision of the staff. Preoperative and postoperative evaluation of patients, oxygen therapy, and resuscitation are cov- ered. ANESTHESIA

460. Special Assignment. (1-5 per week) Su, F, W. Sp. Elective for residents during either second or third year. UC Eger
Ablon
Review of theoretical and methodological literature on anthropological life histories and the use of life history materials. Classic life histories and newer works will be read and examined for the methodologies and analyses utilized. EPID & BIOSTAT

Nygard
Workshop format, utilizing student research projects. 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

Mittens
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 6-12 hours.
Ablon
An introduction to data processing methods most commonly used by medical anthropologists. Topics covered include computer use and laboratory demonstrations include: how a computer works, data form design, key-punching, use of SPS and HMD program packages and interpretation of computer output. EPID & BIOSTAT

Staff
Students study current and important topics in human cognition. EPID & BIOSTAT

221A-B. Research Training Seminar. (0-3, 3-6, 3-9) F, W, Sp. Pre-requisite: Consent of instructor. Lecture 3 hours; plus 3 hours independent study for 4 units. Required for and open to only second-year students in the intercampus Program in Medical Anthropology. Required for students in the UCSF Ph.D. Program in Medical Anthropology.
Ablon, Mittens
Survey of the biocultural areas of medical anthropology; anthropology in relation to biomedicine and human biology. EPID & BIOSTAT

221A-B. Research Apprenticeship. (2-3-5, 2-3-6, 2-5-6) F, W, Sp. Pre-requisite: 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

225. Contemporary Issues. (2-4) F, W, Sp. Pre-requisite: Consent of instructor. Lecture 2 hours, plus 3-6 hours independent study for 3 or 4 units.
M. Clark
Introduction to selected controversies and current issues in medical anthropology, including sociology, social-cultural impact of high technology medicine, abortion, euthanasia and right to life, status of research on the etiology of mental disorders, advocacy, prosecution, and the social sciences. EPID & BIOSTAT

Ablon
Examination of social attributes of stigmas to such conditions as diseases, 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

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 in health and mental health resources. EPID & BIOSTAT

230. Culture & Personality. (2-3) F. Pre-requisite: Consent of instructor. Lecture 2 hours, plus 3 hours independent study for 3 units.
Kiefer
Exploration of the relationship between culturally conditioned modes of perceiving, thinking, and communicating, and individual behavior and personality development. Applications of cultural and personality findings in medical and nursing settings. EPID & BIOSTAT

231. Ethnopsychiatry. (2-3) F, W, or Sp. Pre-requisite: Consent of instructor. Lecture 2 hours, plus 3 hours independent study for 3 units.
M. Clark, Hertog
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. Pre-requisite: Consent of instructor. Lecture 2 hours, plus research project for 3 units.
Kiefer
Cross-cultural approaches to roles, status, and problems of aged populations. Cultural factors influencing the conditions of adaptation of the aged to 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. Pre-requisite: Anthropology 230A or equivalent, or consent of instructor. Lecture 2 hours, plus 3 hours independent study for 3 units.
Staff
Course is designed to examine the interaction of culture and symbolic systems in social anthropology and the role of culture as an important variable in social, economic and political processes. EPID & BIOSTAT

235. Cross-Cultural Aspects of Childhood. (3) F. Pre-requisite: Consent of instructor. Open to students in medicine, nursing, or other departments. Lecture 2 hours, plus research paper.
Mittens, 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. Pre-requisite: Consent of instructor. Lecture 2 hours, plus 3 hours independent study.
Ablon
Anthropological approaches to family study. Structure and dynamics of varied family systems examined, emphasizing changing family forms and ways family life style and values contribute to manners of coping with stress, illness, and crime. EPID & BIOSTAT

Kaye-Jones
Course covers developmental theory and research in aging. Emphasis is on the interplay of biological and sociocultural factors in aging. Topics may include biological, psychological, and sociocultural perspectives on aging. EPID & BIOSTAT

Staff
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 parapsychological dimensions of healing, and relevance of traditional medicine for health maintenance and primary health care. EPID & BIOSTAT

Ablon
A review of anthropologically oriented research on basic American values, social organization, and ethnicity. Emphasis is on socio-economic dimensions of change and varying institutions, values, and life styles. EPID & BIOSTAT

Staff
Groups of two or more collaborate on special problems in anthropology under the direction of faculty.
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


Colby, Michael


Michaelis, Benson

150. Research in Biochemistry. (1.5 per week) F, W. Sr. Prerequisite: Consent of instructor.

Staff

170. Molecular Biology of Medicine. (1-2) W. Prerequisite: Consent of instructor. Seminar 2 hours.

Colby

189. Supervised Study. (0-1-5) Su, F, W, Sr.

Colby

190A. Structure of Macromolecules. (3) Sr. Prerequisite: Calculus, physical chemistry, organic chemistry, and an advanced course in biology. Lecture 3 hours.

Agard

Fundamental principles governing the behavior of, and modern techniques for study of biological macromolecules. Topics covered include 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 enzyme systems and systems of biological control. BIOCHEM

200C. Chromosome Structure & Function. (1.5) Sr. 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 examined 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

200B. Enzymology. (3) Sr. 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. Offered 1996-97.

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. Intermolecular forces and enzyme substrate interactions. Techniques of investigating enzyme mechanisms and kinetics. BIOCHEM

201A-B. Biological Regulatory Mechanisms. (3, 1.5) W, Sr. Prerequisite: Calculus, physical chemistry, organic chemistry, introductory biochemistry and an advanced course in biology. Lecture 3 hours.

Yamamoto

Discussion of the discovery of principles forming the foundation of molecular biology and recent advances in rapidly developing areas of research. Topics covered include RNA transcription, protein translation, DNA replication, control mechanisms, and genome structure and organization. BIOCHEM

210. Special Topics. (0-5) Sr. F, W, Sr. Prerequisite: Consent of instructor. Lecture 1-5 hours.

Staff

220. Selected Topics. (0-5) W, Sr. Prerequisite: Consent of instructor. Lecture 1-5 hours.

Albers

Lectures and discussion on topics of current interest in biochemistry and biophysics. BIOCHEM

BIOCHEM/ Bioengineering

242. Protein Crystallography. (3) Sr. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours. Offered in alternate years. Offered 1996-97.

Stroud

Principle 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) Sr. Prerequisite: Calculus, physical chemistry, organic chemistry, and an advanced course in biology are recommended. Lecture 3 hours.

Kirschner, G. Martin

Modern aspects of cell biology and development with emphasis on structure-function relationships and molecular organization. BIOCHEM


Staff

297. Special Study. (1-3) F, W, Sr.

Staff

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

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

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

Bioengineering

190. Diff Equations for Biomechanical Engineering. (3) F. Prerequisite: Introductory calculus. Lecture 3 hours.

Glantz

Course covers description of biomechanical processes such as cardiovascular physiology, pharmacokinetics, instrumentation with ordinary differential equations, direct methods to solve equations and interpret the results; linear systems, exponential, natural log, sine and cosine functions, eigenvalues, time constants, and half-times.

192. Lagrange & Fourier Transforms. (3) W. Prerequisite: Bioengineering 190 or equivalent. Lecture 3 hours. Glantz

Course covers Lagrange transform and numerical solutions of differential equations; Fourier transform and spectral analysis of biological signals; impulse, step, and frequency response; introduction to curve fitting; examples from pharmacokinetics and common laboratory instrumentation.

Preparations of selected topics in biochemistry by graduate students in the Department of Biochemistry. BIOCHEM

Presentations of selected topics in biochemistry by graduate students in the Department of Biochemistry. BIOCHEM
198. Supervised Study. (1-5) F, W. Prerequisite: Consent of instructor and academic advisor. 
Staff 
Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department.


Bioengineering/Biomaterials/Biotechnology


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 gamma-rays. Counting statistics and radiation protection. Applications in biology, chemistry, engineering.

220. Bioengineering Seminar. (1) F. Seminar 2 hours.

Baumstaid, Bhattachary 
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 dysfunction.


Staff 
Advanced study in various subjects through seminars on topics to be selected each year, informal group study of special problems, group participation in comprehensive design projects, or group research on complete problems for analysis and experimentation.

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 transformography, computed tomography, serological, digital subtraction angiography, phosphorescent phosphor technology, dual-energy imaging techniques, bone-demineralization, and quantitation of various flow rates.


Staff 
Clint Aspects of Bioengineering. (2) Sp. Prerequisite: Consent of instructor. Lecture 1.5 hours. Lab 1.5 hours.

Litt 
Apects of bioengineering will be explored within the context of clinical reality. Important clinical issues relevant to bioengineering will be reviewed to help the student appreciate the potentials and pitfalls of contemporary technologies. The course will cover one week for each one- and one-half hours of clinical and laboratory experience. Throughout the course there will be contact with scientists, physicians, nurses, technicians, and patients. The course will utilize bioengineering students with clinical activities at UC/CH and teach them to rapidly 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 advisor.

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 advisor.

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

Biomedical

156. Dental Materials Survey. (3) Sp. Lecture 1 hour. Lab 1 hour.

Bertolotti 
An introduction for the dental hygienist to the basic concepts associated with selected dental materials. Emphasis is placed on the use and manipulation of materials commonly used in the practice of dentistry.

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

Mayall, Chew 
Introduction to quantitative microscopy, microscopic 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) F. Prerequisite: Successful completion of 207A. Lab.

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

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

Fike, Morgan 
Interactions 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 tissues.

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

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

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

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


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

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

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

See also: Biochemistry 2004, Chemistry 260, Biostatistics 185
Biostatistics

171. Introduction to Linear Algebra. (3) F. Prerequisite: One year of college-level mathematics. Lecture 3 hours. Offered in alternate years. Not offered 1990-91.

Paul

This course provides a general introduction to linear algebra. The main topics to be covered are: linear equations, matrices, vector spaces, linear transformations, determinants, eigenvalues and eigenvectors. Understanding of the concepts of theorems will be emphasized; understanding of proofs will not be emphasized. The course can be helpful to people planning to take courses in linear statistical methods or applied linear mathematical methods, as well as provide information useful for many advanced courses in mathematics. EPID & BIOSTAT

183. Intro to Statistical Methods. (4) 5 Sp. Lecture 4 hours.

Hoffman, Clanci

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

185A. Intro to Probability & Statistics. (4) W. Prerequisite: Working knowledge of algebra. Lecture 4 hours.

Paul

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

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

Paul

Continuation of Biostatistics 185A. Course covers one- and two-factor analysis of variance, linear regression analysis with one and two independent variables, elements of nonparametric methods, simple chi-square tests, and other topics. EPID & BIOSTAT

187. Statistical Theory & Practice. (6) F. 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. Preparation for more advanced work. EPID & BIOSTAT

Clinical Trials & Life Tables. (3) Sp. Prerequisite: Biostatistics 183 or equivalent permission of the instructor. Lecture 3 hours. Offered in alternate years.

191. Clinical Trials & Life Tables. (3) Sp. Prerequisite: Biostatistics 210A or equivalent. Lecture 3 hours. Lab 3 hours.

Segal

This course continues the material and approach of Biostatistics 210A. Topics include analysis of variance and covariance (primarily from a regression standpoint), repeated measures analysis of variance. EPID & BIOSTAT

213. Multivariate Methods. (4) F. Prerequisite: Biostatistics 210A and 210B or equivalent. Lecture 3 hours. Lab 3 hours. Offered in alternate years. Not offered 1990-91.

Neuman

Course covers classical multivariate methods such as canonical correlation, multivariate analysis of variance, principal components, and discriminant analysis. Emphasis is on application and interpretation of these procedures with real data. EPID & BIOSTAT

225. Selected Topics. (2-3) F, W, Sp. Lecture 2 or 3 hours. Lab 0 or 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) SS, SS, Su, F, W, Sp. Prerequisite: Consent of instructor. Staff

BioCHEM

Chemistry

112. Intro to Organic Chemistry. (6) F, W, Sp. Prerequisite: Completion of 8 units of organic chemistry. Lecture 1 hour. Lab 4 hours.

Craig

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

133. Organic Chemistry. (3) F. Prerequisite: Chemistry 112 or passing grade in the Chemistry 112 equivalency examination. Lecture 3 hours.

Kitcham, Craig

A continuation of the study of compounds of carbon including some aromatic, hydro-aromatic, and heterocyclic compounds. PHARM CHEM

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.

Kome

Elementary physical chemistry with emphasis on thermodynamics. PHARM CHEM

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

T. James

Elementary physical chemistry with emphasis on chemical kinetics. PHARM CHEM

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

Kitcham
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.

CF PHARM

130. Therapeutics. (6) F. Prerequisite: Successful completion of all first-, second-, and third-year courses and Clinical Pharmacy 130 series comprehensive examination. Clinical 40 hours per week for six weeks.

Flaherty 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. CF PHARM

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

Flaherty and Staff
Continuation of Clinical Pharmacy 148A. CF PHARM

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

Aller 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. CF PHARM

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

Flaherty and Staff
Continuation of Clinical Pharmacy 148A. CF PHARM

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

Aller 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. CF PHARM

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

Flaherty and Staff
Continuation of Clinical Pharmacy 148A. CF PHARM
Clinical Pharmacy

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

Sauer and Staff
Supervised clinical pharmacy experience in an inpatient setting. Students 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

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

Sauer and Staff
A continuation of Clinical Pharmacy 149.03A. 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. Leeks 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 & MHLD. (6-5) F., W., Sp. Prerequisite: Successful completion of all first-, second-, and third-year courses and Clinical Pharmacy 130 series comprehensive examination.

Shinomura and Staff
Supervised clinical 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 & MHLD. (6-5) F., W., Sp. Prerequisite: Clinical Pharmacy 149.02A.

Shinomura and Staff
Continuation of Clinical Pharmacy 149.02A. CL PHARM

149.03A. Ambulatory Externship/Clerkship—UCSD. (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—UCSD. (6-5) Su, F., W., Sp. Prerequisite: Clinical Pharmacy 149.03A. Clinic 39 hours per week for 6 weeks.

Sauer and Staff
A continuation of Clinical Pharmacy 149.03A. CL PHARM

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

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

155.20. Drug-Induced Disease Problems. (3) F., W., Sp. Prerequisite: Pathology 135. Third-year standing or higher. Lecture 2 hours. Special project 4 hours.

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

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

Guglielmo
Course provides students with intensive, systematic approaches to management of patients with selected infectious diseases. Emphasis is on controversies in management. Infectious diseases in specialized circumstances also included. 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 medhands on tours of clerkship sites. CL PHARM

155.50. Oncology Seminar. (2) F. Prerequisite: Fourth-year pharmacy student 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-MHLD. (1-8) F., W., Sp. Prerequisite: Fourth-year standing and consent of instructor.

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

170. Group Studies. (1-6) 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

170.05. Issues Facing Women in Pharmacy. (2) Sp. Seminar 2 hours.

Kimble, Sauer
Through lecture and discussion, issues facing women in pharmacy will be explored. Specific topics to be addressed include career planning and management, balance or career and personal life, job vs. career commitments; part-time work options; and issues related to increasing numbers of women entering the profession. CL PHARM

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

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

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

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

175.04. Clinical Pharmacokinetics—UCI. (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—UCI. (1-8) SS1, SS2, Su, F., W., Sp. Prerequisite: Successful completion of all first-, second-, and third-year required coursework. Consent of instructor.

A. Wong
Participate in activities of Neonatal ICU, including patient monitoring, rounds, drug consultation, and utilization. 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—SFCH. (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 affect children from low income, overcrowded and substandard conditions. Activities include rounds, conferences and participation in special projects. CL PHARM
participation in unit dose medication system, and researching drug information. Special project required.

CL PHARM

175.79. Home Care Services. (1-4) S: 1 S, 52 Su, F, W, Sp. Prerequisite: Successful completion of all first-, second-, and third-year required coursework. Consent of instructor.

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


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

175.82. IV Additives Clinic—VA. (1-8) Su, 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) Su, F, W, Sp. Prerequisite: Clinical Pharmacy 130, 131, and 132. Consent of instructor.

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

175.84. Drug Utilization Review—VAM. (1-8) Su, F, W, Sp. Prerequisite: Clinical Pharmacy 144A or 149A and 149B. Consent of instructor.

Winter, Ebr, 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 pharmacists, 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.

McCarty. Students design a drug utilization review. Adler reviewing 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.


L. Hart. 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.


Winter, Miller and Staff. Experience in collection, evaluation and dissemination of drug information in a community-based drug information service. Activities include answering drug information requests from community practitioners. CL PHARM.


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.


Winter, Tatro. 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 service. CL PHARM.

175.99. Clinical Pharmacy Practice. (6) Su, 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 patient-specific drug information questions. CL PHARM.

176.01. Nephrology—UCSD. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148 A or 149 A. Consent of instructor.

D. Adler and Staff. Students participate in the Renal Consult Service, Hemodialysis Unit, and 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 A or 149 A. Consent of instructor.

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 A or 149 A. Consent of instructor.

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


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 A or 149 A. Consent of instructor.

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

176.06. Anticoagulation—UCSD. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148 A or 149 A. Consent of instructor.

Weber and Staff. Students participate in the services of the anticoagulation clinic at University Hospitals under the guidance of a clinical pharmacist. CL PHARM.

176.08. Dermatology—UCSD. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148 A or 149 A. Consent of instructor.

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


Weber and Staff. This hypertension clerkship is an inpatient, 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.

176.20. IV Additives & Fluid Ther—UCSD. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148 A or 149 A. Consent of instructor.

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.


Manooguerra 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.


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


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.


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

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

Ignoffo. Students attend work rounds, house staff management rounds and teaching conferences; learn techniques utilized as caring for patients with hematologic or solid tumors. Emphasis on acute care of cancer patient: anti-emetic and pain control; hyperalimentation; treatment of hypercalcemia and infections. Projects. CL PHARM.


Guglielmo. Students are responsible for patient interviewing, monitoring, rounds, and drug consultation. Patients are primarily pediatric with congenital heart defects and adults undergoing open heart surgery with permanent pacemaker placement and cardiac valve replacement. CL PHARM.


Hazel, Winter.
Clinical Pharmacy

The clerkship stresses the integration of dispensing and clinical practice in a primary community hospital. Students will make daily didactic and/or patient presentation pharmacy staff members. A project is required. CL PHARM

185.22. Pediatrics—CHMC. (1-8) Su, F, W, Sp. Prerequisite: Completion of all first-, second-, and third-year required coursework and consent of instructor. Winter, Lundergan, Rockwood

Students will participate in the activities of the In-Patient Pediatric Service at Children's Hospital, Oakland. Emphasis will be placed on the development of clinical skills in pediatric pharmacy, with a limited exposure to the development of essential administrative skills. CL PHARM

185.23. Medicine—SRL. (1-8) Su, F, W, Sp. Prerequisite: Clinical Pharmacy 146A or 149A and 149B. Consent of instructor. Winter, Dennis, Sobel

Students attend rounds, interview patients and take medical histories, mentor and evaluate drug therapy, provide patient-specific information to health team members, provide drug and health information to patients, document clinical services. CL PHARM

185.25. Brooks Hospital Clerkship. (1-8) F, W, Sp. Prerequisite: Completion of all first-, second-, and third-year required course work.

Winter, Anin, Milice

Students participate in various clinical activities, including patient monitoring (antibiotics, nutritional support), education of patients, patient education and drug information. CL PHARM

185.28. Psychiatric Care Unit—STF. (1-8) SS1, SS2, Su. Prerequisite: Completion of all first-, second-, and third-year required course work and successful completion of the comprehensive examination.

Winter, Closson

The student will participate in an interdisciplinary team approach to psychiatric care, including drug therapy monitoring, daily interdisciplinary patient care rounds and patient education. CL PHARM


Winter, Gatterer, Jansen

Students work with critical pharmacists in ICU, monitoring patient drug therapies throughout intensive illness course. Diseases of patients include acute failure of major body systems (including cardiovascular, renal, hepatic, neurologic, and pulmonary). CL PHARM

185.30. Gastroenterology. (4-8) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second, and third year required coursework and instructor approval. M. Winter, Carr-Lopez

Students participate in screening of patients over 70 years of age, with emphasis multidisciplinary geriatric teams conferences, attending rounds, and weekly geriatric outpatient clinics. Most common problems relate to polypharmacy, poor nutrition, chronic diseases, depression, syncope, dementia, and pneumonia. CL PHARM


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

185.34. Inpatient Clinical Pharmacy. (1-8) F, W, Sp. Prerequisite: Successful completion of all first-, second-, and third-year required course work and the comprehensive examination.

Winter, Garich, Inouye

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

185.36. Nutrition Support—Queen's Medical Center. (1-8) F, W, Sp. Prerequisite: Completion of all first-, second-, and third-year required course work and successful completion of the comprehensive examination.

Winter, Garich, Schanzenbach

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

185.38. Alcoholism & Poly-Drug Abuse—OC. (1-8) Su, F, W. Sp. Prerequisite: Clinical Pharmacy 146A or 149A and 149B. Consent of instructor. Winter, Furtado, Icazo

Detoxification and management of alcoholism and poly-drug abuse. Emphasis on methods of acute detoxification and support services in the care of patients, including responsibilities of health care team members and consultation of physical and psychological consequences. CL PHARM

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

Students participate in daily medical-gynecological clinics, including management and handling of pharmaceuticals, monitoring BCP use, and participating in special projects. CL PHARM


Students interview patients, monitor drug therapy, provide nursing in-service education, provide drug information consultations to physicians, and conduct drug utilization and adverse drug reaction studies. Students continuously document activity and findings and submit a written report. 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 review, nursing in-service and medical distribution reviews, and conduct medication administration error audits and special project. Students may also be involved with the development of laptop computer consulting and nutritional and pharmacokinetic console. CL PHARM

185.71. Jail Medical Services—SF. (1-8) Su, F, W, Sp. Prerequisite: Clinical Pharmacy 130, 131, 132 and consent of instructor. Winter, Kubo-Hallshik, Lunn

Students gain experience managing medical problems of adult and adolescent patients at three jail sites; participate in daily clinic, medical screening, patient monitoring, conferences. Optional administrative or clinical project. CL PHARM

185.72. Outpatient Forensic Psychiatric Service—SF. (1-8) F, W, Sp. Prerequisite: Completion of Clinical Pharmacy 130, 131, 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 in-service conferences. They will work under the supervision of a faculty in the on-going management of selected mentally disturbed criminal-justice patients. CL PHARM

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

Winter, L. Davis

Students will design and implement a drug usage evaluation and target drug program which will include the following components: Drug utilization evaluation, written proposal, implementation, follow-up, and evaluation. Students will participate in didactic conferences which will discuss formulation management, DUEs, cost containment strategies, and target drug implementation. CL PHARM

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

Winter, L. Davis

Students will design and implement a drug usage evaluation and target drug program which will include the following components: Drug utilization evaluation, written proposal, presentation to the P&T Committee, and implementation, data collection and follow-up activities. Students will participate in didactic conferences which will discuss formulation management, Drug Usage Evaluation process, cost containment strategies, and target drug implementation activities. CL PHARM

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

Winter, K. Lee

Students will participate in a centralized IV Admixture, Automated Unit Dose system and distribution of parenteral nutritive and medications for home-bound patients. Students also become familiar with the administrative structure and marketing of home health services. CL PHARM

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

Winter, Echaves

Students will participate in patient home visits as a member of the Hospice Committee at San Francisco General Hospital to determine the efficacy of drug therapy and assess medication compliance. CL PHARM

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

Winter, Sandow

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 obstetric patient. CL PHARM

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

Winter, Bergstrom

Students will design and implement a target drug program which will include the following components: Drug utilization evaluation, written proposal, implementation, follow-up, and evaluation. Students will participate in didactic conferences which will discuss formulation management, DUEs, cost containment strategies, and target drug implementation. 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 and Staff. Discussion and review of pharmacokinetic principles in drug therapy relating to clinical cases at UCD, including appropriate patient counseling, 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


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

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

Shimomura, Diamant, Towne. 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, plugging in and administration of agents, side effects and toxicity, applicable pharmacokinetic calculations. CL PHARM


Shimomura, Ambrose. Participation in all aspects of clinical pharmacokinetics service including information, consultations, and drug dosing. Emphasis on research approved protocols. Involvement in analysis and evaluations 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, M. Cook. Participation in application of heparin and warfarin guidelines, which involve dosage adjustment, clinical assessment, data collection, medical audit. Students learn about management of patients with thromboembolic diseases through conferences, selected readings and clinical participation. CL PHARM


Shimomura, Holding, Folli, Rivers. Participation in patient care rounds, monitoring care presentations, pharmacokinetic evaluations, literature research, and CPUs in neonatal and pediatric patients. Major pediatric disease states and appropriate drug therapy will be reviewed daily. Six to ten hours of medical seminar 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. Through background into 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, Zern. 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 pharmacy practice in active and neonatology under supervision of pediatric clinical pharmacist and pediatrics. CL PHARM


Shimomura, S. Gardner. Students participate in the activities of the Jules Stein Eye Institute, which include patient monitoring, attendance at conferences and seminars, and drug prescription. Medications will be supervised under the supervision of the pharmacist preceptor in learning the management of common diseases of the eye. CL PHARM


Shimomura, R. Thomas. Students participate in activities of emergency room and become familiar with the role of the pharmacist in this setting. Emphasis is on managing emergency conditions such as drug overdose, diabetic ketoacidosis, trauma, and cardiac arrhythmia. CL PHARM


Shimomura, Shukur. Students observe and participate in activities of the pharmacy and developmental services at the hospital.

Emphasis is on diagnosis and management of neurologic 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 participate in 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


Shimomura, Kityama, Lehave. 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


Shimomura, Luna. Students 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


Shimomura, Zeidler. 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 patient’s problem with the knowledge of the drug’s kinetic and pharmacological properties. CL PHARM


Shimomura, Martinez, Henry. Students work with a home care pharmacist in a hospital, extended care facility, and homes, involved with monitoring total parental nutrition, chemotherapy, pain management, antibiotic therapy, and related services for home care patients. CL PHARM

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

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


Shimomura, Giambone, Posedal. 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 in-service education classes and preparing pharmacy and therapeutic committee drug reviews. CL PHARM


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


Shimomura, Ming. Students participate in the activities of an intravenous additive service in a large university teaching hospital. Students will learn about aspects of compounding, compatibility and stability of drugs in intravenous solution, total parental nutrition, perfused syringe programs, home hyperalimentation and piggyback. CL PHARM

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

Shimomura, Vrabel. An on-line experience in a drug information center serving a large multidisciplinary teaching hospital. Through a series of experience modules, in addition to day-to-day information requests received by the center, students will be exposed to demonstrating computer in drug literature evaluation and drug information removal skills. CL PHARM

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

Shimomura, Casselmann. 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) Su, F, W. Sp. Prerequisite: Successful completion of all first-, second-, and third-year course work 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 practices. Through observation and performance, students will develop and explore their roles as clinical pharmacists. CL PHARM
Clinical Pharmacy

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

Sauer and Staff
Students participate on the UCD Medical Center inpatient acute care psychiatric ward. Activities include monitoring and interviewing patients, participation in team medical rounds, conferences, and pharmacy and medical lectures. Students will also present inter-service programs to the psychiatric staff and pharmacy staff. CL PHARM

188.03. Poison Information—UCD. (1-8) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second-, and third-year course work, Clinical Pharmacy 148 or 149 and consent of instructor.

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


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

188.05. Medical Intensive Care—UCD. (1-8) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second-, and third-year course work, 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 site of the Children’s Hospital of the University of California. 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) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second-, and third-year course work, Clinical Pharmacy 148 or 149 and consent of instructor.

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


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

188.08. Microcomputer Applications in Pharmacy Practice—UCD. (1-8) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second-, and third-year course work and consent of instructor.

Sauer and Staff
The student will identify and develop a solution for a problem in pharmacy practice that can be resolved by the use of microcomputers. In addition, the student will review the utility of various software used in pharmacy practice. CL PHARM


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

188.10. Infectious Diseases—UCD. (1-8) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second-, and third-year required course work 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. Pharmacokinetics. (1-8) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second-, and third-year required coursework, and consent of instructor.

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


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

188.20. Oncology/Sutter Community Hospitals. (4-8) F, W, Sp. Prerequisite: Four-year standing only.

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

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

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

188.25. Pharmaceutical Svs in Managed Hth Care Organizations. (1-8) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second-, and third-year required coursework and consent of instructor.

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

188.26. Community Hospital Critical Care. (1-8) Su, F, W, Sp. Prerequisite: Successful completion of all first-, second-, and third-year required coursework, and consent of instructor.

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

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

Sauer, Foert
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 (convalvescent hospital) setting. CL PHARM

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

Sauer, ENA
The student will work in the long-term care setting. This includes learning federal and state regulations mandating frequency of drug regimen reviews and pharmacy systems operations. Projects may be DUR, insurance to nursing personnel or a newsletter. CL PHARM

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

Sauer, Okamoto, Dager
The pharmacy student will participate in various operations within a home health care pharmacy. These areas include TPN, enteral nutrition, and home antibiotic therapy. Clinical monitoring of such patients will be completed. CL PHARM

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

Sauer, Enos, Martin
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

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

450. Pharmacy Clinical Work. (8-12) F, W, Sp. Prerequisite: Resident standing. Herfindal, Kishi and Staff
Residents provide direct care services to patients in the wards and outpatient clinics including taking drug use histories, preparing and monitoring medication profiles, providing drug use information and consultation, and related activities. In addition, there are administrativa and teaching responsibilities. CL PHARM

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

452. Administration. (5) Su, F, W, Sp. Prerequisite: Resident standing and approval of program director. Herfindal, Kishi and Staff
Residents are responsible for carrying out assignments related to the administration of a modern hospital pharmacy service. Activities include preparation of budgets, supervision and development of staff, program planning and related administrative assignments. CL PHARM

453. Research. (1-5) Su, F, W, Sp. Prerequisite: Resident standing and approval of program director. Herfindal, Kishi and Staff
Research programs are arranged with appropriate faculty members on an individual basis. CL PHARM
Community Dentistry/Craniofacial Anomalies/Dental Aux Utilization/Dental Health Education

160. Community Health Methods. (2) W. Lecture 1 hour. Lab 3 hours. Tobin
Dental hygiene students work in the North Oakland community with the Children and Youth Project. [3.5] Students are assigned to area schools where oral screening is done. Students also make home visits. DENT PUB HLTH

Craniofacial Anomalies

170.21. Craniofacial Function. (F) F. Prerequisite: Enrollment in pedodontic orthodontic or pediatric dentistry programs or consent of instructor. Lecture 2 hours. A. Miller
This course emphasizes those properties of the neuromuscular system that modify the craniofacial morphogenetic structures. GR. DEVEL

171. Diagnosis & Treatment. (2) F, W, Sp. Lecture 1 hour. Seminar and clinic 3 hours. Chieregi, Vargervik
Diagnosis, operative, and corrective methods relative to patients with congenital malformations of the orofacial region are discussed. GR. DEVEL

171.22. Craniofacial Anomalies. (2) W, Sp. Prerequisite: Enrollment in pedodontic orthodontic or pediatric dentistry programs or consent of instructor. Lecture 2 hours. Vargervik
Demonstration of various types of craniofacial anomalies, assessment of growth and development of abnormal and normal craniofacial structures, diagnosis and evaluation of the more common anomalies and associated impaired functions and therapeutic needs of the individual patient. GR. DEVEL

186.01. Abnormal Orofacial Development. (1) F, W, Sp. Prerequisite: Fourth-year-standing or consent of instructor. Seminar and clinic 3 hours. Chieregi, Vargervik
The pathogenesis of jaw deformations, dental malocclusions, and speech disorders associated with congenital malformation is discussed. Instruction in diagnosis and preventive and corrective treatment methods is given in the clinic. GR. DEVEL

Dental Auxiliary Utilization

120. Use of Dental Auxiliaries. (1) Sp. Prerequisite: Restorative Dentistry 116. Lecture 1 hour. Bird
Lecture, clinical, and field work covering the principles of dental ergonomics, operator and patient positioning, instrument transfer technique, and an orientation to efficient chairside auxiliary utilization and their legal functions. DENT PUB HLTH

Dental Health Education

150A. Communication Theory in Dental Hygiene. (1) F. Lecture 1 hour. Walsh
Introduction to communication theories and models. Considers personal and professional aspects of communication, interpersonal, interprofessional, verbal, and nonverbal communication and listening skills. Emphasis is placed on the dental hygiene-patient relationship and the development of communication skills for dental hygiene care and chairside education. DENT PUB HLTH

150B. Human Dev & Oral Health Education. (2) W. Prerequisite: DHE 150 A. Lecture 2 hours. Ishida, Poupad
Introduces student to basic concepts of preventive oral hygiene, learning and motivation theories, and an overview of human development, including physical/ dental, cognitive, emotional, and psychosocial aspects across the life span. Considers each stage of development, from infancy, childhood, adolescence, to young, middle, and late adulthood, and related health care and oral health education needs. DENT PUB HLTH

160. Community Dental Health. (2) W. Prerequisite: Dental Health Education 150A. Lecture 2 hours. Tobin
Explores alternative, non-clinical roles for dental hygienists while introducing the student to program planning, implementation, evaluation, and financing theories. Student is given the opportunity to develop program planning and evaluation skills with a selected community dental health education field project. DENT PUB HLTH

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

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

199. Laboratory Project. (1-5) F, W, Sp. Prerequisite: Dental Health Education 150A-B and 160A-B. Lecture 1 hour. Lab 0-12 hours. Francisco
A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. DENT PUB HLTH

150.01. Leadership & Mgmt in Dental Hyg. (2) Sp. Lecture 2 hours. M. Walsh, Heckman, Poupad
Analysis of leadership and management theories, and of primary leadership skills related to personal behavior, communication, organizational 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) Sp. Lecture 2 hours. Haemelnbrink
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 150A-B, 159, and approval of the chairperson of the division. Clinic 3-4 hours. Staff
Course provides additional clinical dental hygiene experience before entry into the second-year clinic. DENT PUB HLTH

150.01. Theoretical Foundations for Dental Hyg. (3) F. Prerequisite: Dental hygiene standing. Lecture 2 hours. M. Walsh, Heckman, Poupad
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 Hyg Process. (2) F. Prerequisite: DH 150.01 Lecture 2 hours. Heckman
Course will focus on the principles of assessment as the first phase of the dental hygiene process of assessment, planning, goal-setting, implementation, and evaluation used in providing dental hygiene care. The rationale for collection of assessment data, associated clinical techniques, and documentation procedures will be presented. DENT PUB HLTH

150.03. Dental Hyg Planning, Implementation, & Evaluation. (2) W. Lecture 2 hours. Heckman
The planning, implementation, and evaluation phases of the dental hygiene care process will be emphasized as a continuation of DH 150.02. The use of 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

Dental Hygiene

150.04. Dental Hyg Care for Patients with Special Needs. (2) Sp. Prerequisites: DH 150.01, 150.02 & 150.03. Lecture 2 hours. Heckman
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 planning. DENT PUB HLTH

152. Introduction to Research. (1) Sp. Prerequisite: To be taken concurrently with Dental Public Health and Hygiene 121. Lecture 1 hour. Poupad
Concurrent 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. Heckman
Seminar to discuss the dental hygiene process as applied to dental hygiene care. Each seminar will provide an orientation to each of the techniques/skills taught as part of dental hygiene practice in DH 153A/B (Clinical/Lab application). Anamnetization, sequential steps for technique performance as well as specific criteria for performance evaluation are included. DENT PUB HLTH

153C. Clinical Dental Hyg Care Seminar. (5) Sp. Seminar 1 hour. Heckman
Seminar discussion will focus on code of conduct, patient care responsibilities, patient records, financial policies, emergency procedures, infection control protocols, clinical administrative policies/procedures and patient care, and issues related to clinical dental hygiene care. DH 153 is a series of F-W-S. DH 153 C is different from its precedents and must be taken along with DH 153A-B to complete a clinical seminar, and DH 153C is a clinical seminar. DENT PUB HLTH

155A. Intro to Clinical Dental Hygiene. (2) F. Lab 6 hours. Heckman
Laboratory and clinical experiences in patient assessment, care planning, goal setting, and implementation of instrumentation techniques for providing preventive-oriented dental hygiene care. Post-treatment evaluation is also emphasized. DENT PUB HLTH

155B. Intro to Clin Dental Hygiene Care. (2) W. Prerequisite: DH 155A. Lab 6 hours. Heckman
Extension of lab and clinical experiences in patient assessment with greater emphasis on dental hygiene care, planning, goal-setting, care presentation, and implementation of instrumentation techniques for...
Dental Hygiene/Dental Jurisprudence/Dental Practice Management/Dental Public Health & Hygiene


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

166. Expanded Clinical Functions (2) F. Lecture 1 hour. Lab: 3 hours. 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. Comp Clinical Dental Hygiene Care. (4-5-5) F, W, Sp. Prerequisite: Dental Hygiene 150.01, 150.02, 150.05, 150.04, 155A, 154.01, 154.02, 154.03, 159. Concurrent enrollment in Dental Hygiene 169. Clinic: 12 hours F, 15 hours W. W. Walsh, Heckman

Assessment of patient histories and signs of deviations from normal as 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 periodontally-affected patient. DENT PUB HLTH

182. Research Design. (0-2) F. Prerequisite: DH 152. Poupard, M. Walsh

Fundamentals of research design and the scientific method. Each student will expand his/her experience from DH 152 and prepare a research protocol. DENT PUB HLTH

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

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. (0-5) V. Clinic variable. R. Miller

Clinical experience in mobile dental clinics. DENT PUB HLTH

189.02. Community Health Clinic. (0-2) 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. Walsh

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


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

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

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 5 hours. Walsh

Practical teaching experiences in selected dental hygiene courses under the supervision of dental hygiene faculty members. DENT PUB HLTH

Dental Jurisprudence

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

Dental Practice Management


Provides skills in communicating effectively with employees, patients, and others associated with the practice of dentistry. Personnel management, recruitment, retention, benefits and patient management, legal responsibilities, financial arrangements are covered. DENT PUB HLTH

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

Dental Public Health and Hygiene

116. Epidemiology & Preventive Dentistry. (1.5) F. Lecture 1 hour. Lab 2 hours. Pollick and Staff

Lectors on lab in preventive dentistry; plaque control; diet analysis; fluoridation history; evaluation indices; dental health and thrift in children; data analysis; dental screening in first grader in the dental health education. DENT PUB HLTH

117. Professional Issues in Dentistry. (6.5) F. Lecture and seminar 16 hours. Wycoff, Gerbert, Pollick, Sherwitz, S. Silverstein, M. Walsh

Lectors and seminar on professional issues in dentistry. Topics included are: modes of practice, dental needs of special groups, stress management, drug use abuse, prevention, education, ethics and history of dentistry. DENT PUB HLTH

120. Behavioral Sciences. (1) F. Lecture 1 hour. Gelbert

Introduction to the basic concepts, theories, and findings of the social sciences. Emphasis is on the application of these concepts and methods to reasoning and problem solving in the health professions. DENT PUB HLTH


Provides skills in communicating effectively with employees, patients, and others associated with the practice of dentistry. Personnel management, recruitment, retention, benefits and patient management, legal responsibilities, financial arrangements are covered. DENT PUB HLTH

84
Dental Public Health & Hygiene/Dental Techniques/Dermatology

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

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

186. Adv Dental Practice Management. (1.5) W, Sp. Prerequisite: DH 121; Dent 4 Dent's Course (Fall quarter) or consent of instructor. Lab 1 hour, seminar 1.5 hours, field trip 1 hour. W. Bird
Advanced concepts of dental practice management, using dental practice case studies, computer simulations and practice analysis techniques, and independent field study and ongoing dental practice. Computer Lab training will be included. DENT PUB HLTH

187. Multidisciplinary Geriatric Care. (1.5-2.5) F, W, Sp. Lecture 2 hours, Clinic 3 hours, Field trip 2 hours, Observations 2 hours optional. Shen, Finley, Salisbury, Mittens, Yatabe, DiMinno
A seminar and clinical rotation in which the students function as members of a multidisciplinary health care team. The students evaluate geriatric patients and formulate comprehensive treatment plans. Seminar topics include functional assessment, home assessment, social resources and dental management. DENT PUB HLTH

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

Dental Techniques

185. Intro to Basic Dental Techniques. (2) S, S, Lab 1 hour, 18 weeks for three hours. Hoskine
Technical orientation to the basic techniques taught in the first year of dentistry such as morphology, prosthodontics, biomaterials, operative dentistry. RESTOR DENT

Dermatology

First-Year Coordinated Instruction—Medicine
131A-B-C. Lecture demonstrations and section work devoted to the supervised examination of patients. Core Clerkship—Family and Community Medicine 130 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. Odem
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. Winston
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. Odem, Winston, Resnick
Four-week block rotation. Students will work with inpatient Dermatology residents and staff in the hospital outpatient and inpatient care and consultation service. DERMATOL

140.05. Advanced Clinical Dermatology. (1.5 per week) Su, F, W, Sp. Prerequisite: Dermatology 140.01. Odem, Winston, Resnick
Students will function as clinical clerks with primary responsibility for patients seen in an outpatient clinical setting. Responsibilities will include diagnosis, patient management, and therapy of common cutaneous diseases. Course duration is four weeks. DERMATOL

150.01. Dermatology Research. (0.5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor. Winston
A research project under the direction of a member of the faculty. DERMATOL

160.01. Clinical & Research Clerkship. (1-5) Su, W, F, W, Sp. Prerequisite: Consent of instructor. Winston
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

199. Laboratory Project. (1-5) F, W, Sp. Prerequisite: Consent of instructor. Winston
A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. DERMATOL

400. Staff Conference. (2) F, W, Sp. Winston and Staff
Residents present and discuss cases, histories of patients at conferences, making reference to appropriate literature, special studies and laboratory work. Conference includes discussions of recent developments and research investigation by staff members and faculty from other UC departments and other universities. DERMATOL

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 discussion of material presented. DERMATOL

420. Dermatological Literature. (2) F, W, Sp. Seminar 2 hours. Maibach and Staff
Seminar covers recent literature in dermatology. Includes a assigned reading with required reports which are evaluated by members of the faculty. DERMATOL

430. Specialty Seminar. (2) F, W, W. Seminar 2 hours. Winston and Staff
Seminar includes presentations, required reading, and report on dermatology and related basic sciences such as histology, histochemistry, and physiology. DERMATOL

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

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

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 Dermaphtes, skin bacteria, and viruses. Occasional lectures on specialized topics are given. DERMATOL

450. Clinical Care Clerkship. (10) Su, F, W, Sp. Winston 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. Winston
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. Winston
Assistants 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/Epidemiology and Biostatistics

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

150.01. Research. (1-5 per week) F, W, Sp. Prerequisite: Consent of instructor.

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

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

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

202. Mechanisms of Hormone Action. (2) S, F, W. Prerequisite: Physiology I and/or Human Biology 200A or 200B, or Biochemistry 190A-8, 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, adenylyl cyclase, Ca²⁺ as a second messenger, oncogenes, growth factors, and steroid hormone action. PHYSIOLOGY

203. General Endocrinology. (5) S, F, W. 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

209. Molecular Endocrinology. (4) S, F, W. Prerequisite: Knowledge of Biochemistry. Will not be given for less than 5 seniors. Offered in alternate years. Not offered 1990-91. Lecture 4 hours.

W. Miller
Application of recombinant DNA to study endocrine systems. Topics include basic molecular biology, cloning methods, RNA and DNA analysis, gene structure, and experimental design. Objective is to provide a working knowledge of molecular approaches to endocrine problems. PHYSIOLOGY


Shoback
Clinical and basic science 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


PHYSIOLOGY

Epidemiology and Biostatistics

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

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


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

140.03A. Clinical Clerkship Abroad. (1.5 per week) S, F, W. Prerequisite: Nine months of clinical work and Epidemiology and International Health 150.01, or consent of instructor.

R. Goldsmith, Brave, S, Lane
Clinical clerkship elective in a developing country. Students provide patient care at a medical school, provincial hospital, or rural health clinic for eight to twelve weeks. Arrangements may be made to participate in a public health or research program abroad. EPID & BIOSTAT

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

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

140.03. Leprosy. (1.5 per week) S, F, W. Prerequisite: Medicine 110 and consent of instructor.

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

160.04. Refugee Screening Clinic—SFCH (1.5 per week) S, F, W. Prerequisite: Medicine 110, Pediatrics 110, and consent of instructor.

De La Cruz
Diagnosis and treatment of refugees from culturally diverse populations. Clinical experience with various tropical diseases and medical problems in family practice associated with these cultures. Guided reading and possible attendance at Tropical Medicine Disease Clinics, UCSF, and Leprosy Clinic, SMCC. EPID & BIOSTAT

150.01. Medicine in Developing Countries. (1.5 per week) W. Prerequisite: Epidemiology and International Health 100 or consent of instructor.

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

150.02. Research Abroad. (1.5 per week) S, F, W. Prerequisite: Consent of instructor.

F. Dunn and Staff
Research abroad, usually in a developing country, under supervision of a member of the Epidemiology and International Health faculty. Guidance available for epidemio logical studies and for research in tropical medicine, medical genetics, medical anthropology, and topics in international health. EPID & BIOSTAT

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

Petrakis and Staff
Survey of cancer statistics, cancer screening methods, and influential epidemiologic studies. Discussion of topics to be decided by instructor. EPID & BIOSTAT

180.01. Tropical Medicine Clinics. (1-20) S, F, W. Prerequisite: Epidemiology and International Health 100 and six months of clinical experience. Clinic 4-8 hours.

R. Goldsmith, Frierson and Staff
Examination and treatment of patients in the Tropical Medicine Clinics under staff supervision. The clinics operate in conjunction with the Infectious Diseases Service; patients seen have both parasitic and other infectious diseases. EPID & BIOSTAT


Holley
Primary readings on diverse clinical topics from the recent literature will be discussed. The objective is to enhance skills in interpreting and designing clinical research. Major themes are the difficulty of demonstrating cause and effect, and the challenge of guiding health policy. EPID & BIOSTAT


Arshold

Epidemiology and Biostatistics

170.06. International Health Policy. (2) S. Lecture 2 hours.

P. Lee, F. Dunn, J. Justice
Lectures and discussions to examine topics and issues in international health at the level of policy. EPID & BIOSTAT

170.09. Psychiatric Epidemiology. (1-2) F. Prerequisite: Training in epidemiology and consent of instructor. Lecture 1 hour. Optional term paper for 2 units.

F. Dunn
Survey of epidemiological and medical ecological approaches—historical and contemporary—to understanding of psychiatric disorders. EPID & BIOSTAT

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

Mustacchi
Seminar 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 it. EPID & BIOSTAT

170.11. Journalization for Health Sci Students. (2) F. Seminar 2 hours.

Gastel, Gardner
This elective is designed to introduce UCSF students to pertinent aspects of the craft of journalism. It includes discussions of basic skills and issues, guest sessions featuring science journalists, and workshops where class members discuss writing samples. Each student is required to write two articles. EPID & BIOSTAT

180.01. Tropical Medicine Clinics. (1-2) S, F, W. Prerequisite: Epidemiology and International Health 100 and six months of clinical experience. Clinic 4-8 hours.

R. Goldsmith, Frierson and Staff
Examination and treatment of patients in the Tropical Medicine Clinics under staff supervision. The clinics operate in conjunction with the Infectious Diseases Service; patients seen have both parasitic and other infectious diseases. EPID & BIOSTAT


Holley
Primary readings on diverse clinical topics from the recent literature will be discussed. The objective is to enhance skills in interpreting and designing clinical research. Major themes are the difficulty of demonstrating cause and effect, and the challenge of guiding health policy. EPID & BIOSTAT

180.05. Maternal & Child Health Devel Clin. (1-2) S. Lecture and discussion 1 hour. Optional term paper for 2 units.

Arshold
Field work experience or research germs 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 the following quarters: Su, F, W, Sp. Prerequisite: Consent of instructor.

140.07 Adm Family Pract Preceptorship. (1.5 per week) Su, F, W, Sp. Prerequisite: Advanced medical school standing and consent of instructor. S. Lane

Students select from several urban or rural sites. Experience provides students the opportunity to participate in the care of patients and their families at the physician's practice, local hospital, and emergency room. FAM CM MED

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

R. Goldsmith, M. Johnson

The Family Practice Inpatient Service at SGFH 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


F. Walter

Students receive practical training in emergency medicine, in emergency prehospital care, and 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.

Zweidler, Doshen

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.

Heiligman, Nowsil, McCann

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

140.60A-B-C-D. Clinical Geriatrics. (1.5 per week) F, W, Sp. Prerequisite: Medicine 119 and Neurology 110 and consent of instructor. Barbaccia, Werdler and Staff

A-San Francisco; B-Fresno; C-St Mary’s; D-Oberlat. Students supervised by attending staff are assigned to patients in clinical settings: outpatient departments, adult dry centers, nursing homes, acute hospital; also home care. Students will attend multidisciplinary care conferences, didactic sessions, geriatrics consultation rounds. 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. Bravenman, Goldsmith, Petitii 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 approach. To be 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

Note-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

160.02. Family Practice Continuity. (2) Su, F, W, Sp. Prerequisite: Consent of instructor. Course must be taken for one full academic year. R. Goldsmith

Course will provide students the opportunity to follow a small number of patients and families in non-scheduled time during any medical school year. Attempts will be made to select families of special interest to the student: e.g., prenatal, adolescent, geriatric, minority. FAM 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.

S. Lane

Non-block assignment with a family physician in a private office or community clinic for a minimum of
Family and Community Medicine

Family and Community Medicine/Geneal Dentistry

172B. Legal Medicine—Practical Aspects. (2) W. Lecture 2 hours. Tenenhouse Fundamentals 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 CME MED

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

170.04. Rehabilitation in Primary Care. (2) Su, F, W, Sp. Prerequisite: Consent of instructor. Seminar 2 hours. 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 CME MED

160.05. Mission Community Health Elective. (1-3) Su, F, W, Sp. Prerequisite: Consent of instructor. Lab 2-6 hours. Field work 4-8 hours. D. Sanchez, D. Fink Explores health care attitudes, health problems and health care resources in a multi-ethnic Mission Area of San Francisco. Students receive clinical assignments in one or more community health and social service agencies. Fieldwork experience analyzed in seminars and tutorials. FAM CME MED

160.07. Family Health & Care. (2) F. Seminar 2 hours. Ransorns, Braveman, Segal Introductory principles of family medicine are discussed in class and debriefing groups led by family physicians and family psychologists. Preceptornships with family physicians in patient offices and community clinics. Each student will interview a family and present a case report. FAM CME MED

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

170.02. Elderly Community Programs. (2) W. Lecture 1 hour. Conference 2 hours. Enrollment limited. Barbacina, Robinson, Weiss This course offers the student a survey of the aged in San Francisco. Lectures cover the socio-demo-

181. Clinical Preventive Medicine. (2) Sp. Prerequisite: Second-year standing in the School of Medicine. First-year medical students with consent of instructor. Lecture 1 hour. Seminar 1 hour. Petitti Lectures-seminars on the basic concepts of preventive medicine, the integration of preventive medicine into clinical practice, the evaluation of preventive strategies in medical care, and the role of the practicing physician in influencing policies on prevention. FAM CME MED

184. Contemporary Issues in Latino Health. (2) Sp. Prerequisite: Medical student status. Seminar 2 hours. Braveman, Sanchez, Koreck An introduction to demographic, political/economic, anthropologic and sociologic issues of importance for the health of diverse Latino subcultures in the US. FAM CME MED

185. Health Care Systems. (3) Sp. Lecture 1 hour. Seminar 2 hours. Barbacina Lecture-seminar format is used to cover most aspects of the organization and function of the health care system and its subsystems, including marketplace, hospital, ambulatory care, planning regulation and control, economics, government programs and health services research. FAM CME MED

198. Supervised Study. (1-5) Su, F, W, Sp. Prerequisite: Consent of instructor. Werdegar and Stull Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. FAM CME MED

475.01. Western Medical Attitude. (3) F, W, Sp. Prerequisite: Consent of instructor. Rodnick Lecture and reading 3 hours. Explores the philosophical principles on which Western medicine rests in relationship to other disciplines, the structure of patient-physician relationships, organizational and economic factors influencing the health of the community and provision of care. Topics include: preventive care, health behavior and formulation of policy. FAM CME MED

475.02. Theoretical Problems of Clin Med. (1) F, W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour. Rodnick Seminar on selected writings of and topics discussed in Family and Community Medicine 175.01. FAM CME MED

180. Intro to Social & Preventive Med. (1—2) F. Lecture and seminar 1—2 hours. Barbacina Lectures and seminars introduce 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 the formulation of policy. FAM CME MED

180.01. Seminar in Family & Health Research. (2) F, W. Seminar 2 hours. I. Fisher Review of theoretical and methodological alternatives for studying the family as a psychosocial unit, with emphasis on the context of health and illness. FAM CME MED

109.01. Community Dentistry Rotation. (0-9) F, W. Sp. Prerequisite: Certification of competency by the various departments in the School. Seminar 3 hours. Clinic 24 hours. Wycoff, Sinclair, M. Garcia General Dentistry
Multi-component rotation including seminars, patient group presentations, specialty grand rounds and comprehensive patient care. Supervised-clinic and seminar experience in community settings. Students develop and explore their roles as members of the health care team and learn to meet community needs. DENT/ PUB/ HLTH

Genetics
200A. Principles of Genetics. (3) F. Lecture 3 hours.
Kornberg, Herskowitz
In-depth analysis of genetic mechanisms in selected prokaryotic, eukaryotic. Topics include genetic exchange (conjugation, generalized and specialized transduction, transformation, recombination), genetic structure, sex-specific, "diplogenome", mapping, mutagenesis (induction and consequences), mobile genetic elements, gene expression, mutagenic and mutacnic 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 genetic methodologies. Students are required to rotate through three different laboratories at least two subject areas, and give an oral seminar at the end of each quarter.

BIOCHEM

220. Current Topics. (0.5) F, W, Sp. Prerequisite: Consent of professor. (2) F. Lecture 1 hour.
Herskowitz and Staff
Students will lead a discussion on a topic of special interest in genetics. A different faculty member will act as advisor each week. This is a required course each quarter for first- and second-year students in genetics.

BIOCHEM

Kim, Kao, 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, effect of chromosome imbalance, gene therapy, and environmental mutagenesis.

BIOCHEM


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

Rosinski
Consideration of principles of learning, including individual student differences, techniques of instruction, and approaches to evaluation of student progress. Individual teaching plans are developed and criticized.

MEDICINE

Growth & Development
110. Normal & Abnormal Craniofacial Dev. (1) F. Lecture 1 hour.
Chiečiūtė, S. Fischer, C. Cook, R. Coleman, Kapila
Developmental processes underlying normal and abnormal craniofacial morphogenesis are presented and the biological basis for congenital malformations are discussed. GR/DEVEL

120. Orofacial Functions/Dysfunctions (1) W. Lecture 1 hour.
Chiečiūtė, 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 craniofacial musculature, mastication, swallowing, and characteristics of craniofacial musculature. GR/DEVEL

188. Relevance of Neuromuscular System to Craniofacial Dev. (2) F. Prerequisite: Physiology. Enrollment limited to senior dental students and post-doctoral graduate students in orthodontics, pediatric dentistry, removable prosthodontics.
A. Miller
Course illustrates how the neuromuscular system of the craniofacial system affects and interacts with craniofacial development by modifying its function, diet, force development, impinging on development and function, and altering occlusion. GR/DEVEL

History of Health Sciences
150. History of Pharmacy. (2 or 3) F. Lecture 2 hours; term paper (optional) for 3 units.
Sader
Emphasis is on the historical development of pharmacy, its relationship to other health professions, and the personalities who significantly contributed to the advancements 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.
Risse
Two-week non-clinical block devoted to reading, library research, discussions and presentations on the historical development of topics considered central to the practice of medicine: character of scientific medicine, role of technology, medical ethics and malpractice, corporate medicine, and the physician-patient relationship. HIST HL SC

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

180. Topics in the History of Dentistry. (2-4) W. Prerequisite: Consent of instructor. Lecture 1 hour. Seminar 1 hour. Term paper, independent study optional.
Staff
Presentation and historical analysis of issues and problems considered critical in the evolution of modern dentistry. Among the subjects to be considered are the relationship with other health professions, medical technology, and social policy. HIST HL SC

188. Supervised Study. (1-5) F, W, Sp. Prerequisite: Consent of instructor. Risse and Staff
History of research and/or directed reading under supervision of a faculty member with approval of the department chairman. HIST HL SC

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

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).
Pressman
Continuation of the 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. (1-4) 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).
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, decline of plague. HIST HL SC

Risse
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) F. Prerequisite: Consent of instructor. Seminar 2 hours. Optional term paper & reports.
Riser, Pressman
Introduction to historical methodology. Discussion of the different approaches employed in writing history: intellectual, social, history of disease, feminine perspectives, etc. HIST HL TC SC

204B. Historical Research II (2-4) W. Prerequisite: Consent of instructor. Seminar 2 hours. Optional term paper & reports.
Riser, Pressman
Introduction to research in medical history. Survey of bibliographical tools available to historians. Visits to archives and libraries as the Bay Area. Interviewing skills and preparatory research for oral history. HIST HL SC

204C. Historical Research III (2-4) Sp. Prerequisite: Consent of instructor. Seminar 2 hours. Optional research paper.
Riser, Pressman
Introduction to the craft of interpreting and writing medical history. Directed and assisted research and writing of historical topics. HIST HL SC

206. History of Psychiatry. (2-4) F. 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 HL SC

Guttag, Tzeng
Extended reading and conferences of History of Health Sciences 208. HIST HL SC

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

211B. History of Hospitals II. (2-4) Prerequisite: Consent of instructor. Lecture 2 hours, seminar 1 hour
Pressman, Risse
Course begins with the early Industrial Revolution and ends with the modern technologically intensive institution that dominates current medicine. HIST HL SC

213. Topics in American Medicine. (2-4) W. Prerequisite: Consent of instructor. Lecture 2 hours, seminar 1 hour
Pressman, Risse
The rise of the American health care system and the broaderizing 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 HL SC

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

219. Latin America: Hist of Illness. Issues. (2-4) Sp. Prerequisite: Consent of instructor. Lecture 1 hour, seminar 1 hour. Term paper & class presentations optional for extra credit.
Risse
Examination of relationships between society, environment, and disease and their effects on pre-Columbian and colonial medical institutions in Latin America. HIST HL SC

Traumer
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. Prerequisite: Consent of instructor. Seminar 1-4 hours. Staff
Staff
Supervision of independent research, including presentations and criticism of research sources, methods, and papers. HIST HL SC

252. Women, Health, & Healing. (2-4) F. Prerequisite: Consent of instructor. Lecture 2 hours. Seminar 1 hour. Term paper (optional). Staff
Staff
Representative works from behavioral science literature and world poetry and prose are brought together in the study of personality development in adult life.

Human Development & Aging

200. Off-Campus Study. (1-4) F, W. Sp. Prerequisite: Approval of graduate advisor. Staff
Full-time graduate study in the Human Development and Aging program through the intercampus exchange consortium program. PSYCH/PTR

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

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

204. Personal Development. (2) F, W. Prerequisite: Consent of instructor. Lecture 2 hours. Kaiser
Representative works from behavioral science literature and world poetry and prose are brought together in the study of personality development in adult life.

Compared insights from the two fields on how the developing person copes with social, historical, and psychological challenges. PSYCH/PTR

205. Data Analysis. (5) F, W, Sp. Prerequisite: Consent of instructor. Lecture 3 hours. Mullen
Students either provide their own or use accessible data from ongoing research projects. Emphasis is on training in data organization, analysis, and research report writing. PSYCH/PTR

207. Methods of Survey Research. (3) F. Prerequisite: Consent of instructor. Lecture 3 hours, plus field work. Pearlin
Course covers the major tasks of survey research. Topics such as conceptual specification, the development of indicators and measures, the construction of questionnaires, sampling, field testing, interviewing, and analysis are covered. PSYCH/PTR

214. Adv Personal Development. (2-3) Sp. Prerequisite: Huerta Dec 204, or consent of instructor. Seminar 2 hours, optional extra unit. Kiesler
The prerequisite, Huerta Dem 204, combines study of mainstream theories of adult personality development with literary works as case material. This course, Huerta Dem 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. PSYCH/PTR

220. Pre-Seminar. (1-5) F, W. Sp. Prerequisite: Consent of instructor. Lecture 2 hours, given in alternate weeks. Staff
Students, staff, or guest lecturers present selected topics, based on their current research. PSYCH/PTR

230. Research Project Seminar. (0-6) W. Prerequisite: Graduate standing in Human Development and Aging Program, or consent of instructor. Seminar 4 hours. 6 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 study and collection and analysis of data. PSYCH/PTR

249. Special Studies. (2-8) F, W. Prerequisite: Consent of instructor. Staff
Students select special problems to investigate on an individual or collaborative basis. These studies may be conducted through readings, the collection and analysis of empirical data, or the development of conceptual analyses or methodologies. PSYCH/PTR
Human Development and Aging/Human Sexuality/Interdepartmental Studies/Laboratory Medicine

Staff PSYCHIATRY

Prerequisite: Advanced to candidacy and permission of the grad-
uate director.
Staff
For graduate students engaged in writing the dissertation for the Ph.D. degree. PSYCHIATRY

Human Sexuality

159. Human Sexuality. (1.5) S
Prerequisite: Lecture 1.5 hours. Offered in alternate years. Offered 1990-91.
R. Day
Social, behavioral, and clinical aspects of human sens-
uality are covered in a series of lectures. Lectures will present didactic material. PHARMACY

Interdepartmental Studies

100. Cell & Tissue Biology. (10) S
Prerequisite: 7 hours. Lab 4 hours. Conference 2 hours.
Colby, Wissig, Michaeli
Course covers the basic principles of molecular and cell biology, as well as the microscopic organization of cells, tissues, and organs with emphasis on relationships of structure and function. The histology of endocrine and reproductive systems is covered in a separate course. Intended for students in the School of Medicine and for beginning graduate students. ANATOMY & BIOCHEM

110. Core Clerkship in Surgery Specialties. (1.5 per week)
A four-week required clerkship in the surgical special-
ties 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. OTOLARYN., OPHTHALMOL., ORTHO SURG, UROLOGY

155. Reproduction Growth & Devel. (3) F
Prerequisite: 3 hours.
Jacobs
Course is designed to trace the biological mechanisms concerned with conception, development of the fertilized ovum through embryonic and fetal life, and promotion of the mature individual. OB/GYN R S

191. Introductory Cell Biology. (3.5) F
Prerequisite: Lecture 6 hours, lab 4 hours, conference 1 hour. 4-week course.
Colby, S. Wissig
Course covers the basic principles of cell biology and introduces the histology of epithelia, nerve cells, muscles, and connective tissue. Intended for begin-
ning graduate students. ANATOMY & BIOCHEM

192. Introductory Molecular Biology. (2.5) F
Prerequisite: Introductory Studies 191. Lecture 3 hours, conference 1 hour. 7-week course.
D. Colby
Course covers the basic principles of molecular biology with emphasis on their application to control of gene ex-
pression in humans. ANATOMY & BIOCHEM

193. Organ System Histology. (4) F
Prerequisite: Introductory Studies 191. Lecture 3 hours, lab 4 hours, independent study 4 hours. 7-week course.
S. Wissig
Course covers the light and electron microscopic structure of organs with emphasis on the relationship of structure to function of organ. The histology of endo-
crine and reproductive systems is presented in a sepa-
rate course. PHYSIOLOGY 101. ANATOMY & BIOCHEM

Laboratory Medicine

140.01. Clinical Pathology. (1.5 per week)
Prerequisite: One year of medical school and consent of instructor.
Gottfried
Lecture 2 hours.
M. Fisher, Sobenes
Clinical Pathology I. 3 per week.
Prerequisite: Medicine 110 and consent of instructor.
G. Brooks
Lecture 2 hours.
Nicol, Wall, Tierney
Clinical Pathology II. 2 per week.
Prerequisite: First-year standing or consent of instructor. Lecture 1 hour 5. Section work 2 hours.
F. W, 4 hour Sp.
M. Cooke

140.06. Laboratory Medicine in Fresno. (1.5 per week)
Prerequisite: Medicine 110. Belens, L. Mann
Lecture 1 hour.
Utilization of different laboratory settings, organiza-
tions, and approaches by pathologists in hospitals throughout the Fresno community. Includes coverage of techniques of automated clinical laboratory in addi-
tion to such specialized areas as cytogenetics and therapeutic drug monitoring. LAB MED

140.07. Laboratory Medicine Hematology. (1.5 per week)
Prerequisite: Lecture 6 hours, lab 4 hours, conference 1 hour. 4-week course.
Engman, Corsah, Roth, Levin, Gottfried
Core practical course in hematology for medical students. 4-week course.
Mayall, Fulwyler
Course introduces in the theory and techniques of image analysis, flow cytometry, and flow sorting, and surveys the research and clinical applications of these powerful techniques for the analysis of individual cells. LAB MED

at hematology conferences, and daily bone marrow signs.
One-year course teaching of blood and marrow. Experience at Moffit/Long, VAMC, and SFH. LAB MED

140.08. Laboratory Medicine Microbiology. (1.5 per week)
Prerequisite: Lecture 6 hours, lab 4 hours. 4-week course.
Hussey, Pullaras, Brooks
Course introduces practical microbiology laboratory inactivation with clinical infectious disease rounds. The student will observe laboratory diagnosis of viral, bacterial, fungal, and parasitic infections. The goal is to a better understanding of how to use the labo-
atory for infectious diseases diagnosis. There are core lectures (8 hour per week); daily lab work and plate rounds, and weekly infection Disease rounds. The practical course may be taken at VAMC, SFH, or UC LAB MED

160.01. Radiology. (2) F
Prerequisite: One year of medical school. Lecture 1 hour. Clinic 4 hour.
Polycohort
Basic laboratory course in nuclear medicine. Clinical participation in the diagnosis of patients receiving radionuclides in the outpatient clinics and in the wards. LAB MED

160.02. Sexually Transmitted Diseases. (2) F
Prerequisite: Lecture 2 hours.
G. 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. Diagnostic Workup of Clinical Prob-
lems. (2) F
Prerequisite: Second-year standing. Lecture 1 hour.
F. W, 4 hour Sp.
M. Cooke

170.01. Clinical Pathology-SFH. (2) F
Prerequisite: Lecture 1 hour. Prerequisite: Medicine 110. SFH.
Gottfried
Laboratory session and seminars on aspects of clinical chemistry, hematology, microbiology, blood bank-
ing, and radiology are held in the clinical laborato-
aries at 3020 Sutter. LAB MED

452. Cytometry & Cell Analysis. (3) W
Lecture 3 hours.
Mayall, Fulwyler
Course introduces in the theory and techniques of im-
gage analysis, flow cytometry, and flow sorting, and surveys the research and clinical applications of these powerful techniques for the analysis of individual cells. LAB MED

110. Medicine Core Clerkship-UCSF-VA, MEZ-VAMC. (1.5 per week)
Prerequisite: Medicine 110. BA, B, C, and 132AB-2-
C. Open to UCSF students only.
UC Davis, VA, SFH, HABER, VA TIERNEY, MEZ

Woober, VAMC, Freeman
Students are part of the ward team with the housestaff and fellows. Bedside teaching, physical diagnosis, selected seminars in general medi-
cine including the psychiatric aspects of medicine, and presentations and demonstrations of relevant cases. MEDICINE

111. Mechanisms of Disease. (1.5 per week)
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)
Prerequisite: Medicine 110 and Surgery 110.
Le
Course will discuss economic forces, ethical and legal issues, social and cultural factors, and governmental policies affecting medical practice. It will define pro-
fessional responsibilities in the context of these influ-
ences and the resulting forms and trends in medical practice. MEDICINE

Prerequisite: First-year standing or consent of instructor. Lecture 1 hour 5. Section work 2 hours.
F. W, 4 hour Sp.
M. Cooke

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

Prerequisite: Anatomy 100, 102, and 103; Biochemistry 100A-B; Medicine 131A-B-C; Micro-
biology 100A and 100B (may be taken concurrently). Pathology 101, 102, and 103 (may be taken concur-ently). Physiology 100A and 101, or consent of in-
M. Cooke
Continuation of interdepartmental course on pa-
thophysiology 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

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Students examine hospitalized and ambulatory pa-
tients, participate in their care, and present case sum-
maries to supervising gastroenterology fellows and
attending physicians. They attend all rounds and
training conferences and may observe performance
of various diagnostic and therapeutic procedures.
MEDICINE

140.09. Cardiology-MZ. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 or 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

140.02. Adv Medicine Clerkship CRI-UC. (1.5
per week) Su, F, W, Sp. Prerequisite: Medicine 110 and
113A-B-C.

Shuman and Staff

On Clinical Cancer Chemotherapy Service, students
work up patients, present them to attending staff
and at conferences, do 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.

Jennsen, Zager

Clinical elective with inpatients and outpatients at
VA. Students will see consults with clinical infectious
disease fellow. Introduction to clinical microbiology
and hospital epidemiology is included. MEDICINE

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

Gregoratos

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

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

Kohl

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 conditions, the students will be al-
lowed 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.
Ockner

Students examine hospitalized and ambulatory pa-
tients, participate in their care, and present case sum-
maries to supervising gastroenterology fellows and
attending physicians. They attend all rounds and
training conferences and may observe performance
of various diagnostic and therapeutic procedures.
MEDICINE

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

Bolan

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

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

Embry

Students work under supervision of fellows and fac-
tulty; review relevant clinical laboratory data; interpret
bone marrow slides; see hematology patients in the
outpatient clinic and the inpatient consultation serv-
ICE. Emphasis is on sickle cell disease, other hemo-
globinopathies, and coagulation problems. MEDICINE

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

T. Boyer

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.

Barline

Students share consults and on-call with cardiol-
ogy fellows; work up patients on wards; interpret
electrocardiograms and Holter monitor studies; at-
tend rounds and conferences. MEDICINE

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

Lockshin

Students work up and present patients under the
direct supervision of the infectious disease resident.
Patients are presented at attending rounds and infec-
tious disease conferences. MEDICINE

140.21. Private Practice. (1.5 per week) Su, F, W,
Sp. Prerequisite: Medicine 110. Approval of third-
and fourth-year coordinator. Students must make
arrangements with private-practice physician.

Papadakis

Working experience with an internist on clinical
faculties at the bedside 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

140.22A. Pathophysiology-Carotid Arteries. (0.5
per week) Sp. Prerequisite: Medicine 110. Minimum class size 12; maximum class size 20.

Sebastian, Dohrmann

Overall emphasis on prototypes of disease in organ
systems demonstrating fundamental biochemical or
physiological defects. Lectures cover background
material and general concepts. Students participate in
discussions, are assigned topics for presentation, and
are encouraged to develop ability to evaluate litera-
ture critically. Reading lists. MEDICINE

140.22B. Pathophysiology-Hematology. (0.5
Sp. Prerequisite: Medicine 110, Pediatrics 110 or
Surgery 110.

Sebastian, Steiniger, Dallman, Ries

Overall emphasis on prototypes of disease in organ
systems demonstrating fundamental biochemical or
physiological defects. Lectures cover background
material and general concepts. Students participate in
discussions, are assigned topics for presentation, and
are encouraged to develop ability to evaluate litera-
ture critically. Reading lists. MEDICINE

140.22C. Pathophysiology-Renal Disease. (0.5
Sp. Prerequisite: Medicine 110, Pediatrics 110 or
Surgery 110. Enrollment limited.

Sebastian, Ives

Overall emphasis on prototypes of disease in organ
systems demonstrating fundamental biochemical or
physiological defects. Lectures cover background
material and general concepts. Students participate in
discussions, are assigned topics for presentation, and
are encouraged to develop ability to evaluate litera-
ture critically. Reading lists. MEDICINE

140.22D. Pathophysiology-OncoLOGY. (0.5
F, W, Sp. Prerequisite: Medicine 110, Pediatrics 110
and Surgery 110.

Sebastian, Steiniger, L. Epstein

Overall emphasis on prototypes of disease in organ
systems demonstrating fundamental biochemical or
physiological defects. Lectures cover background
material and general concepts. Students participate in
discussions, are assigned topics for presentation, and
are encouraged to develop ability to evaluate litera-
ture critically. Reading lists. MEDICINE

140.22E. Pathophysiology-Derm/Inf Disease. (0.5
F, W, Sp. Prerequisite: Medicine 110, Pediatrics 110 or
Surgery 110.

Sebastian, Steiniger

Overall emphasis on prototypes of disease in organ
systems demonstrating fundamental biochemical or
physiological defects. Lectures cover background
material and general concepts. Students participate in
discussions, are assigned topics for presentation, and
are encouraged to develop ability to evaluate litera-
ture critically. Reading lists. MEDICINE

140.22F. Pathophysiology-Therapeutics. (0.6
F, W, Sp. Prerequisite: Medicine 110 or Pediatrics 110 or
Surgery 110. Minimum class size 15; maximum class size 30.

Sebastian, Benowitz

Emphasis on selected pathophysiology and clinical
therapeutics. Lectures and case-oriented workshops
presenting the principles of therapeutics with applica-
tion to specific therapeutic consequences of common
cardiovascular, respiratory, gastrointestinal and infectious diseases as well as diabetes. MEDICINE
Emphasizes biochemical and physiological concepts that determine nutritional management of patients in clinical medicine. Students attend lectures, participate in discussions and develop an independent ability to critically evaluate research literature in nutrition and use information to compare unscientific problems. MEJCINE

140.23. Endocrine Metabolism—UIC (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110.

Karam
Students attend at Moffitt Hospital, twelfth floor, south, art adult residents to and endocrine fellows for consultations as well as hospitalized endocrine patients. Attend endocrine and metabolic clinics and seminars, and teaching exercises of endo-
crinology and metabolism, including Medicine Grand Rounds. MEJCINE

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

Sack
Familiarization with clinical manifestations, rheumatic disease therapy, immunologic disorders. Par-

ticipation in in/outpatient clinics. Basic immunologic principles as related to clinically apparent immunol-

cogie dysfunction. Assignment of pertinent literature, lectures, and introduction to principles and practice of various immunologic testing. MEJCINE

140.25. Renal Disease—SFCH (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and fourth-year standing.

Hayphrey
Students work up and follow patients with a wide variety of renal and electrolyte disturbances, and see outpatients at a weekly Renal Clinic. Cases are dis-
cussed with attending physicians daily. Students attend weekly Journal Club, Renal Grand Rounds, and Chief of Service Rounds. MEJCINE

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

Ukley, Woebner
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 criti-
cal care medicine. MEJCINE

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

Keros
Students attend rounds in the Coronary Care Unit, receive instruction in cardiology, stressing electrocar-
diography; may work in the pulmonary function laboratory, and attend regular teaching conferences and seminars.

140.28. Infectious Disease—SFCH (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110.

J Mills
Course includes active consultation service averaging three patients treated per day. Daily patient round clinics, weekly combined infectious diseases/pediatric mini-

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

Shuman
Students work up and present patients in the ward and outpatient clinics, participate in conferences and seminars, and learn the laboratory procedures appli-
cable to their patients. MEJCINE

140.30. Endocrine Metabolism—SFCH (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and fourth-year standing.

Bilgieri, Scharbain
The Endocrine-Metabolic Service provides daily house staff/fellow-supervised consultations, three weekly clinics, biweekly rounds with staff, conferences on current research. Emphasis on clinical investigation of endocrine disorders in the General Clinical Research Center. MEJCINE

140.31. Inpatient Cardiology—VA (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 recom-

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 recom-

140.34. Renal Disease—UIC (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110.

Cogan
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-
hose, or electrolyte balance. Emphasis is placed on pathophysiology, history-taking, physical examination, and treatment. MEJCINE

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

Chelnit, Rapaport, N. Goldschlager, Morelli, Dohrmann, Sung
Students see patients in consultation on wards and clinics, read electrocardiograms, review cases with cardia-

140.36. Emergency Medicine—UIC (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and fourth-

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

140.39. Pulmonary Disease—UIC (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110.

Boushky
Students examine patients in Chest Clinic, on the wards and in RICU, and present them at ward rounds, pulmonary function and radiology conferences. They participate in pulmonary function testing and do assigned readings. MEJCINE

140.40. Gastroenterology—KF (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110.

Allison, Kaufman, Uddow, Grossman
As a member of the teaching faculty, the student will work-up patients, observe and participate in diagnos-
tic and therapeutic procedures, and attend all rounds and GI division conferences. MEJCINE

140.41. Gastroenterology—SFCH (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110. Limited to fourth-year students.

Cella
Students are responsible for evaluation and presenta-
tion of gastroenterological patients on medical and surgical wards. Work-ups are thoroughly discussed with gastroenterology staff. Students may also observe GI techniques including sigmoidoscopy, colonoscopy, endoscopy, liver biopsy. Conferences held weekly in conjunction with Surgery, Pathology and Radiology. MEJCINE

140.42. Toxicology & Occup Med—SFCH (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and fourth-year standing.

Cleckner
Students evaluate patients in hospital and clinic set-

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

Seaman
A four-to-twelve-week introduction to rheumatology and immunology, offering both clinical and laboratory experience. The student will participate in inpatient and outpatient care and take part in didactic and clinical aspects of the research program. MEDICINE

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

Superstein, Arnon

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 hyperlipemia. Patients will be examined and treated in both the inpatient and outpatient services. MEDICINE

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

J. Murray, Hopewell, Sheppard

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

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

Pollock

Clerkship in clinical nephrology. Lectures, rounds, conferences, renal biopsy review. Patients with acute and chronic renal disease, acute and chronic dialysis patients, patients with fluid and electrolyte problems. Renal grand rounds, journal club, nephrology research, and renal pathophysiology conferences weekly. 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 diseases. 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. Clinical and laboratory research available. MEDICINE

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

Busch

Students, teamed with a resident, will evaluate and share the care of patients admitted to an acute care hospital. Experience includes history-taking, physical examination, therapeutic plan, and progress notes. Attendance at daily teaching rounds and conferences. MEDICINE

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

Freigubas, H. Brownstein

Offers the opportunity for participation in various medically-oriented geriatric programs. Assignment to health care teams serving patients at home, at MZ Geriatric Day Care Center, Geriatric Inpatient Assessment and Rehabilitation Unit; in-hospital consultations, and participation in multidisciplinary geriatric assessment. Supervision under MZ faculty and fellows in geriatric medicine. MEDICINE

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

Dedeonwia

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

P. Baylor

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


Ambra, 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

140.60. Rheumatology—VMC & VMF. (1.5 per week) Su, F, W, Sp. Prerequisite: Fourth-year standing.

Berkman

Experience with rheumatic diseases and chronic musculoskeletal pain including arthritis and collagen-vascular disorders as seen in clinics. Develop skills in history-taking, physical examination, selection and interpretation of diagnostic procedures, approaches to management, including drug therapy. Supervision by division chief and faculty. MEDICINE

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

R. Freeman

Assignment to team with first- and second-year residents, rounds with attending faculty four to five times weekly; attend daily noon conferences; increase skills in history-taking, physical examination, write-ups, and oral presentation. Experience in written 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.

Savinsky

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

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

Conolly

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

D. Perloff, Scheinman

Instruction in interpreting electrocardiogram as well as other diagnostic procedures used in cardiology, such as echocardiography, exercise testing, use of radionuclides, electrophysiologic, hemodynamic, and radiologic studies. Students regularly attend cardiac and hypertension clinics, cardiology conferences and rounds. MEDICINE

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

Larson

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—VAF. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110.

Litsky

Management of common and unusual infectious diseases. May include use of anti-microbials in presence of impaired renal or hepatic function, treatment of infection in immunologically compromised host, etc. Participation in patient evaluations, treatment follow-up, ward rounds, conferences. Microbiology laboratory can be arranged. MEDICINE

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

Grayson

Participation with house staff in patient care on CCU, ICU, medical wards, outpatient clinics. Emphasis on treatment of invasive and non-invasive diagnostic procedures, techniques of management in care of hospitalized and ambulatory patients. Attends ECG interpretations, CCU rounds, consults, and teaching conferences. MEDICINE

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

Scherberg

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

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

Lohne, Hiruma

Evaluation and management of adult patients with respiratory diseases, supervised by house staff and faculty. Pulmonary Medicine section. Emphasis on physical examination of chest, interpretation of X-rays, arterial blood gases, pulmonary function tests. Gain familiarity with respirators and other aspects of respiratory care. MEDICINE

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

Giffin

Participation in evaluation of patients with gastrointestinal problems (gastroscopies, ERCP, colonoscopies, liver biopsies, proctoscopies, bowel biopsy) on wards and in outpatient clinic. Experience includes demonstration of investigation (acid perfusion and others), weekly clinical conference, liver histology, and tutorial discussion sessions. MEDICINE

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

I. Goldstein, H. Or Perez

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

140.74. Medical Consultation—SFSPH. (1.5 per week) Su, F, W, Sp.

Cooke

Clerkship in Medical Consultation at SFSPH. Also includes a half-day clinic in which representative medical evaluations are performed for patients about to undergo elective surgery. MEDICINE

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

Fessel
188.01. Nation's Health. (2) F, W, or Sp. Lecture 2 hours.

P. Lee and Staff

Course will address health policy issues related to the health status of the population, the determinants of health, and health care. Jointly offered with Sociology 160 and Sociology 220. MEDICINE

188.02. Health Policy Research Seminar. (1-2) S, F, W. Prerequisite: Consent of instructor. Lecture 1-2 hours. Seminar 1.5 hour.

P. Halvorsen

An introduction to the application of policy research methods to current policy issues; an interdisciplinary seminar.

188.03. Economics of Health. (2) F, W, or Sp. Lecture 2 hours.

P. Lee, Luft

Basic economic concepts and tools as applied to problems in the health care system. Topics to be covered include measurement of output; demand for care, insurance, and incentives; supply of physicians' services; health sector planning; and an alternative view of the system. MEDICINE

188.2. Supervised Study (1-5) Su, F, W, Sp. Prerequisite: Consent of instructor or 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 chairman of the department. MEDICINE

198.01. Laboratory Project. (1-5) Su, F, W, Sp. Prerequisite: Consent of instructor preceptor and approval of third- and fourth-year coordinator.

Papadakis

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

200. Health & Aging. (2-4) W. Prerequisite: Graduate standing. Consent of instructor. Lecture 2-4 hours.

P. Lee, H. Lipton

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

400. Medical Staff Conferences. (2) F, W. UC R.R. Root, SFGH Rappaport, VA Steinhser Interns and residents prepare and present case histories of patients at medical staff conferences including reference 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. Internship Clinical Correlation. (4) F, W. 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

403. Medical Literature Seminar. (1-3) F, W, Sp. VL Slesinger
Seminars on recent literature in internal medicine, with assigned and reading, required reports, and evaluation of presented material by internes, residents, and faculty. MEDICINE

Seminars are conducted in the fields of gastroenterology, hematology, cardiology, electrocardiography, 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

Seminars are conducted in cardiology, electrophysiology, 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 neuropathology conference. MEDICINE

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

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, W, Sp. Solow
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

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

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

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, W, Sp. VAH Roseneil
Residents are responsible for patient care under the direction of the attending staff, including histories, 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, 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, and Medicine. MEDICINE

461. Clinical Primary Care. (1.5 per week) Su, W, Sp. Crede and Staff
Residents 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, and Medicine. MEDICINE

490. Clinical Medicine. (1.5 per week) Su, W, Sp. SFCH 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 work-ups, laboratory tests, and consultation. MEDICINE

491. Clinical Medicine. (1.5 per week) Su, W, Sp. SFCH H. Williams
A modified "intensive" 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. MICR.OBIOI

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. MICR.OBIOI

116. Microbiology and Immunology in Dentistry. (6) W, Lecture 4 hours. Lab 6 hours. Felton, DeFronzo
Comprehensive presentation of microbiological principles 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. (5) Sp. Prerequisite: Successful completion of all first-year required coursework. Lecture 3 hours, lab 6 hours.
Lucero
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 sterilization. MICR.OBIOI

121. Immunology. (2) Sp. Prerequisite: Biochemistry 120A-B. Required course for students in the School of Pharmacy. Lecture 2 hours.
Brodky
Lectures on the fundamentals of immunology, drugs in hypersensitivity and immunosuppression. MICR.OBIOI

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. MICR.OBIOI

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

190A. Med Immunology-Grad Students. (2) Sp. Prerequisite: Biochemistry 100A-B. Lecture 2 hours for nine weeks. Equivalent to Microbiology 100A and 121.
W. Levinson
Lectures on the fundamentals of immunology. Small group seminars on patient-related problems in this field. MICR.OBIOI

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. MICR.OBIOI

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

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. MICR.OBIOI

203. Cellular Immunology. (5) F. Prerequisite: General knowledge of immunology and biochemistry. Lecture 3 hours. Offered in alternate years. Offered 1990-91.
DeFronzo, J. W. Goodman
Course covers chemical and genetic basis of immunity, properties of immunocompetent cells, cell interactions in the immune system, and regulatory circuits. MICR.OBIOI

204. Immunology of B Cells. (5) F. Prerequisite: General knowledge of immunology. Lecture 3 hours.
G. Davis
Neurological Surgery

Core Clerkship—Neurology 110. Students serve as clinical interns in the inpatient and outpatient clinics.

140.01. Advanced Neurosurgery Clerkship. (1.5 per week) Su, F, W, Sp.
C.B. Wilson
The student will become a member of the house staff, attending ward rounds, working up patients, assisting at operations, and taking calls 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.
Pitta, P. 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.

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

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

199. Laboratory Project. (1–5) F, W, Sp. Prerequisite: Consent of instructor.
Pitta
A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. NEURO SURG

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


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

Pitta
Recent literature in neurology and neurological surgery is presented. Discussions by members of the faculty in attendance and by visitors from other schools interested in this and related fields. NEURO SURG

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

Pitta
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

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

Finn, P. Weinstein
Inners 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.

Lazar
Students are assigned patients for study under supervision of attending and resident staffs. They attend ward 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.
R. Fishman
Students serve as acting interns on the inpatient services or on the consult service. Attendance at departmental clinical rounds, seminars, and conferences is required. NEUROLOGY

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

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

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

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

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

140.07. Advanced Neurology Clerkship. (1.5 per week) Su, F, W, Sp. Margolin, Feldman
Advanced students will have the opportunity to broaden and enrich their clinical neurological experi-
R. Fishman
Conference includes resident preparation and presentation of patient case histories including reference to the literature, laboratory work, and special studies. Faculty members and visiting professors from other universities discuss new developments in their respective fields. NEUROLOGY 402. Neurological & Neuromuscular 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 neurologic and neurological patients. NEUROLOGY 403. Neuropathology Research. (1-10) Su, W, Sp.
R. L. Davis
Course involves pathological 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, 2, 3, 4) F, W, Sp.
D. Norman
R. Fishman
Clinical and basic research in neurological disease. After consultation, assistance means to one of the several departmental laboratories will be possible. NEUROLOGY 412. Neuropathology Research. (10) Su, F, W, Sp.
VA Rady
Specific projects in experimental pathology of the nervous system may be undertaken by the student. NEUROLOGY 419. Laboratory Project. (1-5) Su, W, Sp.
R. Fishman
A laboratory research project under direction of a member of the faculty with the approval of the chairman of the department. NEUROLOGY 400. Neuroscience Seminar. (1.5 per week) Su, F, W, Sp.
R. Fishman, L. Diamond
Residents learn interpretation of electroneurographic data under the supervision of experienced electroencephalographers. They interpret electroneurographic data in patients they have seen clinically, with individual instruction as required. Instruction is accredited by the Board of Qualification of the American Electroencephalographic Society. NEUROLOGY 454. Clinical Electroencephalography. (1.5 per week) Su, F, W, Sp.
Aminoff
Students learn the application of electroencephalography in the diagnosis of patients seen in the wards and in the outpatient clinic, with individual instruction as required. NEUROLOGY 456. Clinical Neuro-ophthalmology. (1.5 per week) Su, F, W, Sp.
Berg
W. Hoyt
Residents participate in clinical evaluation of patients in preparation for rounds. Clinical teaching in neuro-ophthalmology. NEUROLOGY

Neuroscience

117. Neuroscience. (5) W. Prerequisite: Five-year Dental Hygiene standing. Lecture 4 hours. Lab 4 hours.
Sargent
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 oral cavity. STOMATOLOGY 156. Neurobiology. (5) W. Prerequisite: Five-year Dental Hygiene standing. Lecture 4 hours. Lab 4 hours.
Sargent
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 oral cavity. STOMATOLOGY 201. Principles of Neuroscience. (6) F. Lecture 4 hours. Review & discussion 3 hours.
Copenhagen, Hall, Reichardt, L. Jan, Baasbaum
An interdisciplinary introduction to fundamental aspects of nervous system function. Course examines the ionic basis of neuronal signaling, neurochemistry, the cell biology of the neuron, and mechanisms of neuronal integration. PHYSIOLOGY 215. Laboratory Rotation. (6) 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 nervous system research. PHYSIOLOGY 220. Selected Topics. (1) F, W, Sp. Prerequisite: Consent of instructor. Seminar 1 hour.
Z. Hall
Topic in neurobiology is selected such as development, anatomy and physiology of the visual system, biochemistry of membranes. Pertinent papers from the recent literature are read and discussed. Each student must participate regularly and present one seminar per quarter. PHYSIOLOGY 223. Developmental Neurobiology. (3) W. Prerequisite: Neuroscience 201 and consent of instructor. Lecture 3 hours.
Reichardt, Y-N, Jan, L. Jan, J. LaVal
Course covers important areas of nervous system development with emphasis on molecular, genetic, and cellular approaches. Much of the course will focus on recent studies using nematodes, Drosophila, leeches, and zebrafish. PHYSIOLOGY 225. Neurobiology of Disease. (3) W. Prerequisite: Neuroscience 201 and consent of instructor. Seminar 3 hours.
Mobley, Fields
Seminar format with students reading and presenting papers in the current literature of neurological and psychological disease. Emphasis will be on the physiological and molecular bases of disease. Representative topics include neurodegenerative diseases, epilepsy, demyelinating disorders, and neuromuscular disease. PHYSIOLOGY 230. Biophysics of Membranes Excitability. (3) 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, thermodynamics and kinetic equations, electrostimulation, voltage clamp methods, and Hodgkin-Huxley analysis of nerve excitation. PHYSIOLOGY 231. Neuropeptide Mechanisms in the CNS. (3) Sp. Prerequisite: Neuroscience 201 Seminar 3 hours.
Nicoll, Julian, Malenka
This is primarily a reading course in which recent papers on various aspects of synaptic pharmacology and plasticity in the CNS will be discussed in depth. PHYSIOLOGY
242. The Auditory System (3) F. Lecture 3 hours. Meeting time: T, Th. Course will review in lectures, laboratory demonstrations, and in discussions the state of understanding the peripheral and central nervous systems underlying hearing and speech perception. PHYSIOLOGY

243. Pain, (5) F. Prerequisite: Neurosciences 201 and consent of instructor. Fields This is a predoctoral lecture and discussion format course. It will examine the neural basis of pain and its control. Correlated clinical case presentations will be included. FAM HLTH

244. Motor Systems, (3) F, Sp. Prerequisite: Anatomy 103, Neurosciences 201. Lecture 1 hour, conference 3 hours. Lieberberg 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

250. Research, (1-8) Su, F, W, Sp. Prerequisite: Consent of instructor. Laboratory. STAFF

PHYSIOLOGY

299. Dissertation, (0) Su, 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

103. Introduction to Nursing, (7) F. Prerequisite: Admission to Articulated B.S./M.S. Program. Lecture 2 hours. Lab 15 hours. C. West Introduction to nursing and nursing process: fundamentals of nursing, terminology, roles in nursing, and their application in nursing practice. PHYSIOLOGY NURSING

104. Nursing of Adults, (9) F. Prerequisite: Admission to Articulated B.S./M.S. Program. Lecture 2 hours. Lab 21 hours. C. West Application of the nursing process to the physiologically, psychologically, sociological, and sociopolitical aspects of regularizing response mechanisms to stress. PHYSIOLOGY NURSING

105. Maternal-Child Nursing, (9) F. Prerequisite: Admission to Articulated B.S./M.S. Program. Lecture 2 hours. Lab 21 hours. M. Suveda Application of principles and theories to nursing care given during the life processes of reproduction, nurturance, and development, and alterations due to stresses during pregnancy and child development from birth to adolescence. FAM HLTH

106. Psychiatric Mental Health Nursing, (9) F. Prerequisite: Admission to Articulated B.S./M.S. Program. Lecture 2 hours. Lab 21 hours. J. Lipson Principles and dynamics of personality and family development. Application of the nursing process with clients who have coping problems resulting from stress or in selected developmental or situational crises. MENT HLTH COM ADM

122. Physiol Processes-The Life Span (4) F. Lecture 4 hours. Seminar 1 hour. J. Lipson Course provides an introduction to the basis for professional practice and problems related to role change and revalidation in academia. Emphasis will be on use of theoretical approaches as the basis for providing nursing care. MENT HLTH COM ADM

127. Adaptation to Acute Illness, (5) F. Prerequisite: Admission to Articulated B.S./M.S. Program. Lecture 12 hours. Lab 3 hours. Seminar 2 hours. C. West Course is designed to explore concepts related to the nursing care of the acutely ill patient. Description of behavior, measurements, and nursing actions appropriate to the concepts will be compared and contrasted across a variety of acute illnesses. PHYSIOLOGY NURSING

128. Intro to Research & Theory, (3) W. Lecture 2 hours. Seminar 1 hour. H. Wilson Introduction to research concepts, language, process, logic, and methods for various types of research as well as the meaning and use of nursing theory. Engages students in students in critical thinking and analysis, self-directed learning, and improvement of nursing care. MENT HLTH COM ADM

129. Health Assessment, (5) F. Lecture 2 hours. Lab 3 hours. L. Leventhal Course covers the process of health assessment of a patient with a variety of health problems. Medical assessment through history, physical examination, clinical studies, and identification of problems of health status. Laboratory for health assessment of clients. FAM HLTH

131. Psychosocial Adaptation, (6) W. Lecture 2 hours. Lab 4 hours. Conference 2 hours. P. Underwood Course presents a knowledge base for understanding assessment of intervention with persons demonstrating psychosocial responses to actual or potential health problems. Interviewing and communication techniques are presented as an integral part of both assessment and intervention. MENT HLTH COM ADM

132. Care of Aged & Chronically Ill, (3) S W. Lecture 3 hours. G. Dowling Nurse's role in health promotion and meeting special needs of the elderly and chronically ill. Demographic issues, formal assessment, alternatives for providing long-term care, and case management in acute, long-term, and community care settings will be covered. MENT HLTH COM ADM

133. Family Health Care, (3) W. Prerequisite: N129 Lecture 2 hours. Lab 1 hour. Conference 2 hours. S. Rankin Course deals with the healthy family as the primary unit of family health care. Nursing process applied to promoting family health is emphasized, utilizing the adaptational-developmental framework. Community involvement with a family is an integral part of the course. FAM HLTH

135. Leadership in Nurses-Client Sys, (3) S. Lecture 2 hours. Seminar 1 hour. C. West Course provides opportunity to develop a professional nursing role in a health care system appropriate to the educational level. Knowledge and skills basic to the professional nursing leadership role are the focus of the course. MENT HLTH COM ADM

137. Community Health Nursing, (6) Sp. Prerequisite: N124 Lecture 3 hours. Lab 15 hours. C. Kelly Application of nursing, family, and community health theory to community health settings, focusing on assessing, planning, implementing, and evaluating nursing programs with families, groups, and communities. Health planning and public policy will be examined. MENT HLTH COM ADM

140. Integrated Science, (3) Su. Lecture 3 hours. M. Dodd Course introduces basic cellular structure and function. Chemical, physical, and biochemical principles of cellular structure and function are presented. Principles of micro- and cellular biology are explored as a special case of cellular function. PHYSIOLOGY NURSING

141A. Anatomy and Physiology, (3) Su. Lecture 3 hours. M. Dodd Course introduces anatomy and physiology needed to understand adaptation in health and illness. The focus is on understanding normal homeostatic mechanisms and their interactions in health. The integrative organ functions of the cardiac, pulmonary, and renal systems are presented. PHYSIOLOGY NURSING

141B. Anatomy and Physiology, (3) F. Prerequisite: N140, N141A, N142, N143. Lecture 3 hours. M. Dodd Anatomy and physiology needed to understand adaptation in health and illness. The focus is on understanding normal homeostatic mechanisms and their interactions in health. The integrative organ systems are presented. PHYSIOLOGY NURSING

142. Professional Nursing I, (8) Su. Lecture 2 hours. Patient contact 18 hours. M. Dodd Course explores the concepts of health and illness and role of the professional nurse in contemporary nursing in care of persons across the adaptation and developmental continuums. Concurrent laboratory designed to develop knowledge and skills common to the nursing care of adults. PHYSIOLOGY NURSING

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

144. Nursing Care of Med-Surg Patients, (13) F. Prerequisite: N140, N141A, N142, N143. Lecture 5 hours. Patient contact 24 hours. M. Dodd 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 professional knowledge and skills application of content with clients. PHYSIOLOGY NURSING

145. Pathophysiology, (2) F. Prerequisite: N140, N141A, N142, N143. Lecture 2 hours. M. Dodd Course provides understanding of disease and its impact on the human body as the basis for nursing assessment and intervention. Major disease entities will be explored, utilizing a conceptual organization of the content. PHYSIOLOGY NURSING

146. Parent-Child Nursing, (7.5) W. Prerequisite: N140, N141A, N142, N143, N144, N145. Lecture 4 hours. Patient contact 10.5 hours. M. Wosler This course examines the role of the nurse in the care of children and families. Nursing care of infants and children is examined with emphasis on the concepts of normal growth and development. PHYSIOLOGY NURSING

147. Childbearing Families, (7.5) W. Prerequisite: N140, N141A, N142, N143, N144, N145. Lecture 4 hours. Patient contact 10.5 hours. K. Lee Course focuses on biopsychosocial concepts forming the basis for normal childbearing events and applies this knowledge to situations. Emphasis is on nursing assessment and management of the woman and fetus
148. Socio-Cultural Issues in Illness, Illness. (2) W. Prerequisite: N140, N141A, N141B, N142, N143, N144, N145. Lecture 2 hours.

V. Olsen Course focuses on significant socio-cultural variations in health and illness, prevention and care that make particular impacts on nursing practice in a variety of settings. Attention will be given to cultural diversity associated with ethnicity and social class. SOC BEH SCI

149. Psych/Mental Health Nursing. (4 S) Sp. Prerequisites: N140, N141A, N141B, N142, N143, N144, N145, N146, N147, N148. Lecture 2 hours. Patient contact 7.5 hours.

L. Chaffeta, P. Underwood Course presents theories of human behavior as they relate to function, alteration, and/or disruption of mental processes; reviews current knowledge related to nursing care, psychiatric treatment, and psychosocial rehabilitation of the identified mentally ill individual and his/her family. MENT HLTH COM ADM


D. Oda Course explores applications of nursing, family, and community health theory in community health settings, including 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 COM ADM


M. Styles Course explores major issues and trends in contemporary nursing and health care delivery as they relate to nursing practice, education, and research. MENT HLTH COM ADM

152. Theories & Conceptual Frameworks. (3-4 S) Sp. Prerequisite: Doctoral standing. Lecture 3 hours.

A. Moleis Comparative study and critical analysis of major conceptual models and theories in nursing. Considers relationship congruency of models to prototype theories, nursing interactions, developmental, adaptation level theories. Examines the implication of nursing theories and models for practice and research. MENT HLTH COM ADM

200. Counseling Theory & Process. (3-3 S) W. Sp. Lecture 2 hours. Lab 0.5 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. Optiona laboratory for theory testing. MENT HLTH COM ADM

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

202. Clinical Knowledge Development. (4 S) F. Prerequisite: N202A. Lab 6 hours. Seminar 2 hours.

P. Larson Course defines the nature of advanced clinical practice relevant to the area of focus in the doctoral program. Problems common to selected patients are explored. Phenomena are analyzed to develop knowledge for advanced nursing in clinical and administrative settings. PHYSIOL NURS

203. Clinical Knowledge Development. (4 S) F. Prerequisite: N202A. Lab 6 hours. Seminar 2 hours.

I. Martinson Course defines the nature of advanced clinical practice relevant to the area of focus in the doctoral program. Problems common to selected patients are explored. Phenomena are analyzed to develop knowledge for advanced nursing in clinical and administrative settings. FAM HLTH

204. Clinical Knowledge Development. (4 S) F. Prerequisite: N202A. Lab 6 hours. Seminar 2 hours.

P. Underwood Course defines the nature of advanced clinical practice relevant to the area of focus in the doctoral program. Problems common to selected patients are explored. Phenomena are analyzed to develop knowledge for advanced nursing in clinical and administrative settings. FAM HLTH COM ADM

205. Nursing Management of Adult Psych. (3 S) F. Prerequisite: N227 and N239 or equivalent, and consent of instructor. Lab 3 hours. Seminar 2 hours.

P. Larson Seminar is designed for graduate psychiatric nursing students to examine and discuss various theories and practice approaches to the treatment and management of psychiatric conditions in adults. MENT HLTH COM ADM


D. Oda Course is an advanced study of the theory and research in the care of patients with physical dysfunction and/or illness. In-depth examination of patient problems, assessment and management in the student's selected specialty area. Seminar with clinical laboratory. PHYSIOL NURS

206.01A. Conceptual Delineation in Physiological Nursing. (3 S) W. Prerequisites: N2025.01 or N2025.02 or N2025.03. Seminar 3 hours.

V. Carriere-Kollman Seminar describes and analyzes phenomena relevant to nursing from theoretical, clinical, and empirical perspectives. Related concepts of interest to nursing are selected from observations in clinical settings and delineated in relation to the selected phenomena. PHYSIOL NURS

206.02A. Conceptual Delineation in Family Health Care Nursing. (3 S) W. Prerequisite: N2025.01 or N2025.02 or N2025.03. Seminar 3 hours.

D. Oda Seminar describes and analyzes phenomena relevant to nursing from theoretical, clinical, and empirical perspectives. Related concepts of interest to nursing are selected from observations in clinical settings and delineated in relation to the selected phenomena. PHYSIOL NURS

206.03A. Conceptual Delineation in Mental Health, Community, and Administrative Nursing. (3 S) W. Prerequisite: N2025.01 or N2025.02 or N2025.03. Seminar 3 hours.

D. Oda Seminar describes and analyzes phenomena relevant to nursing from theoretical, clinical, and empirical perspectives. Related concepts of interest to nursing are selected from observations in clinical settings and delineated in relation to the selected phenomena. PHYSIOL NURS

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Nursing

208.02B. Concept Measurement in Family Health Care Nursing. (3) Sp. Prerequisite: N205.01 or N205.02 or N205.03. Seminar 3 hours.
Staff
Seminar focuses on measurement of selected concepts and their clinical manifestations. Existing measures are examined from theoretical, clinical, and empirical perspectives when the need for new measures is identified. MENT HLTH

208.03B. Concept Measurement in Mental Health, Community, and Administrative Nursing. (3) Sp. Prerequisite: N205.01 or N205.02 or N205.03. Seminar 3 hours.
Staff
Seminar focuses on measurement of selected concepts and their clinical manifestations. Existing measures are examined from theoretical, clinical, and empirical perspectives when the need for new measures is identified. MENT HLTH COM ADM

208.03C. Social Support: Theory, Res & Meth. (2-4) W, Sp. Prerequisite: Doctoral standing. Seminar 2 hours. Independent study optional 3 or 6 hour for 3 or 4 units.
J. Norbeck
Analysis of the literature relating social support to various health and adjustment outcomes with emphasis on conceptual and methodological issues. Students will develop a focused review of the social support literature related to research and/or clinical interests. MENT HLTH COM ADM

W. Holzmeister
Professional development seminar provides a forum for all students in the QA specialty to discuss current topics and issues. Faculty, students, and guest speakers will alternate as seminar leaders and presenters. PHYSOL NURS

210. Information Technology and Nursing Care. (3) Sp. Lecture 3 hours. Lab hours vary.
W. Holzmeister, S. Henry, Z. Mirsky
Course applies research findings from information technology and selected aspects of nursing care (diagnoses, nursing management data sets, decision-making) in order to capture patient outcomes program planning activities. PHYSOL NURS

211A. Introduction to Research. (3) F. Prerequisite: Elementary statistics or equivalent. Lecture 3 hours.
H. Wilson
Lectures and computer-assisted instructional materials present an overview of the research process, including sections on: developing research questions, experimental design, instrumentation, sampling, and data analysis. Different views of science will be explored. Course is designed as a competency-based instructional program. PHYSOL NURS

211B. Patient-Family Teaching Critique. (3) F. W. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours.
J. Hallburg
Course critiques studies in patient-family teaching with the intent to develop research consumers. Emphasis on attitudes, insights, and abilities crucial to the appreciation, appraisal, and utilization of research in the health sciences. FAM HLTH

S. Laffey
Students will critically examine research on health status at the individual, group, and societal levels. Emphasis is on the concept of health status, measurement methods, and implications of research approaches and findings for nursing practice. MENT HLTH COM ADM

211B.04B. Death in Childhood Res Critique. (3) W. Prerequisite: Nursing 211A and consent of instructor. Seminar 3 hours.
I. Martinson
Critique of studies related to the professional management of death, childhood development of the concept of death, children’s response to death in the family, death anxiety in family illness, and impact of death of a child on the family. FAM HLTH

211B.05B. Critique: Studies in Family Health. (3) W. Prerequisite: N211A or equivalent consent of instructor. Seminar 3 hours.
C. Gillis
Course is a critique of research addressing the family and its relationship to the health and illness of family members. Research considered classic in the field will be reviewed, as will contemporary research. FAM HLTH

211B.06B. Neuroscience Research Critique. (5) W. Seminar 3 hours.
R. Simon
This course presents the scholarly process of critiquing research in neuroscience nursing. The focus is on evaluation of the research process, assimilation of the scientific basis for this specialty, and examination of implications of empirical findings for neuroscience nursing. PHYSOL NURS

211B.07B. Crit of Onc Nursing Studies. (3) W. Prerequisite: Consent of instructor. Seminar 3 hours.
M. Dodd, P. Halliburton
Course presents the scholarly process of critiquing published research in oncology nursing. Emphasis will be on evaluation of the research processes utilized by investigators, and the implications of empirical findings for oncology nursing practice. PHYSOL NURS

211B.08B. Concept of Management Research. (3) F. W. Prerequisite: Consent of instructor. N211A or consent of instructor. Lecture 3 hours.
J. Kerr
The course provides a critical analysis of studies which examine organizational behavior and administrative practice. The emphasis is on attitudes, insights, and abilities crucial to appreciation, appraisal, and utilization of research in management. MENT HLTH COM ADM

211B.09B. Research Critique: Critical Care. (3) W. Prerequisite: N211A. Seminar 3 hours.
V. Carrieri-Kohlman
Course critiques research studies related to the nursing assessment, its plan, and therapy of acutely ill patients with multi-system failure. Students will learn to appreciate, evaluate, and integrate research findings into their clinical practice. PHYSOL NURS

211B.10B. Critique: Studies in Child Health. (3) W. Prerequisite: N211A or equivalent consent of instructor. Seminar 3 hours.
D. Weeks
Course is a critique of research addressing the health pediatric client and those experiencing chronic illness. Research considered classic in the field will be reviewed, as will contemporary research. FAM HLTH

J. Lipsett
Course is a critical analysis of studies exploring the relationship of the workplace to health of the worker. Emphasis is on appraisal of relevant scientific literature, identification of research methods, and development of research proposals in occupational health nursing. MENT HLTH COM ADM

211B.14B. Critique of Hith Outcome Studies. (3) Sp. Prerequisite: N211A or consent of instructor. Seminar 3 hours. Lab 2 hours.
L. Chafetz
Course will critique outcome studies in psychosocial care of the chronically chronically or severely mentally ill. The intent is to develop research consumers, through promotion of attitudes, insights, and abilities necessary for critical evaluation and utilization of health-related research. MENT HLTH COM ADM

211B.20B. Critique-Psychiatric & Pediatric. (3) W. Prerequisite: N211A or equivalent consent of instructor. Seminar 3 hours.
D. Affonso, M. Lynch
Course critiques studies reflecting psychological or emotional stressors in the high-risk psychiatric patient. Course will facilitate the appreciation, appraisal, and integration of research findings into clinical practice. FAM HLTH

211B.21B. Cardiopulmonary Res Critique. (3) W, Sp. Prerequisite: N211A or consent of instructor. Lecture 2 hours. Lab 3 hours.
K. Miller
Course of cardiopulmonary research with the intent to develop research consumers, with emphasis on attitudes, insights, and abilities crucial to the appreciation, appraisal, and utilization of research in the health sciences. PHYSOL NURS

211B.22B. Qltl Patient Care Res Eval. (3) Sp. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours.
V. Carrieri-Kohlman
Course critiques research studies in quality of patient care, emphasizing the utilization of a systematic critique process, methodologies employed in evaluation program, and identification of major problems in patient care evaluation research. PHYSOL NURS

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

211B.24B. Institutional Care of the Aged. (3) F W. Prerequisite: N211A. Seminar 2 hours. Field work 3 hours.
J. Kayser-Jones
Seminar focuses on critiquing research studies in the institutional care of the elderly using a theoretical, historical, and cross-cultural approach. PHYSOL NURS

211B.25B. Research Critique: Trauma/ Emergency. (3) W. Prerequisite: N211A. Seminar 3 hours.
S. Janson-Bjerklie
Course is a critical analysis of studies that explore assessment and management variables in emergency and trauma nursing. Emphasis is on the critique process related to studies for applicability to clinical practice. PHYSOL NURS

211B.26B. Critique of QA/Staff Dev Res. (3) Sp. Prerequisite: N211A. Lecture 3 hours. W. Holzmeister
Course examines strategies for the critique of research and applies to quality assurance and staff development research studies. PHYSOL NURS

211C. Clinical Research Methodologies. (3) Sp. Prerequisite: N211A. Lecture 2 hours. Lab 3 hours.
N. Stoits
Course provides the opportunity for students to apply research methods in the development of research proposals. Students will address research of problems significant to their patient population. PHYSOL NURS

211C.52C. Visual Data Study of Human Behav. (3) Sp. Prerequisite: One course in research methods. Graduate standing and consent of instructor. Lab 3 hours. Seminar 2 hours.
B. Highley
The use of still photography in the study of human behaviors as it relates to health care. Includes the histo-
ry of photography's impact on social and health policy, and issues related to design, sampling, and
counter analysis. FAM HLTH

211.53C. Illness Management Research. (3) § F, W. Sp. Prerequisite: N211A, or graduate course on research
methods in social science, or consent of instruc-
tor. Lecture 2 hours. Lab 3 hours. Course may be
repeated for credit.
L. Reif
Methods for conducting exploratory studies on so-
cial-psychological and organizational factors which
affect the management of illness and delivery of health
services. Problem identification, collection and analy-
sis of data, and presentation of findings and policy
implications of research are included. PHYSIOL
NURS

211.54C. Data-Gathering Methods. (3) § W. Sp. Prerequisite: One course in research design. Seminar
3 hours.
W. Holzemer
Course will focus on selection and construction of
data-gathering tools in nursing research. Validity,
reliability and utility are discussed. Computer coding
and conducting a pilot study are included. PHYSIOL
NURS & FAM HLTH

212A. Eval of Psychosocial Theory. (2) § F, Sp. Prerequisite: Consent of instructor. Lecture 2 hours.
P. Underdwrite
This advanced seminar, open to graduate students,
focuses on theory as an approach to understanding
human behavior rather than as an approach to treat-
ment. Emphasis is on evolution of theory and use of
psychosocial concepts in nursing research. MENT
HLTH COM ADM

212B. Social Issues in Psych Nursing. (2) § W. Sp. Prerequisite: M.S. students may take this course if
they have completed N227. Lecture 2 hours.
L. Chafetz
This course will examine historical and current inter-
views, focusing on social factors and mental illness re-
lated to the severely ill in urban environments and
public psychiatric treatment settings. The emphasis
is on critical analysis for nursing research and practice.
MENT HLTH COM ADM

213. Advanced Nursing Practice Roles. (2) W. Sp. Restriction: Course is for second-year M.S. students.
Consent of instructor is required for other students. Lecture 2 hours.
M. Maxwell
Course focuses on analysis of the content, scope, and
issues of advanced nursing practice roles, using the
conceptual role and organizational theory. PHYSIOL
NURS

214. Community-Based Long-Term Care. (3) § W. Sp. Prerequisite: Graduate status or permission of
instructor. Lecture 2 hours. Lab 3 hours.
L. Reif
Course analyzes empirical research and theory dealing
with noninstitutional approaches to long-term care.
Examination of patient characteristics and needs,
models of service delivery, factors affecting service
utilization, and nursing roles in provision and manage-
ment of community-based long-term care. PHYSIOL
NURS

215A. Health in the Community. (3) § F, W, Sp. Prerequisite: Consent of instructor. Lecture 3 hours.
C. Kelly
Course provides exploration of theorems, concepts,
and principles pertaining to the practice of commu-
nity health nursing with a focus on positive health fac-
tors and interaction within families, groups, and com-
munities. MENT HLTH COM ADM

215B. Community Health Planning. (3) § F, W, Sp. Prerequisite: Consent of instructor. Lecture 2 hour.
Lab 3 hours. C. Kelly
Exploration of analytic planning models applicable
to community health services. Utilization of the com-
munity as a basis for planning and delivery of health
care. Emphasis is on the role of the community nurse
in health planning. MENT HLTH COM ADM

216. Interventions-Nurs Work Stress. (2) § F. Prerequisite: Graduate standing. Seminar 2 hours.
A. Baldwin
Course will help to enable students to evaluate the
recent research and current models of nursing work
stress. Emphasis will be on how nurses can develop
strategies for assisting and intervening in nursing stress
situations. PHYSIOLOG NURS

217. Psychosocial Care of Children. (3) § Sp. Prerequisite: Consent of instructor. Lecture 2 hours.
Lab 3 hours. M. Testor
Course explores theory related to the psychosocial
experiences of illness and hospitalization for the child
and his family. Focus is directed to minimizing trauma
and promoting growth. Concurrent practicum rec-
commended. FAM HLTH

218A. Phenomena Common to the Nursing
Care of Ill or Injured. (3-4) § F. Prerequisite:
N276. Prior or concurrent enrollment in physiology
or consent of instructor. Lecture 1 hour. Seminar 2 hours.
Lab optional 3 hours for 4 units.
N. Stotts
Knowledge is organized around phenomena com-
mon to ill or injured individuals across the life span.
Concepts such as stress, healing, comforting, infection,
consciousness, pain and coping will be examined from
a theoretical and clinical perspective. PHYSIOLOG
NURS

218C. Current Therapeutics. (1-5) § F. Prerequisite:
Physiology, N218A and N218B. Seminar 1-5 hours.
N. Stotts, C. West
Course investigates the theoretical basis of selected
therapies commonly used with the ill or injured.
Therapeutic aspects of interventions as well as side
effects will be explored. Discussion will be used as
the basis for discussion. PHYSIOLOG NURS

218D. Illness or Injury Rehabilitation. (2-3) § W. Prerequisite: Graduate standing. N218A and N218B.
Seminar 2 hours. Lab optional 3 hours.
C. West
Course examines the theoretical basis for rehabilita-
tion of patients following physical illness or injury.
Nursing therapies which promote optimal adaptation
and development are evaluated using relevant research
as a basis. Clinical laboratory optional. PHYSIOLOG
NURS

218E. Trauma and Emergency Therapeutics. (3) § F. Prerequisites: N218D and N275M. Seminar 3 hours.
C. May
Course focuses on scientific basis of selected ther-
petic interventions used in the care of trauma and
emergency patients. Nursing interventions related to
therapies will be evaluated and/or proposed. PHYSIOLOG
NURS

218.01B. Concepts in Cardiovascular Neg. (3) § W. Prerequisite: Consent of instructor. Cardio-
physiology and pathophysiology. Seminar 3 hours.
P. Skov
Course analyzes the needs of cardiovascular surgical
patients. Physiologic and pathophysiologic mecha-
nisms and surgical interventions are explored. Issues in
clinical management are discussed from the theoret-
ical perspective, and compared and contrasted with
clinical practice. PHYSIOLOG NURS

218.02B. Concepts in Neuroscience Nursing. (3) § W. Prerequisite: N218A. Lecture 3 hours.
R. Simon
Course explores phenomena which are commonly
experienced by patients with a neurological diagnosis
from a theoretical, scientific, and clinical practice
perspective. Focus is on nursing interventions.
PHYSIOLOG NURS

218.04B. Concepts in Adult Medical Nursing. (3) § W. Prerequisite: N218A. Seminar 3 hours.
Staff
Course analyzes the needs of the medical patient.
Physiologic and pathophysiologic mechanisms and
appropriate treatments are explored. Issues in clinical
management are discussed from the theoretical per-
pective, and compared and contrasted with clinical
practice. PHYSIOLOG NURS

218.05B. Concepts in Oncology Nursing. (3) § W. Prerequisite: N218A. Lab 2 hours. Seminar 1 hour.
Staff
Course analyzes the needs of the cancer patient.
Physiologic and pathophysiologic mechanisms are
explored from the theoretical perspective and com-
pared and contrasted with clinical nursing practice.
PHYSIOLOG NURS

218.06B. Concepts in Critical Care Nursing. (3) § W. Prerequisite: N218A. Seminar 3 hours.
Staff
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 per-
pective, and compared and contrasted with clinical
practice. PHYSIOLOG NURS

218.07B. Concepts in Trauma & Emergency Nursing. (3) § W. Prerequisite: N218A and N221M. Seminar 3 hours.
B. Bries
Course examines human responses commonly expe-
renced by trauma and emergency patients from a
theoretical and clinical practice perspective. Emphasis
is on scientific basis of nursing knowledge as the founda-
tion for practice. PHYSIOLOG NURS

218.08B. Concepts in QA Nursing. (3) § W. Prerequisite: N218A and consent of instructor. Seminar 3 hours.
W. Holzemer, S. Henry, Z. Mirsky
Course examines human responses commonly expe-
renced by hospitalized patients from a quality assure-
ance and patient outcome perspective. Issues in the
understanding of relationships between clinical phe-
nomena and quality assurance measures will be ex-
plored. PHYSIOLOG NURS

219. Psychosocial Assessment. (3) § W. Lecture 2 hour.
H. Wilson
This course critically examines diagnoses of the psy-
chosocial human responses and standard psychiatric
disorders. Emphasis is on the use of assessment tools
(i.e., Mental Status Examination, Psychiatric History,
DSM-III-R, and PANE) across diverse clinical areas
and with clients throughout the life span. MENT
HLTH COM ADM

220.01. Adv Surf in Nursing Research. (3) § F, W, Sp. Prerequisite: Successful completion of the
qualifying examination and/or consent of instructor. Seminar 3 hours.
W. Wilson
This seminar guides doctoral students in the design
and conduct of research in specialty areas in nursing
and community nursing. MENT HLTH COM ADM

220.02. Adv Surf in Nursing Research. (3) § F, W, Sp. Prerequisite: Successful completion of the
qualifying examination and/or consent of instructor. Seminar 3 hours.
I. Martinson
A seminar which guides students in the design and
conduct of research in specialty areas in family health
nursing. FAM HLTH

220.03. Adv Surf in Nursing Research. (3) § F, Sp. Prerequisite: Successful completion of the qualifying
examination. Restriction: Doctoral-level course. Seminar 3 hours.
V. Caretto-Kohlmann
Course explores the theoretical concepts and principles applied to the management of pathophysiologic 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. Prerequisite: Consent of instructor. Lecture 3 hours.
C. Dietrich
Course focuses on assessment and management of common mental health problems of the older adult. Factors contributing to mental health or illness, adaptive behavior, specific psychopathologies, and the similarity of presenting features of physical and mental illness are explored. PHYSIOL NURS

224. Pediatric Clinical Therapeutics. (4) F.S. Prerequisite: Course given in conjunction with N233 (Pediatric Clinical Care Assessment). Lecture 4 hours.
M. Lynch
Course provides a conceptual approach to examine pathophysiological phenomena identified in the pediatric critical care population. The interrelationships of human responses, symptoms, processes, stressors, and interventions will be discussed specifically to allow children to see the phenomena identified in this population. FAM HLTH

226A. Chronic Illness and Nursing. (3) F. W. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours.
J. Halibur
Course offers a study of problems related to long-term illness. Explores the interrelationship of various cultural, psychosocial, and pathophysiological factors involved in chronic illness. Field experience included. FAM HLTH

226B. Chronic Illness and Nursing. (3) W. Prerequisite: N226A or consent of instructor. Lecture 2 hours. Lab 3 hours.
J. Halibur
Course further explores the complexities involved in the illnesses of patients with chronic illness and their families, including the implications for nursing. Course analyzes the interrelationship of various cultural, psychosocial, and pathophysiological factors involved in long-term illness. Field experience included. FAM HLTH

227. Theories of Psych Conditions. (4) W. Prerequisite: Consent of instructor. Lecture 3 hours. Lab 3 hours.
L. Chaifez
Course is an overview of socio-cultural, psychological, and biological theories of mental illness. Seminar emphasizes historical development of these theoretical perspectives and the ways in which they currently contribute to the biopsychosocial model of disorders and to nursing practice. MENT HLTH COM ADM

228. Statistical Analysis Critique. (3) F. W. Prerequisite: Basic statistics course. Open to doctoral students only, others by permission of instructor. Lecture 3 hours.

Staff
course emphasizes the critique of the statistical analysis of nursing research. Statistical tests are evaluated by using the criteria of logical consistency between research questions, design, statistical method, and conclusions; power of the test; and underlying mathematical assumptions. FAM HLTH

229. Comparative Research Methods. (3) W. Prerequisite: Admission to the doctoral program or consent of instructor. One quarter of theory (N202 or 290) and research (N278); desirable. One quarter of theory, N202A, 202B, 202C or 290.01, 290.02, 290.03 and research, N278 recommended. Seminar 2 hours.
S. Gottner
Underlying assumptions as well as design, measurement, and analytic issues pertinent to nursing research will be compared for various research methods. The advantages and disadvantages of approaches such as historical, descriptive, correlational, epidemiological, experimental, and action research will be examined. FAM HLTH

230A. QA Needs Assessment, Planning, and Evaluation. (3) W. Prerequisite: Consent of instructor. Lecture 3 hours.
W. Holzemer, S. Henry, Z. Minsky
Course examines strategies to design, monitor, and evaluate Quality Assurance programs. Current criteria and standards for practice are critically reviewed. Theoretical relationships among QA, staff development, and evaluation research are presented. PHYSIOL NURS

230B. Selected Topics in QA. (3) Sp. Prerequisite: Consent of instructor. Lecture 3 hours.
W. Holzemer, S. Henry, Z. Minsky
Course provides an in-depth exploration of selected topics related to QA, including prospective payment, diagnostic-related groups, utilization review, case management, and consumerism. PHYSIOL NURS

231. Clinical Pharmacology in Primary Care. (3) F. W., Sp. Prerequisite: Consent of instructor. Limited to various practitioner students. Lecture 3 hours.
S. Echeveria, L. Emnis
Course introduces the clinical application of pharmacology and therapeutics to the medical management of patients. Focus is on common medications used in primary care. Emphasis is placed on integration of drug therapy as one component of therapeutic management. MENT HLTH COM ADM

J. Faucon
Course focuses on the epidemiology and primary prevention of AIDS. Ethical and legal issues, access to care, and mental health issues are discussed. Emphasis is on teaching strategies for prevention with high-risk populations and those practicing high-risk behavior. MENT HLTH COM ADM

234.01. Speciality Research Seminar. (3) Sp. Prerequisite: Doctoral standing or consent of instructor. Seminar 3 hours.
N. Statts
Course evaluates research in the student's area of specialization. Emphasis is on critique of the design, methodology, and findings. Synthesis of the evaluation of studies results in the identification of major research questions in the field of study. PHYSIOL NURS

234.02. Speciality Research Seminar. (3) Sp. Prerequisite: Doctoral standing or consent of instructor. Seminar 3 hours.
J. Halibur
Course evaluates research in the student's area of specialization. Emphasis is on critique of the design, methodology, and findings. Synthesis of the evaluation of studies results in the identification of major research questions in the field of study. FAM HLTH

234.03. Speciality Research Seminar. (3) Sp. Prerequisite: Doctoral standing or consent of instructor. Seminar 3 hours.
A. Davis
Course evaluates research in the student's area of specialization. Emphasis is on critique of the design, methodology, and findings. Synthesis of the evaluation of studies results in the identification of major research questions in the field of study. MENT HLTH COM ADM

235A. Child Mental Health Counseling I. (2) F. W. Seminar 2 hours.
S. Weiss
Course addresses client-centered and psychodynamic theories underlying individual counseling with children. Emphasis will be on therapeutic play and use of counseling as a prevention strategy involving collaborative work with the child's psychosocial environment. MENT HLTH COM ADM

235B. Child Mental Health Counseling II. (2) W. Prerequisite: N235A. Seminar 2 hours.
S. Weiss
Course covers cognitive, behavioral, and gestalt theories of child mental health counseling. Theories of group counseling will also be examined, including methods based on play, activity, and interview. MENT HLTH COM ADM

235C. Child Mental Health Counseling III. (2) W. Prerequisite: N235A-B. Seminar 2 hours.
S. Weiss
Course focuses on mental health counseling of children in institutional crises. Particular emphasis is placed upon crises associated with loss, divorce, and physical illness. Termination of the counseling relationship is also addressed. MENT HLTH COM ADM

236. Expectant Parent Group Education. (2-3) Sp. Prerequisite: Consent of instructor. Lab 3 hours. Seminar 2 hours.
D. Affonso
Theoretical sessions are related to methodology and techniques of conducting expectant parent education
groups. Exploration of content relevant to concerns of expectant parents encompassing childbearing and early child rearing experiences. Concurrent practice is encouraged, but not required. FAM HLTH

237. Health Assessment through Life. (3-4) F, Sp. Prerequisite: Department of Family Health Care. Nursing students. Approval by F.O.R. Concurrent practice is 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 age groups. Laboratory experience provides application and integration of theory. FAM HLTH

238A. Infant & Child Development. (3) F. Prerequisite: Consent of instructor. Lecture 3 hours. B. Holoday
Course covers major theories and research findings dealing with the physical, intellectual, and emotional development of the child from birth through school age. FAM HLTH

238B. Adolescent Development. (3) W. Prerequisite: Consent of instructor. Lecture 3 hours. M. Savedra
Course explores relevant theory, literature, and research related to the normal developmental course of adolescents during the adolescent period. FAM HLTH

239. Environ Issues in Psych Rehab. (3) F. Lecture 2 hours; Lab 3 hours. L. Chatzer
Course provides an overview of rehabilitative, residential, and interpersonal environments for the chronic or severely mentally ill. It considers properties of mental health programs, housing, and personal networks which appear to promote rehabilitation goals and overall quality of life. MENT HLTH COM ADM

240A. Family Primary Care I. (3) F. Prerequisite: N241A. Lecture 1 hour. W. McBain, S. Carroll
Theoretical, conceptual, and knowledge for comprehensive assessment and management of selected episodic, stable chronic illness, and related health 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. Prerequisite: N240A. Lecture 4-5 hours. S. Carroll
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) W. Prerequisite: N240A-B. Lecture 4-5 hours. B. McBain
Course presents theories, concepts, and knowledge for comprehensive assessment and management of special problems in family primary care. Emphasis will be on care of the family unit. FAM HLTH

241A. Collaborative Role Development. (1) F. Prerequisite: Consent of instructor and concurrent enrollment in primary care clinical residency. Seminar 1 hour. B. McLain
Seminar deals with critical analysis of issues and research related to collaborative practice in primary care. Emphasis is on history and philosophy of primary care, role change, and models of collaborative practice. FAM HLTH

241B. Role Development in Primary Care. (2) F. Prerequisite: Consent of instructor and concurrent enrollment in primary care clinical residency. Lecture 2 hours. J. Saxx
Course offers the student the nurse practitioner the opportunity to discover strategies for promoting role development and advancing the nursing profession in the primary health care arena. INTERDEPAR-TMENTAL

241C. Collaborative Role Development. (1) F. Prerequisite: Successful completion of N241B (Role Development in Primary Care) and concurrent primary care clinical residency (N404.01, N405, or N406). Lecture 2 hours every other week. J. Saxx, S. Carroll
Bi-weekly seminars deal with critical analysis of issues and research related to collaborative practice in primary care. Emphasis is on joint practice frameworks and practice management, marketing the nurse practitioner role, and legal/professional issues. MENT HLTH COM ADM

242A. Long-term Care of Older Adults. (3) F. Prerequisite: N257 (Biological Aging) or consent of instructor. Seminar 3 hours. G. Dowling
Course focuses on nursing management strategies geared toward maximizing function and minimizing risk factors in older adults. Emphasis is on the scientific basis for advanced nursing practice with this population including the role of the interdisciplinary team. PHYSIOL NURS

242B. Care of Acutely Ill Older Adults. (3) F. Prerequisite: N257 (Biological Aging). Seminar 3 hours. M. Wallhausen
Course addresses major phenomena common in the acutely ill older adult and focuses on the scientific basis for nursing management, the role of the multidisciplinary team in care management, and ethical issues that influence decision-making. PHYSIOL NURS

243-01. Family Therapies. (3) W. Lecture 3 hours. S. Weiss
Course offers a critical examination of theories guiding therapeutic work to enhance family mental health. Diverse theoretical perspectives for assessment and intervention with troubled families will be analyzed, including structural, strategic, and communication frameworks as well as psychodynamic. MENT HLTH COM ADM

243-02. Trends in Group Psychotherapeutic Modalities. (2) F, W. Prerequisite: Consent of instructor. Seminar 2 hours. B. Futas
Seminar is designed for graduate students of psychiatric nursing to examine and discuss theories and practice of various group modalities in current use. MENT HLTH COM ADM

244A. Res. Semi. Indiv. Fam., or Comm. (2-4) F, Sp. Prerequisite: Completion of first-year requirements for the Ph.D. program in nursing or consent of instructor. Lecture 2 hours, Independent study 0-6 hours. S. Lafrey
Nursing 244A is a corequisite for original research through consideration of content methods and issues in an area of specialization. Nursing 244A focuses on evaluation of a content area and generation of research questions within it. MENT HLTH COM ADM

244B. Res. Semi. Indiv. Fam., or Comm. (2-4) W, Sp. Prerequisite: N244A or consent of instructor. Lecture 2 hours, Independent study 0-6 hours. C. Gilliss, M. Duffy
Nursing 244B builds upon prior research coursework to prepare students to develop and defend a plan for original research. Nursing 244B focuses on identification of research questions and criteria of design methods in the students' areas of interest. FAM HLTH

245. Pediatric Critical Care Assessment. (2) F. Prerequisite: Consent of instructor. Seminar 2 hours. S. Lynch
Course focuses on the assessment of manifestations of pathophysiological phenomena in the pediatric critical care population. The assessment provides base data for management decisions and nursing care interventions. FAM HLTH

246. Contemporary Parenting. (3) F, W. Prerequisite: Consent of instructor. Lab 3 hours. S. Lesler
Course addresses the evolving parent-child relationship. Focus is on adaptive tasks to manage environmental and interpersonal variables influencing the development of the parenting role. Nursing functions that support role acquisition and mastery are discussed. FAM HLTH

247A. Pediatric Family Study. (1) W. Prerequisite: N264, N279A, and enrollment in Pediatric Primary Care Program. Lab 2-3 hour visits per quarter. Seminar 2 hours. M. Zweibel
Seminar focuses on family development in the first year of life with emphasis on parental concerns, child-rearing practices, growth and development, nutritional issues and family responses to pediatric primary care experience. Examines name's role in provision of primary care. FAM HLTH

247B. Pediatric Family Study. (1) W. Prerequisite: N246, N247A, and N279B. Lab 2-3-hour visits per quarter. Seminar 2 hours. M. Zweiibl
Seminar focuses on family development in the first year of life with emphasis on parental concerns, child-rearing practices, growth and development, nutritional issues, and family responses to pediatric primary care experience. Examines name's role in provision of primary care. FAM HLTH

248. Group Independent Study. (1-6) F, W, Sp. Prerequisite: Consent of instructor. Lecture 1-6 hours. Staff
Students collaborate in clinical investigations and other studies of special problems in nursing and health sciences under the direction of faculty. Students may select areas related to their long-term interests and future research or clinical program. INTERDEPAR-TMENTAL

249. Independent Study. (1-5) F, W, Sp. Prerequisite: Consent of instructor. Lecture 1-5 hours. Staff
Student undertakes an individual study with emphasis on special problems in nursing. Students may select an area of study which is related to his or her area of interest or future goals. INTERDEPAR-TMENTAL

250. Research. (1-8) F, W, Sp. Prerequisite: Admission to doctoral study and consent of instructor. Staff
Course offers students an opportunity to engage in research with selected faculty. INTERDEPAR-TMENTAL

250.01. Research Rotation. (1-6) F, W, Sp. Prerequisite: Completion of first year of doctoral study and consent of adviser. Lab 3-8 hours. Staff
The student will participate in ongoing faculty research. This experience will contribute to the student's methodological and substantive expertise. INTERDEPAR-TMENTAL

250.02. Clinical Research Rotation. (1-6) F, W, Sp. Prerequisite: Completion of first year of doctoral study and consent of adviser. Lab 3-8 hours. Staff
The student will participate in ongoing faculty clinical research. This experience will contribute to the student's methodological and substantive expertise. INTERDEPAR-TMENTAL

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125

Nursing
251. Advances in Vascular Nursing. (3) § SS1, SS2. Su, F. W, Sp. Prerequisite: Consent of instructor. Learning modules 10 hours. C. West, C. Holbrook 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. PHYS II NURS

252. Issues in Scientific Inquiry. (2-4) § F. Pre-requisite: Consent of instructor. Restricted: Doctoral-level students who have completed the preliminary exam. Seminar 2-4 hours. M. Cowan Course provides a forum for discussion of issues in the conduct of scientific investigations emphasizing those situations and problems associated with the content areas specific to the student's own interest. PHYS I NURS

253. Innovative Subsystems of Nursing Care. (3) § W. Restriction: Doctoral-level—suggested D.N.S. Seminar 3 hours. J. Martinsson 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) § Sp. Lec. 12 hours. C. Liljeblad 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

255.01. Pediatric Health Assessment. (2-3) § F. Prerequisite: Consent of instructor. Restricted: For students enrolled in 2U, evidence must be provided of a concurrent supervised physical assessment experience. Lecture 2 hours. C. L. Danziger, D. Goodman, M. Truskie Course provides the knowledge, principles and assessment techniques for determining health status of children, including health history and physical examination. Focus is on collection and interpretation of clinical data. Laboratory or concurrent practicum required. FAM HLTH

255.02. Child Health Maintenance. (2-3) § F. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 0-3 hours. P. Jackson, C. Clark Course provides theoretical, conceptual, and knowledge for comprehensive child health maintenance, encompassing prevention and promotion. Emphasis is on parents as participants in assessment, decision-making, and management of common child health problems and normal developmental stresses in infancy and childhood. FAM HLTH

255.03A. Common Pediatric Illness Management. (2) § F. Prerequisite: Consent of instructor. Lecture 2 hours. P. Jackson Course explores the 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. (4) § W. Prerequisite: Consent of instructor. Lecture 4 hours. S. Clark Course explores the theories, concepts, and knowledge for comprehensive assessment and management of common acute and chronic pediatric illnesses. Emphasizes integration of content within clinical settings and collaborating care between nurse, family, and 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 family to relationships and transitions. Focuses on responses and coping with situational, developmental, health-illness, and sociocultural transitions. Nursing therapeutic theories will also be explored. MENT HLTH COM ADM

257. Biology of Aging. (3) § W. Seminar 3 hours. M. Wallahagen Course focuses on the biology, physiopathology, and current theories of human aging. Clinical application of theory for nursing practice is provided. PHYS II NURS

258A. Family/Childbearing Theory. (3) § F, Sp. Lecture 3 hours. Seminar 2 hours. J. DeJoseph Course is an introduction to the theoretical foundation of knowledge about the childbearing family. A selection of nursing theories is used to assist the student to analyze the psychosocial and physiological factors impacting the family during the childbearing cycle. FAM HLTH

258B. Family/Childbearing Phenomenon. (3) § W. Seminar 2 hours. Project 3 hours. A. Alfonsi Course studies prenatal phenomena identified in national reports for their theoretical, practical, and research implications. Phenomenon include prevention of low birthweight infants, contemporary stategies for childbearing families, coping strategies for mixed cultural diversity in perinatal health care, and related legislations. FAM HLTH

258C. Family/Childbearing Theory. (3) § W, Sp. Prerequisite: N 258A and N258B. Seminar 3 hours. M. Gershwin Clinical seminar addresses psychosocial and pathophysiological issues of pregnancy, childbirth, parent, and family/marital relationships during childbearing, focusing on self-care practice for family; and planning on midwife as facilitator of adaptation. FAM HLTH

259.01. Women's Reproductive Health. (1-5) § F, W. Lecture 1-5 hours. D. Taylor, 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. Prerequisite: Consent of instructor. Lecture 1-4 hours. Seminar optional 1 hour. W. Star, J. Nosen Emphasis is on theory and management of biopsychosocial 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. Prerequisite: Consent of instructor. Lecture 2 hours. W. Star, D. Taylor Course examines theoretical and management aspects of selected phenomena in women's health applicable to the nurse practitioner role. FAM HLTH

260A. Cultural Concepts in Health Care. (3) § F, W. Sp. Seminar 3 hours. J. Lipson Course introduces basic concepts and issues in medi- cal anthropology and transcultural nursing. Provides opportunity to critically review research literature and discuss implications for nurses and other health care professionals. MENT HLTH COM ADM

260B. Int'l & Cross-Cultural Theories. (3) § F, W. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours. A. Meleis Course explores theoretical and conceptual aspects of international and cross-cultural nursing. Topics covered include culture and ethnicity; social policy and international development; health planning; ethnic, and transcultural communications. MENT HLTH COM ADM

260C. Int'l/Cross-Cultural Nug Issues. (3) § F, W. Prerequisite: Consent of instructor. Seminar 3 hours. A. Davis Course examines selected international nursing issues including primary care, nursing education and nursing service, women's roles, and patient's rights. MENT HLTH COM ADM

261. Mental Health Nursing and the Law. (2) § W. Prerequisite: Enrollment in U.S. program in Psychiatric Nursing or consent of instructor. Lecture 2 hours. G. Gresham Course reviews history and development of mental health legislation and decisional law in the U.S. and California. Explores current mental health laws as they relate to and influence the practice of psychiatric nursing in the public and private sector. MENT HLTH COM ADM

262A. Women's Health Roles/Issues I. (1) § F, W. Prerequisite: Enrollment in Women's Health Nurse Practitioner Program or consent of instructor. Seminar 2 hours (every other week). J. DeJoseph 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 providers. FAM HLTH

262B. Women's Health Roles/Issues II. (1) § W, Sp. Prerequisite: N262A. Seminar 1 hour. L. Sammons, J. DeJoseph, J. Plaugeman Seminar focuses on critical analysis of issues influencing restraints and enhancements of contemporary practice for women's health care providers. Emphasis on current legal, legislative, technological, and health care delivery trends are examined. FAM HLTH

265. Restorative Care: Gerac/LOT. (3) § Sp. Prerequisite: N256A. Consent of instructor. Lecture 2 hours. Seminar 1 hour. Staff Examines restorative nursing care, including supporting principles, concepts, and theories. Explores pre-scribed nursing care, outcomes, and evaluations. Explores various institutional and community settings. Emphasis is on goal achievement and independence of each individual. Concurrent practicum is required. PHYS I NURS

266A. Model Specification. (2-3) § F. Prerequisite: Enrollment in doctoral program and graduate level statistics course. Lab 0-3 hours. Seminar 2 hours. Staff Course reviews and analyzes the theoretical and methodological biases of specifying and testing causal/predictive models in nursing. Analysis of the model includes assessment of mathematic and causal model assumptions and remedial steps to correct for disabilistic and/or specification violations. FAM HLTH

266B. Model Testing and Respecification. (3) § W. Prerequisite: N266A. Seminar 3 hours. Staff Advanced methods in exploratory analysis of data and respecification of models in nursing. Students test their own model using their own or a faculty-provided data base. Course emphasis is on using quantitative analysis for theory building. FAM HLTH

265. Management of Clinical Occupational Health Problems. (3) § F, W. Prerequisite:
Nursing

271A. Clinical Management in Adult Primary Care. (1–4) F, Prerequisite: N270 or consent of instructor. Lecture 1–4 hours.
T. Mendelson
Introduces primary health care concepts essential to management of common physical illnesses in adults. Emphasis is on promotion of optimum client adaptation, selection of clinical interventions congruent with clients' adaptive potential, and incorporation of the nursing process into clinical decision-making. MENT HLTH COM ADM

271B. Clinical Management in Adult Primary Care. (1–4) W, Prerequisite: Consent of instructor. Lecture 1–4 hour.
E. Hughes
Introduces primary health care concepts essential to management of common physical illnesses in adults. Emphasis is on promotion of optimum client adaptation, selection of clinical interventions congruent with clients' adaptive potential, and incorporation of the nursing process into clinical decision-making. MENT HLTH COM ADM

271C. Clinical Management in Adult Primary Care. (2–4) Sp, Prerequisite: Consent of instructor. Lecture 2 hours. Independent projects optional for 3–4 units.
T. Mendelson
Introduces primary health care concepts essential to management of common physical illnesses in adults. Emphasis is on promotion of optimum client adaptation, selection of clinical interventions congruent with clients' adaptive potential, and incorporation of the nursing process into clinical decision-making. MENT HLTH COM ADM

272. Chronic Illness: Child & Family. (3) Sp, Prerequisite: N238A, Anthropology 235, Psychology 205, or consent of instructor. Lecture 3 hours.
W. Belton
Course offers study of chronic illness in childhood and its effects upon the individual and his/her family. The presentation of content is based upon developmental and intersectional models. Clinical content considers systematic assessment and intervention. FAM HLTH

273A. Current Concepts in Occupational Health. (3) F, Prerequisite: Consent of instructor. Lecture 2 hours. Seminar 1 hour.
J. Lipscomb
Course analyzes structure and organization of the occupational health system, regulatory control mechanisms for worker protection, and labor's role in health and safety. Major issues and trends in occupational health are explored. MENT HLTH COM ADM

273B. Current Concepts in Occupational Health Nursing. (2) F, Prerequisite: Consent of instructor. Lecture 2 hours.
B. Burgel
Course analyzes the role of the OHAN in managing an occupational health program. Emphasis is on planning, development, and evaluation of occupational health programs. MENT HLTH COM ADM

274. Health and Safety Hazards/Workplace. (3)
W, Prerequisite: Consent of instructor. Lecture 2 hours. Seminar 3 hours.
J. Lipscomb, P. Quinlan
Course introduces principles of industrial hygiene and safety for identification of chemical, biological, physical, ergonomic, and safety hazards of work. Students will identify environmental monitoring methods, select health surveillance and safety measures, and discuss methods to control exposures and injuries. MENT HLTH COM ADM

275A. Physiological Basis for Nursing. (1–3) F, Consent of instructor.
M. Engler
Course studies physiological theories applicable to nursing. Focus is on normal cell functions and nervous and endocrine system functions which serve as a basis for nursing practice. PHYSIOLOG NURS

275B. Physiological Basis for Nursing. (1–3) W, Lecture 1–3 hours.
M. Engler
Course studies physiological theories applicable to nursing. Focus is on normal function of gastrointestinal, cardiovascular, renal and pulmonary systems which serve as a basis for nursing practice. PHYSIOLOG NURS

275C. Neonatal Pathophysiology. (2) Sp, Lecture 2 hours.
C. Lusby
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

276. Theoretical Perspectives for Nursing Practice. (3) F, Lecture 3 hours.
K. Miller
Course is a study of selected nursing conceptions and theories and their implications for nursing practice, curriculum development, and research. Critique of theories will address key questions relevant to nursing goals, intervention focus and outcome, recipient of nursing, and social significance. PHYSIOLOG NURS

278. Nursing Science History & Philosophy. (4) F, Prerequisite: Doctoral-level standing or consent of instructor. Lecture 2 hours. Seminar 2 hours.
S. Gottsch
Course is an analysis of history and philosophy of nursing science in the United States and abroad, addressing origin of scientific questions and activity, contemporary philosophical viewpoints, and debates currently ongoing regarding design, conduct, and outcomes of nursing research. FAM HLTH

279A. Family Nursing Theory. (3) F, Lecture 2 hours. Seminar 2 hours every other week.
S. Rankin
Course provides an introduction to family theories about systems, development, and stress. Lectures identify relation of stressors with family health or illness and examine ways to apply family theories to nursing practice. Seminars focus on interviewing techniques to assess family health. FAM HLTH

279B. Family Nursing Interventions. (3) W, Prerequisite: N279A (Family Nursing Theory). Lecture 3 hours.
C. Gilliss
Course integrates family theoretical and therapeutic concepts. The focus is on nursing assessment and intervention strategies for identified family problems. The primary framework will utilize a systems model. FAM HLTH

279C. Cultural Issues in Family Health. (2) Sp, Prerequisite: N279B and consent of instructor. Lecture 1 hour. Seminar 1 hour.
F. Dreier
Course involves analysis of family, cultural, and behavioral theories and issues leading to clinical intervention in family primary care. FAM HLTH

279D. Family Self Care. (2–3) W, Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours (optional).
B. McLain
Course examines self-care activities of families and their members from a primary care perspective. Emphasis includes reviewing current theories, research, and practices related to family self care in health and illness. FAM HLTH

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 role of such programs. MENT HLTH COM ADM

281A. Res Sem: Hlth & Its Correlates. (2) W, Prerequisite: Enrollment in Ph.D. program in nursing or consent of instructor. Seminar 2 hours.
J. Fausett
Seminar critically examines theory and research focused on personal and environmental facets as they influence health and illness. Concepts of person, environment, and health will be analyzed and discussed as they pertain to the development of nursing science through research. MENT HLTH COM ADM

281B. Res. Sem: Hlth & Its Correlates. (4–5) Sp, Prerequisite: N281A and enrollment in Ph.D. program in Nursing, or consent of instructor. Lab 3 hours. Seminar 3 hours.
M. Dodd, J. Hallberg
Course critically examines faculty research investigating nursing science from the perspective of person, environment, and health. PHYSIOLOG NURS
282. Geriatric Pharmacology (3–4) F. W. Lecture 3 hours.
S. Echevas, C. Deichler
Course explores clinical management of pharmacokinetics 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 Normal/Abnormal Function. (1-1) P. W. Lecture 1-3 hours.
M. Lynch
Course studies physiologic function of the cellular, neurophysiologic, and immunologic systems as modified by developmental needs, system immunity, and pathophysiologic processes in the pediatric population. Implications for pediatric nursing practice will be addressed in relation to normal/abnormal system function. FAM HLTH

283B. Pediatric Normal/Abnormal Function. (1-1) P. W. Lecture 1-3 hours.
M. Lynch
Course studies physiologic function of the cardiovascular, hematologic, and immunologic systems as modified by developmental needs, system immunity, and pathophysiologic processes in the pediatric population. Implications for pediatric nursing practice will be addressed in relation to normal/abnormal system function. FAM HLTH

283C. Pediatric Normal/Abnormal Function. (1-1) P. W. Lecture 1-3 hours.
M. Lynch
Course studies physiologic function of the gastrointestinal, renal and endocrine systems as modified by developmental needs, system immunity, and pathophysiologic processes in the pediatric population. Implications for pediatric nursing practice will be addressed in relation to normal/abnormal system function. FAM HLTH

284. Adolescent Health Care. (0-2) F, W, Prerequisite: Consent of instructor. Seminar 2 hours.
M. Seal, J. Branch
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

J. M. Nessler, L. L. Lonnell
Course presents theoretical principles of health assessment. A true assessment includes methodologies of data gathering and data analysis essential to comprehensive health assessment of women. The laboratory experience provides application and integration of theory. FAM HLTH

286A. Research in Stress & Coping. (3–4) F, W. Prerequisite: Consent of instructor or doctoral-level
Theory development. Lecture 3 hours. Contract for 1 unit for proposal development (optional).

B. 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 proposals. PHYSIOL NURS

286B. Stress & Coping in Cancer. (3–4) W, Prerequisite: Consent of instructor. Lecture 3 hours. Contact for 1 unit for research proposal (optional).

B. Benner
Course examines the current nursing, behavioral, medical, and psychosocial research relating stress and coping to the etiology and course of cancer. Theoretical and empirical links between coping resources, strategies, and helping interventions are also included. PHYSIOL NURS

287A. Organizational Theory & Research. (3–5) F. Prerequisite: Consent of instructor. Lecture 3 hours.
M. Flood
A critical review and analysis of major organizational theories and research. Emphasis is on open-systems theories to examine characteristics of health service organizations and the role of management. MENT HLTH COM ADM

287B. Behavior in Organizations. (3–5) W. Prerequisite: N287A and consent of instructor. Lecture 3 hours.
J. Ehrast
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. (3–5) F. Prerequisite: N287A and N287B or consent of instructor. Lecture 3 hours.
S. Neiburger
Course provides a synthesis and application of management theories and administrative processes. Emphasis is on leading, planning, organizing, controlling, decision making, managing change, and evaluating. MENT HLTH COM ADM

287D. Financial Management. (3–5) W. Lecture 2 hours. Lab 3 hours.
V. Cleland
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 provides skills development. MENT HLTH COM ADM

288A. Executive Nursing Administration. (3–5) F, W. Prerequisite: Consent of instructor. Seminar 3 hours.
Course offered to doctoral students, analyzing theories and research relative to executive nursing roles in academic and service settings. Course examines administrative processes to governance, use of power, corporate design, and executive scholarship. MENT HLTH COM ADM

288B. Cost Methodology in Nursing. (3–5) F, W. Prerequisite: N281.080 (Cost of Management Research) or equivalent, N287D (Financial Management) or equivalent, or doctoral study or consent of instructor. Lecture 2 hours. Field work 3 hours.
V. Cleland, S. Neiburger
Course focuses on analysis and synthesis of accounting and economic principles relating to the cost of nursing care. Cost methodology is used to determine cost of service, cost averages, marginal costs, cost-effectiveness, and cost-benefit. MENT HLTH COM ADM

288C. Academic Administration Seminar. (3–5) F, W, Prerequisite: Consent of instructor. Seminar 3 hours.
S. Neiburger
Seminar designed for doctoral students in nursing administration interested in the field of administration. Course analyzes and evaluates theories, models, principles, and practices relative to administrative roles in diverse academic settings. MENT HLTH COM ADM

289. Labor Relations. (3–5) W. Prerequisite: Consent of instructor. Lecture 3 hours.
W. Neff
Course critically analyzes organization and exchange theories relative to managing employer-employee relations in health care and educational settings. Emphasis is on labor movement, labor legislation and regulation, contract negotiations, and grievance procedures. MENT HLTH COM ADM

290.01. Family Health Nursing Theory. (3–4) W, Prerequisite: Enrollment in doctoral program. Lab 0-3 hours. Seminar 3 hours.
S. Raszlar
Comparative analysis of classical theories and methodologies for deriving a theory base for family health nursing. Emphasis is on analytical, descriptive, functional, and systems theories. FAM HLTH

290.02. Family Health Theory. (3–4) W. Prerequisite: 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

290.03. Family Health Theory. (3–5) W. Prerequisite: N290.01 and 290.02 or consent of instructor. Enrollment in doctoral program. Seminar 3 hours. Independent study 0-3 hours.
C. Gilliss
Course development of a framework or model for study of a specific family problem in nursing. Emphasis on an in critique of models generated by students and their applicability to research problems. FAM HLTH

291. Acute Psych Care in the Community. (2) F, W, S. Prerequisite: 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 sociological, legal, ethical, and economic factors which influence provision of services. MENT HLTH COM ADM

292A. Physiology of Pregnancy. (2–5) F, W, Prerequisite: Consent of instructor. Lecture 2 hours.
K. Lee, L. Ennis
Course reviews and analyzes advanced physiology and psycho physiology 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. (2–5) W, Prerequisite: Consent of instructor. Lecture 2 hours.
K. Lee, L. Ennis
Course reviews and analyzes advanced physiology and psycho physiology 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

293. Nursing Serv & Educ Evaluation. (3–5) F, W, Prerequisite: Consent of instructor. Seminar 3 hours.
W. Holzer
Case studies are utilized to demonstrate program evaluation in nursing service and education. JACH and NLN criteria are examined. Evaluation design, instrumentation, data utilization, and political components of evaluation for policy decision making are critically analyzed. MENT HLTH COM ADM

294. Computer Management & Clinical Data. (3) W. Prerequisite: Preference given to students in critical care specialty. Others admitted with consent of instructor. Lecture 2 hours. Lab 3 hours.
K. Miller
Course is an analysis of critical care patient data using the computer. Emphasis is on data computing techniques and the sets of data needed for decision making and using the computer to aid in clinical decision making. PHYSIOL NURS

295. Quasi-Experiments in Nurs Res. (3) F, W. Prerequisite: Consent of instructor. Seminar 3 hours.
W. Holzer
Seminar addresses validity issues of quasi-experimentation in nursing research. Designs examined in nursing literature include non-equivalent control group designs, interrupted time-series designs, passive observation, and randomized experiments. PHYSIOL NURS
404.01. Adult Primary Care Nursing—Clinical Preceptorship. (4-12) F, W, Sp. Prerequisite: Consent of instructor. Lab 12-36 hours.

Staff
Course provides an opportunity to apply and evaluate theories, concepts, and skills in the work setting under the supervision of a preceptor. MENT HLTH COM ADM

404.06A. Ped Clin Residency. (5) F. Prerequisite: Consent of instructor. Lab 12 hours. Seminar 2 hours. Conference 3 hours.

D. Goldman
Course offers opportunity to apply and evaluate theories, concepts, and skills in the work setting under supervision of a preceptor. Focus is on development of the pediatric clinical specialist role in ambulatory child health care. FAM HLTH

404.06B. Ped Clin Residency. (5) F. Prerequisite: Consent of instructor. Lab 12 hours. Seminar 2 hours. Conference 1 hour.

P. Jackson
Course offers opportunity to apply and evaluate theories, concepts, and skills in the work setting under supervision of a preceptor. Focus is on development of the pediatric clinical specialist role in ambulatory child health care. FAM HLTH

404.06C. Ped Clin Residency. (5) F. Prerequisite: N404.06A-B. Lab 12 hours. Seminar 1 hour.

P. Jackson
Course offers opportunity to apply and evaluate theories, concepts, and skills in the work setting under supervision of a preceptor. Focus is on development of the pediatric clinical specialist role in ambulatory and chronic illness care. FAM HLTH


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 experience is designed to develop mastery of advanced skills. MENT HLTH COM ADM

405.01. Health Assessment of the Adult Clinical Practicum. (3) SS2. Prerequisite: Must be taken concurrently with N270. Lab 4 hours. Seminar 5 hours/week.

R. Slaughter
Course provides an 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 PC is an integral part of the class. PHYSIOL NURS

411B. Fiscal Modeling. (2) W. Prerequisite: N411A. Provides special space available to Administration students. Lecture 2 hours.

R. Slaughter
Course emphasis is on the use of the computer as a tool for the nurse manager in financial planning. PHYSIOL NURS

411C. Computers in Administration. (2) Sp. Prerequisite: N411B. Lecture 2 hours.

R. Slaughter
Course provides an introduction to administrative information systems and their impact upon patient care. Emphasis will be on basic data management systems in a nursing administration environment. PHYSIOL NURS

411D. Introduction to Computers. (2) F, W. Lecture 1 hour. Lab 3 hours.

D. Chambers
Course provides an introduction to microcomputers, focusing on word processing, DOS basics and hard disk management, hardware and software applications, and purchasing a system. PHYSIOL NURS

414. Data Management. (2) SS1, F, W. Prerequisite: None. BIOMAT 171 or 185A-B are recommended. Lecture 1 hour. Lab 3 hours.

D. Chambers
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 strategies before data are collected is emphasized. PHYSIOL NURS

Nutrition

130. Human Nutrition. (2) W. Lecture 2 hours.

Silverstein
An introduction to the basic principles of human nutrition. Subject material is related to the maintenance of normal nutrition throughout one’s life span, and emphasis is on normal nutrition and in preventive role in maintaining general health, specifically oral health. DENT PUB HLTH

160. Nutrition for the Dental Hygienist. (2) F. Lecture 2 hours.

Levine
Review of biochemical principles of nutrition related to development and maintenance of oral tissue, and the interrelationship of foodstuffs. Emphasis will be placed on practical application of nutritional assessment and counseling for dietary/behavioral change. DENT PUB HLTH

180. Nutrition Counseling for Preventive Dentistry. (1) Sp. Lecture 1 hour. Lab 1 hour. Prerequisite: Senior status in dental hygiene program. Nutrition 130B. Limited to seniors available to Administration students. Lecture 2 hours.

Talbot
Supervised practicum in nutrition counseling with dental clinic patients. Students will apply techniques of diet analysis, preventive program planning, and patient counseling. DENT PUB HLTH

200. Maternal & Infant Nutrition. (2-4) W. Prerequisite: 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) F. Prerequisite: Consent of instructor. Lecture 3 hours.

Y. Gutierrez
Obstetrics, Gynecology and Reproductive Sciences

110. Ob/Gyn Core Clerkship. (1.5 per week) SS1, SS2, Su, W, W. Prerequisite: Medicine 132A-B-C.

R. Glass, Braga
Basic principles and fundamental techniques in obstetrics and gynecology are discussed in a series of seminars, case discussions, and teaching clinics. Students gain practical experience in clinics, wards, delivery room, and operating room under direct supervision. OB GYN R S

140.02. Advanced Clinical Clerkships. (1.5 per week) Su, W, W. Prerequisite: Satisfactory completion of Obstetrics and Gynecology 110, Pediatrics Core Clerkship, and either Medicine 110 or Surgery 110 Core Clerkship.

Braga
Advanced clinical clerkship, obstetrics and/or gynecology at accredited hospital, as individually arranged, and approved by department. OB GYN R S

140.03. Advanced Ob/Gyn Clerkship/VMC. (1 per week) Su, W, W. 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.

Rayes, Cooke, Suedio
Practical clinical training in obstetrics and gynecology at Valley Medical Center of Fresno. Time is divided between labor and delivery experience, gynecologic ward, and obstetrics and gynecology outpatient clinic. Students will have the opportunity to see normal, high risk, and adolescent pregnancies. OB GYN R S

140.06. Advanced Ob/Gyn Clerkship-SFGH (1.5 per week) Su, W, W. Prerequisite: Obstetrics and Gynecology 110, Pediatrics 110, and either Medicine 110 or Surgery 110, or consent of instructor.

R. Sweet and Staff
The clerk will fulfill functions as an acting intern on the gynecologic inpatient service. Some gynecologic outpatient and emergency room experience will be possible as well as inpatient and surgical gynecology. OB GYN R S

140.07. Advanced Gyn Clerkship—UC. (1.5 per week) Su, W, W. Prerequisite: Obstetrics and Gynecology 110, Pediatrics 110 and Medicine 110 or Surgery 110, or consent of instructor.

Braga, R. Glass
The clerk functions in the role of an acting resident on the gynecology service. Responsibilities are primarily on the inpatient service and will include both surgical and nonsurgical aspects of gynecologic oncology, endocrinology, infertility, and general gynecology. OB GYN R S

140.08. Ob/Gyn Preceptorship. (1.5 per week) Su, W, W. Prerequisite: Obstetrics and Gynecology 110 and consent of instructor and chairperson of the department.

Staff
Clinical experience in a subspecialty area or general obstetrics and gynecology under the direction of a member of the faculty. OB GYN R S

140.09. High-Risk Pregnancy—Advanced Senior Elective. (1.5 per week) SS1, SS2, Su, W, W. Prerequisite: Obstetrics and Gynecology 110.

Kittmiller and Staff
Advanced clinical clerkship focusing on outpatient special obstetrical care clinic and inpatient management of high-risk antepartum patients. Duties will include presentations at conferences and journal clubs. OB GYN R S

150.01. Research in Ob/Gyn & Repro Sci. (1.5 per week) Su, W, W. 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, W, W, Field work 3 hours.

Brown
An opportunity for first- and second-year students to spend time in clinical faculty offices and be exposed to the field of general Ob/Gyn. OB GYN R S

170.01. Sociocultural Aspects of Nutr. (1) Prerequisite: Seminar 1 hour.

Abrams
A survey of the social, cultural and psychological factors that determine food behavior in the individual. Lectures, discussion and readings will identify barriers to healthy food patterns. Brief written assignments and class discussions will develop practical approaches to the provision of nutritional care. OB GYN R S

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

Staff
Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. OB GYN R S

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

Staff
A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. OB GYN R S

222. Reproductive Endocrinology Sem. (1) Prerequisite: Consent of instructor. Seminar 1 hour.

Kuhn
Seminar presentations in areas of current interest in reproductive endocrinology by guest speakers and members of the Reproductive Endocrinology Center. Students will be required to submit a term paper. Course may be repeated for credit. OB GYN R S

230. Biology of Reproduction. (2) Prerequisite: Consent of instructor. Lecture 2 hours.

Stitter
Topics include hormonal regulation of development, growth, and function of reproductive tract organs with special emphasis on the ovaries and uterus. OB GYN R S

231. Hormone Receptor Binding. (2) Prerequisite: Consent of instructor. Lecture 2 hours.

J. Roberts
An in-depth assessment of the characterization of hormone receptor interactions by ligand binding methods. Lectures, assigned readings, and problems will focus on theoretical and practical aspects of techniques and data analysis. OB GYN R S

400. Staff Conferences. (1) Su, W, W. Prerequisite: Practicing physicians only.

Jaffe and Staff
Conferences comprised of formal discussions by faculty, faculty, and visiting lecturers. OB GYN R S

401. Surgical Pathology Seminar. (1) Prerequisite: Consent of instructor. OB GYN R S

E. Hill, Braga, H. Jones
Seminar includes the presentation of pathologic material from the obstetric and gynecologic service with formal instruction and discussion. OB GYN R S

402. Residents Core Lecture Series. (1) Prerequisite: Consent of instructor. OB GYN R S

Kittmiller
Seminar includes 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) Prerequisite: Consent of instructor. OB GYN R S

UC Laros, SFGH R. Sweet, C. Webb
Residents are responsible for the care of patients in the hospital and outpatient clinical. 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, W, W. Prerequisite: Consent of instructor. OB GYN R S

Drake
Students will serve as subintensities on the ophthalmology wards. They will work up and present patients, and attend surgery and postoperative clinics. This is an intensive clerkship where students will be on twenty-four hour call the entire time. OPHTHALMOL

140.01B. Advanced Ophthalmology Clerkship—UC. (1.5 per week) Su, W, W. Prerequisite: Consent of instructor.

O’Donnell
Students will observe, work up and present ophthalmology cases at the Eye Clinic. They will attend department rounds and conferences. OPHTHALMOL

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

O’Donnell and Staff
Clinical clerkship in approved hospitals by special arrangement and approval by the dean and the chairperson of the department. OPHTHALMOL

140.03A. Comprehensive Clerkship in Ophthalmology—SFGH. (1.5 per week) Su. Prerequisite: Medicine 110 or consent of instructor. OB GYN R S

Seiff
Students serve as subintensities 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

140.03B. Clinical Clerkship—SFGH. (1.5 per week) SS1, SS2, Su, W, W. Prerequisite: Consent of instructor. Students two per block except summer when one student per block.

Seiff
Clinical observation of patients in clinic, wards, and surgery at San Francisco General Hospital. OPHTHALMOL

140.04. Adv Ophthalmology Clerkship—L. (1.5 per week) Su, W, W. Prerequisite: Consent of instructor.

Kearney
Clinical observation of patients in the clinics, ward, and surgery at L. OPHTHALMOL
140.05. Adv Ophthalmology Clerkship—VMC. (1.5 per week) Su, F, W. Prerequisite: Consent of instructor. 

Whitten

Under close supervision, students are involved in the clinical observation of patients in the Eye Clinic, on the wards and in surgery, and participate in departmental conferences. Main objective of the course is to enable students to perform a complete eye examination. OPHTHAML0N

140.06. Adv Ophthalmology Clerkship—VA. (1.5 per week) Su, F, W, Prerequisite: Consent of instructor. 

Stanley

Clinical observation of patients in clinics, wards and surgery. OPHTHAML0N

150.02. Ophthalmology Research. (1.5 per week) Su, F, W, Prerequisite: Consent of instructor and chairperson of the department. 

Kramer

Research project under the direction of a member of the faculty carried out in the Department of Ophthalmology. OPHTHAML0N

150.05. Supervisied Study. (1-3) F, W, Sp. 

Kramer

Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. OPHTHAML0N


Kramer

A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. OPHTHAML0N


Kramer

Residents prepare and present diagnostic and therapeutic problems cases. Discussion by faculty and visitors follows. Residents also present papers on various aspects of medicine and ophthalmology, which are discussed by faculty members. OPHTHAML0N

401. Staff Conference. (1) F, W, Sp. Prerequisite: First and third-year residents. 

Kramer

Conferences include grand rounds and case presentations of hospital patients, review of recent literature in ophthalmology, and assigned reading with required reports. OPHTHAML0N


Kramer

Seminars include didactic lectures in practical work concerning pathology, neuro-ophthalmology, ocular physiology, retinal degeneration, ocular motility, glaucoma, and microbiology. OPHTHAML0N


Kramer

Didactic lectures and demonstrations cover the basic sciences as applied to ophthalmology. These include anatomy, histology, biochemistry, physiology, and pharmacology. OPHTHAML0N

450. Clinical Ophthalmology. (1.5 per week) Su, F, W, Sp. M. Drake

Residents, under supervision, are responsible for patients in the Eye Clinic. Five-year residents assist in eye surgery and the Eye Bank program. Special clinics include external diseases, extracocular muscles, medical ophthalmology, ophthalmoscopy, refraction, cataract, glaucoma, neuro-ophthalmology, plastic surgery, and tumor. OPHTHAML0N

454. Clinical Ophthalmology. (1.5 per week) Su, F, W, Sp. UC Board, 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. OPHTHAML0N

455. Fourth-Year Residency. (1.5 per week) Su, F, W, Sp. S. Kramer

Fourth-year residency takes at UC or at any approved institution subject to the approval of the chairperson of the department and the dean. OPHTHAML0N


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. OPHTHAML0N

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. OPHTHAML0N

Oral Biology


Winkler

Introduction to the etiology, pathogenesis, and diagnosis of dental caries and periodontal disease. STOMATOL

108.02. Micro/Immunology of Caries & Perio. (2) F. Prerequisite: Oral Biology 108.01. Lecture 2 hours. P. Murray

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

120.01. Césiologist & Preventive Dentistry (3) W. Prerequisite: Oral Biology 108.01 & 108.02. Lecture 2 hours, seminar 1 hour.

Newburry, Beirne, Bhattachar

Principles in the prevention and treatment of caries. Topics covered include composition and function of dentin, diet, factors in the pathogenesis of caries, the role of fluoride in caries prevention, and overall treatment planning for high caries risk patients. STOMATOL

111. First Year Special Study. (2) F. Prerequisite: Passing placement examination and consent of instructor. Lecture 2 hours. Newburry, Beirne, Bhattachar

Discussion of biological problems of interest in dentistry including saliva, mineral metabolism, hydroxyapatite 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.

Christie

Introduction to oral biology correlating morphology, chemistry, function of dental and periodontal 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.

Christie

Introduction to oral biology correlating morphology, chemistry, function of dental and periodontal tissues. Topics include enamel, dentin, cementum, pulp, dental caries, tooth eruption, periodontium, oral mucous membranes. STOMATOL

159. Laboratory Project. (1-3) Su, F, W, Prerequisite: Consent of instructor. Lab 3-15 hours.

Kramer

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

208A-B-C. Oral Immunology and Immunopathology. (2-2-2) F, W, Sp. Prerequisite: Consent of instructor. Lecture 2 hours.

Armitage, P. Murray, Greenspan

Lectures and seminars on immunological mechanisms and their contribution to oral diseases. Topics covered include the immunology of periodontal disease, oral microbial diseases, oral autoimmune disease, and discussions of the interface of immunopathology and inflammation. STOMATOL


Bhattachar

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. (3) F. Prerequisite: General knowledge of microbiology, immunology, molecular biology, or consent of instructor. Seminar 3 hours.

Pereda

Small group tutorial in which special topics in virology and correlated reading will be selected for discussion by students and staff members. 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


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 lecturers. STOMATOL

221. Extracellular Matrices. (2) F or W or Sp. Offered in alternate years: inquire in Oral Biology office for next offering. Prerequisite: Consent of graduate advisor and instructor. Seminar 2 hours.

Fisher, Dansky, Kramer

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

222. Mineralization. (2) F or W or Sp. Offered in alternate years: inquire in Oral Biology office for next offering. Prerequisite: Oral Biology 221. Consent of graduate advisor and instructor. Seminar 2 hours.

Dansky

Recent information on cell biology and physiology of mineralized tissues, and cell biology and development of cell types that produce the extracellular matrices that are subsequently mineralized. Focus on process of mineralization and the hormone regulation, mineral deposition and mobilization. STOMATOL

233. Saliva and Sialyvry Glands. (2) F or W or Sp. Offered in alternate years: inquire in Oral Biology
300A-B-C-D. Teaching Practicum. (1-4, 1-4, 1-4, 1-4) 4-6 F, W, Sp. SSI. Prerequisite: Consent of instructor. Staff.
Practice in teaching a course in oral biology under the supervision of the instructor in charge. STOMATOL.

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.

Oral Diagnosis
Dental clinical problem solving, recognition and resolution. Clinical activities include review of medical and dental histories; examination of oral and paraoral structures; radiographic interpretation, diagnosis and treatment of oral and dental problems; management of the dental patient in pain, or desiring comprehensive dental treatment. STOMATOL.

Recognition and resolution of dental clinical problems. Emphasis is on management of the patient in pain during clinic hours and on-call after hours. Students will examine oral and paraoral structures; review case histories for clinical implications for dental therapy; prescribe, make and interpret dental radiographs; treat or refer to appropriate sources. Senior students will take the place of teaching assistants for their junior partners. Senior will present cases. STOMATOL.

169. Hygiene's Role in Recov of Dental Disease. (0-0-5) Su, F, W, Sp. Prerequisite: Oral 129 or 159, senior dental hygiene status. Clinic 3 hours. Danford, Anglin
In the clinical setting, the student reviews medical and dental histories; examine oral and paraoral structures; make intra- and extraoral dental radiographs; chart and present all findings, functions as a team member in delivery of treatment of dental disease with the dental students and faculty. Emphasis is on the first patient visit for routine or emergency care to the dental school. STOMATOL.

189. Acute Dental Care Clerkship. (1-10) SSI, SSI, F, W, Sp. Danford
Advanced instruction and clinical experience in the diagnosis and treatment of acute dental problems. STOMATOL.

199. Oral & Maxillofacial Surgery
199. Clinical Oral Surgery. (0-5) SS, F, W, Sp. Prerequisite: Third-year standing. For senior rotation, student must have passed Oral & Max. Surgery 120, 130.10, 130.20, 130.30, 130.31, and 132 or have consent from the course supervisor. Clinic variable. R. Smith, Gordon, Pogrel
Students learn to recognize and treat common dental and medical emergencies, perform routine exodontia and minor oral surgical procedures; assist on major procedures in operating rooms setting; utilize common techniques of pain and anxiety control; assist with admission, work-up and discharge of hospital patients. ORAL & MAX SURG.

120. Local Anesthesia. (0.5) Sp. Lecture 1 hour. R. Smith, Gordon, Pogrel
Course covers local anesthetics and techniques as they pertain to the dentition and oral cavity. ORAL & MAX SURG.

130.11. Dental anesthesiology. (1) SS. Prerequisites: Anatomy 117.01, 117.02, and Microbiology 116. Lecture 1 hour. Library research 1 hour. Gordon, R. Smith, Pogrel
An introduction to the basic principles of exodontia, dental anesthesiology, and preoperative care, hemorhagic control, and management of common complications. ORAL & MAX SURG.

130.02. Pain & Anxiety Control. (1) F. Prerequisites: Anatomy 117.01, 117.02, and Microbiology 116. Lecture 1 hour. Gordon, R. Smith, Pogrel
A didactic course outlining the basic principles and techniques of pain and anxiety control in the dental office. Emphasis is on nitrous oxide and oxygen and intravenous sedation. ORAL & MAX SURG.

130.03. Diagnosis & Treatment of Oro-facial Pain. (1) W. Prerequisites: Anatomy 117.01, 117.02, and Microbiology 116. Lecture 1 hour. R. Smith, Gregson, Kabam
A didactic course covering current advances in the field of pain and a variety of topics such as physical evaluation of the pain patient, temporomandibular joint dysfunction, myofacial pain, and orofacial pain. ORAL & MAX SURG.

Procedural skills and academic knowledge the general dentists 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 students' background. OMFS 182 does not include the CPR experience. ORAL & MAX SURG.

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.

199. Laboratory Project. (1-5) F, W, Sp. Prerequisite: Approval of laboratory project by department chairperson. Lab 3-15 hours.
Kaban & Staff
A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. ORAL & MAX SURG.

470. Clinical Methods. (2.5) F. Prerequisite: Enroll in a junior/senior specialty program or consent of instructor. Lecture 2 hours. Patient contact 2 hours.
Pogrel & Staff
A laboratory, physical, and diagnostic course for patients admitted to the hospital. Techniques of examination are demonstrated and practiced in the classrooms; examination of pathologic conditions is conducted at bedside. ORAL & MAX SURG.

471. Applied Surgical Anatomy. (1) F, W, Sp. Prerequisite: Liaison to interns and residents. Lab 3 hours.
Pogrel, Pogrel
Relationships of gross anatomical structures of the head and neck are studied during laboratory directions. Emphasis is placed on the correlation of cadaver dissection findings to diagnosis and operating room surgery. ORAL & MAX SURG.
Oral & Maxillofacial Surgery/Oral Medicine

Kaban, Pogrel, Perrott
Residents will participate in evaluation and defining treatment options for patients with facial and dental deformities. ORAL & MAX SURG

Perrott, Pogrel, R. Smith, N. Gordon, Dodean, Kulbicki
Seminar includes presentation of case studies, literature review, clinical pathology presentations, and occasional guest lectures. ORAL & MAX SURG

Kaban & Staff
Interns and residents, under supervision, are responsible for preparation of case records, laboratory work, preoperative patient preparation, attendance at surgery, postoperative care, and attendance at follow-up clinics. In addition, senior residents have administrative, teaching, and clinical responsibilities. ORAL & MAX SURG

489.01. Clinical Oral Surgery. (1) SS1, SS2, F, W, Sp. Prerequisite: Enrollment in general practice residency or advanced education program in general dentistry. Clinic 3 hours.
R. Smith
Course is designed to teach 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

Oral Medicine

Greenspan
Introduction to recognition, diagnosis and treatment of oral manifestations of systemic diseases, and principles of clinical medicine through presentation of the mechanisms, diagnosis and treatment of common organ system diseases. Will present modifications necessary for the dental treatment of patients with these diseases. STOMATOL

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

Chinn, Zier & Staff
Group rotation through a five-week section: clinical diagnostic-patient presentation; etiology, history-taking, examination, diagnosis, treatment, and follow-up; and medicine—introduction to internal medicine and physical diagnosis. STOMATOL

Lorazo-Njur, 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

Silverman
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. Laboratory Project. (1-1) Su, F, W, Sp. Prerequisite: Consent of instructor. Lab 3-15 hours.
Danes
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.
Danes
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

208A-B. Oral Pathology Seminar. (3-3) F, W, Seminar 3 hours.
Danes
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

Danford
Introduction to principles of diagnostic radiology with foundations in physical and biological sciences. Includes historical contributions to radiology, production of X-radiation, interactions of X rays with matter, biological effects of ionizing radiation, applications of radiological health, radiographic image formation, and photomultiplier. STOMATOL

Oral Pathology

127A-B. Introduction to Oral Pathology. (0-5-5) F, W. Prerequisite: Oral Biology 126. Lecture 4.5 hours. Lab 3-5 hours.
T.L. Green
Course elucidates clinical oral pathology with histologic changes. Emphasis is placed on the microscopic and laboratory investigation of cellular, tissue, and chemical alterations. Laboratory sessions concentrate on clinical presentation of oral diseases. STOMATOL

151. Forensic Odontology. (1) Sp, Lecture 1 hour.
Staff
Identification by means of dental evidence is known as forensic odontology. Course includes identification procedures in single and multiple deaths including homicides and mass disasters, forensic dental radiology, bite-marks and bite injury, the medicolegal autopsy, fire research, and forensic anthropology. STOMATOL

199. Laboratory Project. (1-5) Su, F, W, Sp. Prerequisite: Consent of instructor. Lab 3-15 hours.
Danes
A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the division. STOMATOL

Hatche
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

Staff
Continuation of Oral Radiology 121 and 131 in a seminar teaching format. 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

Oral Pathology/Oral Radiology/Orthodontics

121. Radiographic Interpretation. (1) F. Lecture 1 hour.
Angin
An introduction to the fundamentals of radiographic interpretation, some of the basic physics of X-ray generation, and radiation biology. STOMATOL

129. Basic Radiographic Techniques (0-3) F, W, Sp. Lab 1-3 hours.
Angin
Introduces dental and dental hygiene students to basic radiographic techniques: peritubal, bitewing, occlusal, oblique and panoramic. Through the use of mannekins, provides skills necessary for the transition to the clinic. Equips lab exercises required by the California State Board of Dental Examiners for radiology safety. STOMATOL

Hatche
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

Staff
Continuation of Oral Radiology 121 and 131 in a seminar teaching format. 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

Orthodontics

Vongsvik
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.
R. Boyd, Nielsen, G. Young
Recognition and treatment of orthodontic problems most commonly seen by the general practitioner. GR DEVEL

131.02. Orthodontics in General Practice. (2) F. Prerequisite: Orthodontics 121. Lecture 2 hours.
R. Boyd, Nielsen, G. Young
Recognition and treatment of orthodontic problems most commonly seen by the general practitioner. GR DEVEL
173A-B-C. Orthodontic Surgery Conference. (1-1-1) F, W, Sp. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lecture 1 hour.


McNeill, Nielsen

This course will provide the resident with the basic cognitive skills for recognizing, diagnosing, and treating patients with TMJ pain, TMJ disfunction, and craniofacial pain in a "team environment" (i.e., prosthodontist, orthodontist, oral surgeon, psychologist, neurologist, ENT, physical therapist, etc.). GR DEVEL.

176A-B-C. TMJ Pain & Dysfunction Clinic. (0-5) F, W, Sp. Prerequisite: Resident standing in Orthodontics. Clinic 3 hours.

West, Nielsen, McNeill

This course will provide the resident with the basic clinical skills for recognizing, diagnosing, and treating patients with TMJ pain, TMJ dysfunction, and craniofacial pain in a "team environment" (i.e., prosthodontist, orthodontist, oral surgeon, psychologist, neurologist, ENT, physical therapist, etc.). GR DEVEL.

179A.1A-B-C-D-E. Clinical Orthodontics I. (0-7) SS, FS, W, Sp. Prerequisite: Enrollment in postdoctoral orthodontics or pediatric dentistry program or consent of instructor. Lab variable. Clinic 0-21 hours.

Lee

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. Student will work with other specialists in the management of complex orthodontic problems. GR DEVEL.

179A.01A-B-C-D-E. Clinical Orthodontics II. (0-7) SS, FS, W, Sp. Prerequisite: Enrollment in postdoctoral orthodontics or pediatric dentistry program or consent of instructor. Lab variable. Clinic 0-21 hours.

Boyd

Diagnosis, treatment, and evaluation of clinical postdoctoral orthodontic problems as experienced in modern orthodontic practice. Students will treat patients with a broad spectrum of orthodontic problems. Student will work with other specialists in the management of complex orthodontic problems. GR DEVEL.

179A.05A-B-C-D-E. Ortho General Interaction. (1-1-1-1) F, W, Sp, SS, SS. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Clinic 3 hours.

R. Boyd

Evaluation and treatment of clinical orthodontic problems, as experienced in general dental practice. Postdoctoral students will assist and supervise general dental students in the diagnosis, evaluation, and treatment of orthodontic problems. Emphasis is on the relationship between generalist and specialist. GR DEVEL.
Orthopaedics / Orthopaedic Surgery

118. Adv Orthodontics in Gen Practice. (0-3) F, W, Sp. Prerequisite: Orthodontics 131B. Seminar 1 hour. R. Boyd and Staff

Third- and fourth-year dental students will participate in weekly one-hour discussions of clinical aspects of orthodontic therapy using patient records as a basis of discussion. Students may elect to participate two hours per week in off-campus seminars. GR. DEVEL

Orthopaedic Surgery
First-Year Coordinated Instruction—Medicine
131A-B-C. Lecture-discussions 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.

140.101-B-C-D. Clin Chsop—UC-SFGH-UC ER-VA. (1 per week) Su, F, W, Sp. Prerequisite: Surgery 110 and 111. Must be a senior.

W. Murray, Day, Mauser
Students assigned to inpatient and outpatient services, receive instruction and exercise 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. W. Murray
Orthopaedic surgery clinical clerkships are offered in off-campus hospitals approved by the chairperson of the department and the dean. ORTHO SURG

140.03. Rehabilitation Medicine—S & VA. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 or Pediatrics 110. 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: Orthopaedics 110 and 111 and permission of instructor.

Fracture conference on patients admitted to the emergency room, with emphasis on X-ray findings and treatment modalities. ORTHO SURG

401. Orthopaedic Pathology. (1) F, W, Sp. Prerequisite: Third- and fourth-year residents. UCJ Johansson
A lecture series covering tumors and infections of the musculoskeletal system, illustrated by microscopic slides and photographs of gross specimens. ORTHO SURG

402. Musculoskeletal System Physiology. (1) F, W, Sp. UC Day Course includes lectures by students and faculty on gross and functional anatomy, laboratory description of cadaver material, and demonstrations of surgical approaches. ORTHO SURG

403. Gross & Functional Anatomy. (1) F, W, Sp. UC Day Course includes lectures by students and faculty on gross and functional anatomy, laboratory description of cadaver material, and demonstrations of surgical approaches. ORTHO SURG

404. Orthopaedic Literature. (1) F, W, Sp. Residents at C, RDMC, SFCH, SSF, UC, and VA. UC Day Seminars are student presentations of selected orthopaedic surgery subjects featuring historical review complete with bibliography. They are moderated by an assigned faculty member. ORTHO SURG

406. Orthopaedic Medical Staff Conf. (1) Su, F, W, Sp. UC W. Murray
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

Seminar includes presentation of problem cases by residents for consideration of diagnosis, treatment, and disposition by the attending staff. ORTHO SURG

408. Orthopaedic Surgical Conference. (1) Su, F, W, Sp. SFCH L. Day Selected problems are illustrated by cases treated in the past week. 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. SFH Ashley Conference with emphasis on children's problems in which residents make case presentations of inpatient for review and of new patients for consideration of diagnosis and therapeutic plan. ORTHO SURG

Conference includes review of admissions and discharges of hospitalized patients by the attending and consultant staff. Cases are presented by the residents. ORTHO SURG

Seminars are held in rotation at each of those 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

413. Orthopedic Surgical Conference. (1) Su, F, W, Sp. Staff
 Residents prepare and present case histories of inpatients and selected outpatients. Course includes discussions on diagnostic procedures, indications for surgery, immediate postoperative follow-up, and problem cases (consultations). ORTHO SURG

Conference includes presentation of case studies in hand surgery with central subject for each session. ORTHO SURG

450. Clinical Adult Orthopaedics. (1.5 per week) Su, F, W, Sp. RDMC Bloom, PMC Carroll, KPJ. Johnstone, MG Glick, UC W. Murray
Residents are responsible for patient care in the wards and outpatient clinics including history-taking, physical examination, laboratory tests, elective surgery, fracture treatment, plaster techniques, and consultations. ORTHO SURG

451. Clinical Pediatric Orthopaedics. (1.5 per week) Su, F, W, Sp. CL Larsen, CHMC Debenham, SSF Ashley
Residents are responsible for patient care in the wards and outpatient clinics including history-taking, physical examination, laboratory tests, elective surgery, fracture treatment, plaster techniques and consultations. ORTHO SURG

452. Traumatic & Adult Orthopaedics. (1.5 per week) Su, F, W, Sp. SFCH L. Day, SM Jensen, VA Mauser, H Slabaugh
Residents are responsible for patient care in the wards and outpatient clinics including history-taking, physical examination, laboratory tests, elective surgery, fracture treatment, plaster techniques and consultations. ORTHO SURG

453. Clinical Orthopaedics. (1.5 per week) Su, F, W, Sp. Chief resident. UC W. Murray

Under faculty supervision, the chief resident organizes care and referral of staff patients; supervises a weekly follow-up clinic; administers the teaching- bed fund; independently performs operative procedures in selected cases; advises interns, residents, and fourth-year medical students; participates in paramedical teaching. ORTHO SURG

Clinical instruction in the care and management of orthopaedic problems in athletic injuries. Course consists of clinical practice under supervision as well as didactic lectures every third week. ORTHO SURG

490. Clinical Orthopaedics—SFCH. (1.5 per week) Su, F, W, Sp. L. Day
Residents rotate through orthopaedic wards and follow-up clinic. They are responsible for patient care under the direction of the attending staff, including history-taking, physical examination, X-ray conferences, and consultations. ORTHO SURG

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

Core Clerkship—Surgery 110 and 111 include seven to eight otolaryngology lectures, case presentations, and outpatient clinic assignments. Students are given instruction in methods of examination of patients with otolaryngologic diseases, with emphasis on diagnosis and principles of treatment.

140.01A. Adv Otolaryngology Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 131A-B and Surgery 110.

Boles
A practical course in general otolaryngology including diagnosis and treatment of common ear, nose, and throat problems; both inpatient and outpatient experiences will be offered. OTOFRARY

140.01B. Adv Otolaryngology Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 131A-B and Surgery 110.

Kaplan
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. OTOFRARY

140.01C. Adv Otolaryngology Clerkship—SFCH. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 131A-B and Surgery 110.

Wildes
A practical course in general otolaryngology including diagnosis and treatment of common ear, nose, and
Otalaryngology

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, audiology, vestibular testing, and consultation. Senior resident has certain administrative, teaching, and clinical responsibilities. OTOLARYN


W. Wilde

Intens, under supervision of the attending staff, are responsible for patient care on wards and in the follow-up clinic, including history-taking, examination, and consultation. This rotation is combined with patient-care assignments in the Ophthalmology Service. OTOLARYN

Parasitology

135. Medical Parasitology. (3) W. Lecture 2 hours. Lab demonstration 2 hours.

H. Heyneman and Staff

An introduction to the parasites, helminths, and arthropods that parasitize man. Parasite ecology and disease epidemiology, clinical and diagnostic aspects of parasitic diseases and their treatment are considered in lecture and laboratory. Emphasis in the laboratory is on demonstration. EPI 301 INTL HLTH

Pathology

101. General & Systemic Pathology. (4) F. Prerequisite: Substantive courses in anatomy, biochemistry, physiology, histology, microbiology (or concurrent enrollment), concurrent enrollment in Medicine 332A. If in doubt as to adequacy of preparation, consult the instructor. Lecture 3 hours. Lab 2 hours.

F. Ferrill

Mechanisms and language of disease 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. Surgery and Autopsy Pathology. (1.5 per week) Su, F, W, Sp. Prerequisite: Pathology 101. Consent of instructor. Enrollment limited. Finkelman, Montgomery, Alhwas

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. Off-Campus Pathology Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Pathology 101 and 102.

Bainton

Recent advances and clinical concepts of diseases as they affect the following organ systems are presented: respiratory 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. (3) F. Prerequisite: Substantive courses in biochemistry, physiology, histology, microbiology (first quarter, concurrent) or an introduction to immunology. Emphasis is on studies of exogenous conditions as they effect the normal organism. PATHOLOGY

135. General Pathology. (3) F. Prerequisite: Substantive courses in biochemistry, physiology, histology, microbiology (first quarter, concurrent) or an introduction to immunology. In emphasis is on the adequacy of preparation, consult the instructor. Lecture 3 hours. Lab 6 hours.

Stem

Mechanisms and language of disease 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

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. Lab 6 hours.

Stem

This course is identical to the lecture portion of Pathology 126. PATHOLOGY

135. General Pathology. (3) F. Prerequisite: Enrolled in academic program in Physical Therapy and completion of prerequisite coursework in human physiology and microbiology. Open only to students enrolled in the curriculum or by consent of program director. Lecture 3 hours.

Stem

Mechanisms and language of disease 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. Surgery and Autopsy Pathology. (1.5 per week) Su, F, W, Sp. Prerequisite: Pathology 101. Consent of instructor. Enrollment limited. Finkelman, Montgomery, Alhwas

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. Off-Campus Pathology Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Pathology 101 and 102.

Bainton

Recent advances and clinical concepts of diseases as they affect the following organ systems are presented: respiratory systems, skeletal system, hematopoietic system, and lymph nodes. Emphasis will be on correlation of functional and morphologic characteristics of diseases of organ systems. PATHOLOGY

135. General Pathology. (3) F. Prerequisite: Substantive courses in biochemistry, physiology, histology, microbiology (first quarter, concurrent) or an introduction to immunology. Emphasis is on studies of exogenous conditions as they affect the normal organism. PATHOLOGY

150. Surgery and Autopsy Pathology. (1.5 per week) Su, F, W, Sp. Prerequisite: Pathology 101. Consent of instructor. Enrollment limited. Finkelman, Montgomery, Alhwas

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. Off-Campus Pathology Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Pathology 101 and 102.
Pathology

Clinical clerkships in off-campus hospitals approved by the chairperson of the department and the dean. PATHOLOGY

150.05. Research. (3-5 per week) Su, F, W, Sp. Mckernon, Parslow, Yes. 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 Curriculum Affairs. PATHOLOGY

150.06. Surgical Pathology–VMC. (1.5 per week) F, W, Sp. Prerequisite: Pathology 102 and consent of instructor. M. H. Price, Bezmalinovic. Clerkship is designed to acquaint students with available techniques of tissue analysis, from light microscopic to micromolecular level, 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, Cohen. 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. (3) F. Prerequisite: Courses in biochemistry, physiology, histology, microbiology, and an introduction to immunology. Lecture 1 hour for ten weeks. Lecture 2 hours. Ferrell. Mechanisms of disease with emphasis on dynamic nature of fundamental disease processes: cell injury, immunopathology, inflammation, responses to infectious agents, repair, regeneration, hemodynamic derangement, disturbances of cell growth, and neoplasia. DENT PUB HLT

170.01. Clinical Cytorogy. (3) Sp. Prerequisite: Anatomy 102, Pathology 101 and 102. E. King, E. Hill. Lecture 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 patern. PATHOLOGY


Presentation of selected current cases seen in the hospital pathology laboratory. Discussion of pathological findings, and correlation with clinical and radiological findings and treatment. PATHOLOGY

170.05. Neuropathology. (2) W. Prerequisite: Pathology 102. Third- and fourth-year standing. Lecture and seminar 2 hours. D. Davis, Dickson. Emphasis is placed on clinical neuropathological 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. PA-

170.09. Clinico-pathological Weekly Case. (1) W, Sp. Prerequisite: Pathology 101, enrolled in Pathology 102/103. Restricted to second-year medical students. Seminar 1 hour. Margaretten, Ionnho. A weekly case discussion conference at which students will generate a differential diagnosis, examine gross and microscopic pathological specimens, and discuss the pathophysiology of the case. PATHOLOGY

170.10. Immunological Mechanisms in Human Disease. (1-3) F. Prerequisite: one year basic science courses (graduate, medical, or dental) or consent of instructor. Lecture 1 hour. Seminar 0.5 hour. Mckernon. 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, immunopathology, immune deficiency diseases, tolerance, and autoimmune diseases. PATHOLOGY

170.11. Problems of Medical Delivery in White Androcentric Society. (1) W. Seminar 1 hour. Stern. Feminist readings: how language can be a tool of oppression; how power structures of society maintain hegemony by defining "pathology"; how women, people of color, and gays are marginalized in this context. Exploring how disease/patient dialogue interferes with medical care. PATHOLOGY

170.01. 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

18. 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 directed by a member of the faculty with the approval of the chairperson of the department. PATHOLOGY

209. Applied Pathology. (3) W. Prerequisite: Microbiology 120A-B and Pathology 120 or equivalen-

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 roles of structural protein, such as collagen and elastic in pathology, cell matrix, interactions in developmental biology and morphogenesis. PATHOLOGY

230. Experimental Pathology Seminar. (3) F, W. 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 led by a student leader at each session. PATHOLOGY

240. Concepts in Parasitic Diseases. (4) W. Lecture 2 hours. Seminar 2 hours. Bainston, Sunkari, Denner. 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. (1-4) F, W, Sp. Staff

297. Molecular Biology of Human Disease. (3) Sp. Prerequisite: Open to graduate students, house-

298. Thesis. (0) F, W, Sp. Prerequisite: Advance-

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

301. Teaching Practicum. (3) F, W, Sp. Prerequisi-

308. Pathology Research. (1-8) Su, F, W, Sp. Interns and residents. Staff

Students, under supervision, pursue original investiga-


297. Molecular Biology of Human Disease. (3) Sp. Prerequisite: Open to graduate students, house-

298. Thesis. (0) F, W, Sp. Prerequisite: Advance-

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

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

301. Teaching Practicum. (3) F, W, Sp. Prerequisite: Consent of instructor. Lecture 1 hour. 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. 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 ar-

402. Pathology Research. (1-8) Su, F, W, Sp. Interns and residents. Staff

Students focusing upon the pathology of specific organ systems are conducted by specialists. Emphasis is on the correlation between clinical manifestations of the disease and pathological findings. PATHOLOGY

403. Pathology Research. (1-8) Su, F, W, Sp. Interns and residents. Staff

Students, under supervision, pursue original investiga-

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Practical experience in the ward, newborn nursery, and outpatient clinics with emphasis on case assignment.

Pediatrics

140.01A. Ambulatory Pediatrics—UC. (1.5 per week) Su, W, F, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Pastell Students gain experience in well child care and in dealing with children with acute problems. Emphasis is placed on health maintenance, preventive care, and anticipatory guidance. Conferences focus on general pediatric issues and a review of patients seen in the emergency room. PEDIATRICS

140.018. Ambulatory Pediatrics—SFH. (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. Outpatient Pediatric Clerkship—CHMC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Consent of instructor. Gerden 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 Inpatient Pediatric Clerkship—CHMC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Gerden Students are assigned patients. They are supervised by attending and resident staff. They present patients on wards, attend procedures, and attend specialty conferences when their patients are being discussed, as well as all daily formal teaching conferences. PEDIATRICS

140.01F. Outpatient Pediatric Clerkship—EP. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Consent of instructor. Bunsey 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 Clerkship—EP. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Shinsfield 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

140.02. Off-Campus Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Rudolph 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. McCann 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. Opens to UCSF students only. Silverman 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. Opens to UCSF students only. L. P. Smith Working experience with a pediatrician on the clinical faculty at the pediatrics 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

140.06. Adolescent Medicine. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Gareis Clinical clerkship in adolescent medicine with emphasis on outpatient clinical experience in a wide range of health problems of the adolescent. PEDIATRICS

140.07. Developmental Pediatrics in Fresno. (1.5 per week) Su, F, W, Sp. Prerequisite: Pediatrics 110. D. M. Snyder Students learn to identify children with developmental disabilities and assist them in their growth toward achievement of their potential. Various settings are used in educational and 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 service, 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—UC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Consent of instructor. Opens to UCSF students only. Kooper, Lobin, Meuten The student will participate in ward rounds, outpatient clinic, 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. Higashino 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 conference. Emphasis is on the physiological principles of diagnosis and management. PEDIATRICS

140.12. 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 clinic. PEDIATRICS

140.14. Juvenile Diabetes. (1.5 per week) Su. Prerequisite: Medicine 110 and Pediatrics 110. Obayre Work under the direction of the instructor in Diabetic Camp. Clinical and management aspects of diabetes. Students have an opportunity to participate in the operation of the camp program and treatment of many aspects 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. Ahlila, M. Katoly, 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

140.25. Devel & Behavioral Peds-MZ. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Gorski and Staff Practical extension and training for assessment and intervention of motor, cognitive, and social development of normal and high-risk children. Course includes didactic seminars in medical ethics, child psychiatry, neurodevelopmental and behavioral pediatrics. PEDIATRICS

140.26. Comprehensive Pediatric Care-KP. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Schoen 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. Schoen 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

140.29. Inpatient Pediatrics-VRMC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110, Pediatrics 110 and consent of instructor. Northway Students are assigned to a clinical team of hospital officers, faculty, and practitioners, and participate in the care of acutely ill hospitalized children. Students refine skills in history-taking, physical examination, case write-ups and presentations, assist in special procedures, and attend daily conferences. 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 Clinical–VRMC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Nilsen Opportunity to develop and perfect skills in history-taking, physical examination, case write-ups, presentations, and procedures. Supervised problem-oriented learning/training environment fosters basic diagnostic and management skills. Conferences, case work-ups and presentation, night call with resident, and assigned reading. PEDIATRICS

140.32. Infectious Diseases–FLENSNO. (1.5) Su, F, W, Sp. Prerequisite: Pediatrics 110 and Medicine 110. McCarty Experience with common and unusual infections such as meningitis, osteomylitis, pneumonia, peritaal infections, and infections in immunocompromised hosts. Emphasis on discussion of hospital patients, close interaction with the microbiology laboratory, and assigned readings. Students will also review fundamentals of antimicrobial therapy. 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, Cowan Evaluation and care of children with primary immunodeficiency diseases and rheumatologic disorders. Emphasis on ontology 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: Pediatrics 110. Curry, Winter 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 diagnosis course for future pregnancies. PEDIATRICS

140.35. Infectious Disease–UC & SFGRH. (1.5 per week) Su, F, W, Sp. Prerequisite: Pediatrics 110. Grossman, Tureen, Wintrub Students will learn the 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

140.36. Advanced Elective Adolescent Medicine–NRMC. (1.5 per week) F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. One student per rotation. Van Meter The aim of this course is to provide an intensive "sub intern" experience in the practice of adolescent medicine. Experience will include exposure to sports-related injuries, sexually transmitted disease, birth control counseling, and emotional adjustment problems. PEDIATRICS

140.37. Clinical Clerkship in Adolescent Medicine. (1.5 per week) Su, F, W, Sp. Prerequisite: Completion of basic pediatric 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

150.04. Research in Pediatrics–UC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Grumbach 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. Rudolph Student prepare case presentations weekly from patients on the pediatrics ward. Course correlates patients' problems with work in the required curricula. Experience on the ward in the clinical setting. PEDIATRICS

170.01. Peds Devel Resources Overview. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor. L. Crain Seminar weekly and reading assignments correlated with observation of the spectrum of community and institutional services; diagnostic, preventive, and program services for infants and developmental disabilities included. PEDIATRICS

170.02. Primary School Health Educ. (1–2) F, W, Sp. Prerequisite: Consent of instructor. Attendance of initial orientation by the curriculum department of the San Francisco Unified School District, scheduled at the first session of the quarter. Field work 3 hours plus class participation. Topic paper optional with consent of instructor for 2 units. L. Crain, Erster Health professions students are oriented to working with Primary Grades Health Curriculum Program, and participate, under guidance of qualified instructor, in implementing PHGCP for K-3 grade children in local schools. PEDIATRICS

170.03. Health Professional and Nuclear War. (2) F, S, 1 hour. Kiefer, Newman Seminar exploring nuclear weapons effects, technology and strategy, and the implications of these for health professionals. PEDIATRICS

180. Human Biochemical Genetics. (1) F, W, Sp. Prerequisite: Pediatrics 110 or equivalent. Seminar 1 hour. Packman Selected topics in human biochemical genetics, emphasizing research and concepts of current interest. Course is directed toward physicians, postdoctoral fellows, medical students, and graduate students. A seminar format will be used, with directed reading and discussion. PEDIATRICS
180.01A-B-C-D. Adolescent Development. (2-2-2-2) F, W, Sp. Prerequisite: Consent of instr. Seminar 2 hours.

Rudolph 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. 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. Rudolph 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. U.C. Rudolph Conferences include house staff preparation and presentation of patient case histories with reference to the literature, laboratory work, and special studies. Faculty members are available from other departments as well as other universities discuss recent developments in their respective fields. PEDIATRICS

401. Pediatric-Renal-Endocrine Conf. (1.5) Su, F, W, Sp. Interns and residents. U.C. 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. U.C. Rudolph Seminar includes review and discussion of selected cases of unusual interest, reports on special topics with review of recent literature, and clinicopathologic conferences on pediatric cases. PEDIATRICS


Boyle 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: Psychology 110-112 or 110-114 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. Staff is on applicability of behavioral pediatrics in clinical practice. Includes screening, temperament, attachment, and hospitalization. Supervised experiences at day care 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 is presented over two-year cycle. PEDIATRICS

424. Neurodevelopmental Assessment and Therapy. (1) W. Prerequisite: By instructor approval. Prerequisite: 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. U.C. Rudolph Residents, under supervision, are responsible for patient care in the wards and outpatient clinics 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, 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. U.C. Gooding Interns, under supervision, are responsible for patient care in the wards and outpatient clinics including history-taking, physical examination, laboratory tests, diagnosis, and treatment. PEDIATRICS

Periodontology

129. Introduction to Clinical Periodontology. (1) Prerequisite: Oral Biology 128 A-B. Lecture/clinic 2 hours.

Taggart, Green This course is an introduction to clinical periodontal procedures, including diagnosis, and basic periodontal therapy. It will include lecture, laboratory, and clinical practice in treating patients with early periodontal diseases and preventative periodontics. STOMATOL

130. Periodontal Therapy. (1) Prerequisite: Perio 129 Lecture 1 hour.

Taggart Introduction to the diagnosis and treatment of periodontal diseases. Emphasis will be placed on examination of the patient, diagnosis, and classification and correction of diseases of the periodontium, and treatment planning. The rationale and techniques for treatment of gingivitis and early chronic periodontitis will be discussed. STOMATOL

131. Periodontal Therapy. (1) F. Prerequisite: Perio 130 Lecture 1 hour. Taggart

Diagnosis and treatment of periodontal diseases, acute lesions, less common disease of the periodontium, and moderate to advanced periodontitis. Emphasis on diagnosis and treatment planning, considerations for specialty referral when appropriate. Rationale and techniques for treatment of moderate to advanced chronic periodontitis. STOMATOL

132. Periodontal Therapy. (2) W. Prerequisite: Perio 131 Lecture 2 hours.

Taggart 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 medical aspects of periodontal therapy will be included. STOMATOL


Taggart 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

149. Clinical Periodontal Therapy. (0-0-4) Su, F, W, Sp. Prerequisite: Perio 139 Clinic 12 hours.

Taggart Treatment of a variety of periodontal diseases in a general practice environment under the direct supervision of faculty. STOMATOL

161. Periodontal Therapy. (1) W. Prerequisite: Perio 150A-C Lecture 1 hour.

Taggart Diagnosis and treatment of periodontal diseases, including acute lesions, less common disease of the periodontium, and moderate to advanced periodontitis. Emphasis will be placed on diagnosis and treatment planning, with considerations for specialty referral when appropriate. The rationale and techniques for treatment of moderate to advanced chronic periodontitis will be featured. STOMATOL

162. Periodontal Therapy. (1) W. Prerequisite: Perio 161 Lecture 1 hour. M. Taggart 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 medical aspects of periodontal therapy will be included. STOMATOL


Dienstein (F, W), Ryder (Sp) Dynamics of inflammation and its role in the periodontal issues. STOMATOL


Raust
Study in depth with literature review and seminar discussions on surgical techniques used to treat lesions involving the hard and soft tissues of the periodontium. STOMATOL

180. Periodontics in General Practice. (1) W. Lecture 1 hour.

3. Nathan Implementing the skills and knowledge of periodontology in the private practice environment. STOMATOL

180.01. Advanced Perio Lit. (1) F. Prerequisite: Perio 130 and consent of instructor. Seminar 1 hour.

Abe Study in depth, with literature review and seminar discussions of areas of periodontology having major clinical significance. STOMATOL

180.02. Advanced Perio Lit. (1) W. Prerequisite: Perio 131 and consent of instructor. Seminar 1 hour.

Abe Study in depth, with literature review and seminar discussions of areas of periodontology having major clinical significance. STOMATOL

180.03. Advanced Perio Lit. (1) Sp. Prerequisite: Perio 132 and consent of instructor. Seminar 1 hour.

Abe Study in depth, with literature review and seminar discussions of areas of periodontology having major clinical significance. STOMATOL

181. Perio Surgical Techniques. (1) F. Prerequisite: Perio 130 or 131 and consent of instructor. Lecture 1 hour.

Shibata Surgical techniques are presented which may be used to treat localized areas in the hard and soft tissues of the periodontium. STOMATOL


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

201A-B. Research. (0-3, 0-3, 0-3) F, W, Sp. Lecture 0-2 hours. Lab 0-3 hours.

Shibata (5), Chambers (B), Bhattachar (Sp) Elements of experimental design, statistical inference, and methods of laboratory and clinical research. STOMATOL

202A-B. Moloc & Biochem Basis of Disease. (2-2) F, W. Prerequisite: Biochemistry 100A/B or equivalent introduction to biochemistry. Lecture 2 hours. Seminar 1 hour.

Bhattachar 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 diseases of connective tissues, inflammation, and wound healing. STOMATOL


Staff Seminar designed to correlate basic sciences with problems in periodontology and evaluate concepts in the direction of research, clinical applications, and teaching. Selected papers in the literature are reviewed and evaluated. Other instructions are invited to participate. STOMATOL

401. Examination & Treatment Planning. (1) F. Prerequisite: Enrollment in postgraduate specialty program or consent of instructor.

Shibata Lectures on examination and treatment planning. STOMATOL

401.01 Structure and Physiology of the Periodontium. (2) F. Prerequisite: Enrollment in postgraduate specialty program. Lecture 2 hours.

Ryder Advanced study in the oral tissues, with emphasis on their histopathological aspects. STOMATOL

401.02 Structure and Physiology of the Periodontium. (2) W. Prerequisite: Enrollment in postgraduate specialty program. Lecture 2 hours.

Ryder Advanced study in the oral tissues, with emphasis on their histopathological aspects. STOMATOL

401.03 Structure and Physiology of the Periodontium. (2) Sp. Prerequisite: Enrollment in postgraduate specialty program. Lecture 2 hours.

Ryder Advanced study in the oral tissues, with emphasis on their histopathological aspects. STOMATOL


Ryder Course covers anatomy as it relates to dentistry and periodontal surgery. STOMATOL

406.01. Hospital Anesthesiology. (6) S. Prerequisite: Consent of instructor. Seminar 1 hour. Clinic 16 hours.

Shibata Practical course in operating room anesthesia. Instruction in hospital administration, physical and preoperative evaluation of the patient, monitoring of vital signs, administration of intravenous anesthesia, general anesthesia, and handling of residual medical emergencies. Clinical instruction is supplemented by seminar. STOMATOL

406.02. Hospital Periodontics. (4) F. Prerequisite: Perio 419.01. Lecture 4 hours.

Shibata Clinical periodontics integrated into the regular medical and rehabilitative activities of M2. 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.

Shibata Clinical periodontics integrated into the regular medical and rehabilitative activities of M2. Course provides patients with quality dental care, appreciation for preventive dentistry, and concept of total health care. Students are exposed to various medical conditions. STOMATOL

406.04. Hospital Periodontics. (4) W. Prerequisite: Perio 419.03. Lecture 4 hours.

Shibata Clinical periodontics integrated into the regular medical and rehabilitative activities of M2. 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.

Shibata Students present and discuss management of their cases that are either planned for treatment or currently under treatment. They are expected to defend their treatment plan and therapeutic procedure based on relevant literature and clinical experience. STOMATOL

413.02. Treatment Planning & Surgery. (1) W. Seminar 1 hour.

Shibata Students present and discuss management of their cases that are either planned for treatment or currently under treatment. They are expected to defend their treatment plan and therapeutic procedure based on relevant literature and clinical experience. STOMATOL

413.03. Treatment Planning & Surgery. (3) Sp. Seminar 1 hour.

Shibata Students present and discuss management of their cases that are either planned for treatment or currently under treatment. They are expected to defend their treatment plan and therapeutic procedure based on relevant literature and clinical experience. STOMATOL

413.04. Treatment Planning & Surgery. (1) SS1. Seminar 1 hour.

Shibata Students present and discuss management of their cases that are either planned for treatment or currently under treatment. They are expected to defend their treatment plan and therapeutic procedure based on relevant literature and clinical experience. STOMATOL

416.01. Original Investigation. (1-5-0) 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. (1-5-0) 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 S) 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.

Shibata Clinical procedures in periodontology therapy. STOMATOL

419.02. Clinical Periodontics. (5) W. Prerequisite: Enrollment in postgraduate specialty program. Clinic 15 hours.

Shibata Clinical procedures in periodontology therapy. STOMATOL

419.03. Clinical Periodontics. (5) Sp. Prerequisite: Enrollment in postgraduate specialty program. Clinic 15 hours.

Shibata Clinical procedures in periodontology therapy. STOMATOL

419.04. Clinical Periodontics. (5) SS1. Prerequisite: Enrollment in postgraduate specialty program. Clinic 15 hours.

Shibata Clinical procedures in periodontology therapy. STOMATOL

423.01. Adv Treatment Planning & Surgery. (3) F. Seminar 1 hour.

Shibata Students present and discuss management of their cases that are either planned for treatment or currently under treatment. They will be responsible for defending their treatment plan and therapeutic procedures based on relevant literature and clinical experience. STOMATOL

423.02. Adv Treatment Planning & Surgery. (3) W. Seminar 1 hour.

Shibata Students present and discuss management of their cases that are either planned for treatment or currently under treatment. They will be responsible for defending their treatment plan and therapeutic procedures based on relevant literature and clinical experience. STOMATOL
120. Principles of Pharmac Chem. (3) F. Prerequisite: Chemistry 113. Lecture 3 hours.  
Ordo 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. (W. Prerequisite: Pharmaceutical Chemistry 120 and concurrent enrollment in Pharmacology 121. Lecture 2 hours.  
Kald  
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  
A laboratory research project under direction of a member of the faculty with the approval of the chairman of the department. PHARM CHEM  
200A. Introduction to Biochemical Toxicology. (4) F. Prerequisite: PC 203 or co-requisite. Lecture 4 hours.  
Meehan  
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 alter normal cellular processes at the molecular level. PHARM CHEM  
201A. Basic Principles of Medicinal Chemistry. (3) F. Lecture 3 hours.  
Young  
Introduction to basic concepts of medicinal chemistry, with focus on pharmaceutical 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. (6) F. Lecture 2 hours.  
Sadee  
A review of major drug classes with applications 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). Offered 1990-91.  
Lecture 2 hours.  
Kontz, 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). Not offered 1990-91.  
Lecture 2 hours.  
Shafir  
Principles and recent advances in nucleic acid structure, including experimental and theoretical approaches. PHARM CHEM  
203. Drug Metabolism. (3) F. Prerequisite: Consent of instructor. Lecture 2 hours. Seminar 1 hour. Literature project.  
Sades  
Study of the in vivo and in vivo biotransformation of foreign compounds with particular emphasis on drugs. When possible, detailed chemical and biochemical mechanisms are considered. PHARM CHEM  
204. Introduction to Computer Programming. (3) F. Prerequisite: Consent of instructor. Lecture 3 hours.  
Langridge, 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) F. Lecture 3 hours.  
Crail  
The emphasis of the course will be on modern principles covering structural and functional aspects of nucleic acid and protein; molecular biochemical methodologies that focus on topics of pharmaceutical interest, basic theories of molecular biology, enzyme structure, molecular genetics, and the role of these in the understanding and manipulation of macromolecules. PHARM CHEM  
206. Laboratory Rotation in Pharmaceutical Chemistry. (1-5) S. W. Prerequisite: Consent of instructor. Lab 3-15 hours.  
Staff  
A laboratory rotation course to familiarize new graduate students with various approaches to research in the pharmaceutical sciences. PHARM CHEM  
212A-B. Pharm Sci Computer Prog. (1, 2) F, W. Prerequisite: PC 212A or equivalent is prerequisite to PC 212B. Lecture 1 hour; B, 2 hours. Lab A, 1 hour; B, 1 hour.  
Upton  
A course in computer programming using examples from the pharmaceutical and biomedical sciences. PHARM CHEM  
Oka, Giacomini, Hoener  
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/lecture emphasizes problem-solving in pharmacokinetics. PHARM CHEM  
214. Adv Kinetics of Absorption & Dispersion. (3) W. Prerequisite: Pharmaceutical Chemistry 212A and Biochemistry 202 or equivalents. Lecture 2 hours. Lab 3 hours.  
Teeter, Benet  
Advanced consideration of pharmacokinetics including multicompartiment models, assessment of intrinsic absorption and disposition parameters, nonlinear kinetics, and correlation of pharmacodynamic response with the concentration-time course of a drug. Conference involves problem-solving exercises. PHARM CHEM  
216. Bioanalytical Modeling. (2) Prerequisite: Pharmaceutical Chemistry 212A, 212B or equivalent, or consent of instructor. Lecture 2 hours.  
Siegel
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


Sanft, Kenyon
Selected topics on enzyme mechanisms. General survey of enzyme catalysis; general acid-base catalysis; proton affinity effects; strain and conformational change. Covalent intermediates in enzyme catalysis. The role of cofactors in enzyme catalysis. Phosphate transfer reactions. PHARM CHEM


Bennet
A program involving the presentation of core material in pharmaceutical chemistry in the pharmacoeconomics pathway. The presentations are made by graduate students and examination is by a series of cumulative examinations. PHARM CHEM

221. Research Conf in Pharm Chem. (1) F, W, Sp. Prerequisite: Graduate standing in the Department of Pharmaceutical Chemistry. Lecture 1 hour.

Kenyon
A series of weekly research conferences in medicinal chemistry given by visiting lecturers, faculty, and advanced graduate students. PHARM CHEM


Kunze and Staff
Topics of current research interest in physical and biophysical chemistry. PHARM CHEM

225A-B. Graduate Research Opportunities. (1–3) F, W. Prerequisite: Graduate standing in the Department of Pharmaceutical Chemistry. Lecture 1 hour.

Peng
A series of weekly presentations of the research interests of the basic science faculty. The purpose is to acquaint new graduate students with the research in the Departments of Pharmacy and Pharmaceutical Chemistry. PHARM CHEM

230A. Spectroscopy. (3) F. Prerequisite: Chemistry 162 or equivalent. Lecture 3 hours.

Kollman
The theory and application of molecular electronic and vibrational spectroscopy; optical rotatory dispersion and circular dichroism. PHARM CHEM


T. Janes
Theory and application of nuclear magnetic resonance and electron-spin resonance. PHARM CHEM

230C. Spectroscopy. (2–5) W. Lecture 3 hours. Lab 2 hours.

Basu
Laboratory work in nuclear magnetic resonance. PHARM CHEM

231. Nuclear Magnetic Resonance. (3–4) W. Prerequisite: undergraduate physics or physical chemistry. Chemistry 262 is recommended. Lecture 3-4 hours.

T. Janes
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.

Burlingame
Elucidation of molecular structure, characterization 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) F. Prerequisite: Chemistry 260. Lecture 3 hours.

Guy, Siegel
Basic principles applicable to transport and reaction processes in model membrane and biological systems. PHARM CHEM


Seokoo, Guy
Biophysical consideration of membrane structure; passive and active transport mechanisms and implications for targeted and controlled drug delivery. PHARM CHEM


Siegel
Chemistry and physics of polymers relevant to the design and function of programmable drug delivery systems. PHARM CHEM

240. Radiobiological Synthesis. (1–2) F. Prerequisite: Consent of instructor. Lab 3-6 hours.

Peng
Theory and techniques related to the synthesis of isotopically labeled organic compounds. Course may be repeated for credit. PHARM CHEM

242. Radiotracer Methodology. (1) W. Prerequisite: Pharmacological Chemistry 152 or 160, or consent of instructor. Lecture 1 hour.

Peng
Discussion on the theory and principles in the use of radionuclides as tracers in biological systems. Emphasis is on the design of experiments and data evaluation. PHARM CHEM


Staff
PHARM CHEM


Langridge, Ferrin
Application of interactive three-dimensional computer graphics to modeling complex biological systems, particularly large molecules and their interactions. Elements of hardware and a detailed discussion of software. Demonstration and self-scheduled projects using the computer graphics laboratory. PHARM CHEM


Staff
Discussion and practice in research problem formulation and design selection. Core classes and small group seminars are organized around students' interests by faculty within the area of specialization. PHARM CHEM

269. 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-B. Medical Pharmacology. (4–4) W. Prerequisite: Biochemistry 100A-B or equivalent. Physiology 120 and 125 or equivalent. Lecture 3 hour. Conference 2 hours.

Katzung
Systematic presentation of pharmacological agents based on drug group classification. Major emphasis is on mechanism of action of clinically important agents. PHARMACOL

121. Pharmacology. (1) W. Prerequisite: Concurrent enrollment in Pharmacological Chemistry 121. Lecture 1 hour.

Burkhalter
Systematic survey of action and uses of drugs with emphasis on steroids, hormones, and drugs for metabolic disorders. PHARMACOL

125. Pharmacology & Toxicology. (4) Sp. Prerequisite: Biochemistry 120A-B and Physiology 120 and 125. Lecture 3 hours. Conference 2 hours.

Burkhalter
Systematic survey of action and uses of drugs acting on autonomic nervous and cardiovascular systems and the kidney. PHARMACOL

126B-C. Dental Pharmacology. (2, 4) W. Prerequisite: Physiology 110. Lecture 2 hour W; 3 hour Sp. Lab 3 hour 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 chemical and therapeutic agents. PHARMACOL

134. Pharmacology. (2) W. Prerequisite: Concurrent enrollment in Pharmaceutical Chemistry 134. Lecture 2 hours.

Burkhalter
Systematic survey of action and uses of anti-infective and anti-occlusive drugs. PHARMACOL

136. Pharmacology & Toxicology. (4) F Prerequisite: Pharmacology 125. Lecture 3 hours. Conference 2 hours.

Burkhalter
Systematic survey of action and use of drugs acting on the central nervous system. PHARMACOL

150.01. Pharmacology Research. (1.5 per week) F, S, W. Prerequisite: Consent of instructor. Lecture and lab to be arranged.

Staff
Students perform individual research in a field of their choice under the guidance and supervision of a member of the faculty. PHARMACOL


Staff
Group studies of selected topics in pharmacology. PHARMACOL

193. Survey of Departmental Faculty Research. (1–3) F. Enrollment restricted to pharmacology graduate students. Seminar 1-3 hours.

Trevor and Staff
An overview of Pharmacology faculty research interests presented in a seminar format to introduce first year graduate students to the various areas of ongoing research in the Department of Pharmacology.

PHARMACOL

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

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

206A. Mechanisms of Drug Action. (3) § 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.

Bourses 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. Lassman

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


Presentation by guests and staff on current research in pharmacology. PHARMACOL

250. Research. (1-0) § F, W, Sp. Staff PHARMACOL

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

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

111. Non-Prescription Products. (1) W. Conference 2 hours. Yee

Evaluation and comparison of non-prescription medications and appliances. Discussion on their pattern of use in the community is included. Emphasis is on verbal communications. PHARMACOL

112. Non-Prescription Products. (1) Sp. Prerequisite: Pharmacy 111. Conference 2 hours. Yee

Continuation of Pharmacy 111. PHARMACOL

114. Biopharmaceutics & Phys Pharm. (3) F. Prerequisite: Concurrent enrollment in Chemistry 115. Lecture 3 hours. Hoerner, Guy, Siegel

A study of the physical, chemical, and biological factors which interact and dominate the design of dosage forms as drug delivery systems, including an introduction to the analysis of clinical data. PHARMACOL

115. Biopharmaceutics & Phys Pharm. (4) W. Prerequisite: Pharmacy 114 and concurrent enrollment in Chemistry 116. Lecture 3 hours. Lab 3 hours. C. Hunt, Dill, R. Day, Beut, Siegel, Blake

Continuation of Pharmacy 114 with the addition of laboratory preparation of basic drug delivery systems. PHARMACOL


Continuation of Pharmacy 115. PHARMACOL

123. Non-Prescription Drugs. (2) F. Prerequisite: Pharmacy 112. Conference 2 hours. C. Yee

Continuation of Pharmacy 112. PHARMACOL

127. Biopharmaceutics & Dispensing. (4) F. Prerequisite: Pharmacy 116 and Pharmacy Administration 112. Lecture 2 hours. Lab 6 hours. R. Day, Beut, Siegel

Continuation of Pharmacy 116 with the addition of training in the professional and dispensing aspects of pharmacy. PHARMACOL

128. Pharmacokinetics. (3.5) W. Prerequisite: Pharmacy 117. Lecture 3 hours. Conference 1-2 hours.

Hoerner, Giacomini

Course covers the pharmacokinetic basis of variability in the therapeutic, pharmacologic, and toxicologic effects of drugs. PHARMACOL

129. Pharmacokinetics. (3.5) Sp. Prerequisite: Pharmacy 128. Lecture 3 hours. Conference 1-2 hours.

Giacomini, Oie

Continuation of Pharmacy 128. PHARMACOL

151. Community Health Education. (2) Sp. Lecture and discussion 2 hours. Participation in at least four community health education programs. R. Gibson, Lem

Course is designed to train students for participation in community health programs dealing with drug abuse education and other drug-related areas, such as poison prevention, venereal disease, and birth control. Course may be repeated for credit. PHARMACOL

152. Special Topics in Pharmacometrics. (2) Sp. Prerequisite: Pharmacy 116 or concurrent enrollment. Lecture 2 hours.

Szkola

An intermediate course offering an opportunity to explore, in greater depth, special drug delivery systems and some fundamental relationships involved in drug delivery or action. PHARMACOL

153. Seminar Preparation Techniques. (1) F. Prerequisite: Consent of instructor. Seminar 1 hour. Conference 1 hour. Hunt, Goyan

Preparation, presentation and evaluation of research seminars. PHARMACOL

154. Percutaneous Absorption. (2) W. Prerequisite: First-year standing. Lecture 2 hours.

Wester, Guy

Course presents material dealing with the penetration of drugs and other chemicals across the skin. PHARMACOL

155. External Drug Products. (3-4) W. Sp. Prerequisite: Pharmacy 127. Lecture 2-3 hours. Lab 3-6 hours. Blake, Hoerner

Dissertation and laboratory exercises on the formulation of products for external use, including drug and cosmetic. The course deals with the properties and ingredients of such products. PHARMACOL

156. Parenteral Products. (3) F, W. Sp. Prerequisite: Pharmacy 127. Lecture 2 hours. Lab 3 hours. Blake

Introduction to the formulation and technology of parenteral preparations. Laboratory includes participation in hospital activities in which parenterals are made and administered. PHARMACOL

160. Selected Topics in Clinical Pharmacokinetics. (2) W. Prerequisite: Pharmacy 128 and 129. Lecture 2 hours. Testor

Selected topics in clinical pharmacokinetics. Depending on coverage in Pharmacy 128/129, topics may include: Pharmacokinetic and pharmacodynamic modeling, distribution kinetics population pharmacokinetics, turnover concepts, dialysis, drug interactions, and metabolic kinetics. The course is intended as an elective for third- and fourth-year students. PHARMACOL

164. Veterinary Products. (3) Sp. Prerequisite: Microbiology 120, 127; Pathology 135, Pharmacology 136, and Pharmacy 116. Lecture 3 hours. Emsos

Course is designed to familiarize the student with common ailments of domestic animals and livestock, products used for the prevention and treatment of such diseases, the interrelationship of pharmacists, veterinarians, and animal owners, and legal limitations on veterinary product dispensing. PHARMACOL

165. Pharmaceutical Technology. (3) F. Prerequisite: Pharmacy 116. Lecture 1 hour. Lab 6 hours. Blake, Gibson

An introduction to the technology of liquid and solid pharmaceuticals. Special emphasis is given to the problems encountered and the materials used in pharmaceutical manufacturing. PHARMACOL

166. Pharmaceutical Technology. (3) W. Prerequisite: Pharmacy 165. Lecture 1 hour. Lab 6 hours. Blake, Gibson

An introduction to the technology of solid dosage forms, especially tablets and capsules. Emphasis is placed on problems encountered in preparation of this type of medication. PHARMACOL

167. Pharmaceutical Technology. (3) Sp. Prerequisite: Pharmacy 166. Lecture 1 hour. Lab 6 hours. Blake, Gibson

An advanced study of the relationship of the art and science of pharmaceutical technology to solid dosage forms. PHARMACOL

168. Clinical Pharmacokinetics—UC. (2) F, W. Prerequisite: Fourth-year standing or consent of instructor. Reports and conferences 6 hours. Enrollment limited.

Tozer, Winter, Upton, Salazar

Discussion and review of the literature in the clinical application of pharmacokinetic principles in drug therapy. PHARMACOL

168.02. Clinical PharmacoKinetics—UC. (2) F, W. 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. PHARMACOL
179. Group Studies. (1-4) F, W. Prerequisite: Consent of instructor.
Staff
Group studies of selected topics in pharmacy. PHARMACY

170. 05. Clinical Drug Investigations. (2) W. Prerequisite: Introductory statistics recommended. Lecture 2 hours.
Williams, Weston, Schwartz
A ten-week course that will discuss methods for generating data about drug use and efficacy in clinical investigations, with emphasis on the randomized clinical trial. Statistical methods used in modern clinical trials will be discussed. PHARMACY

170. 06. Molec & Cell Biology in Drug Dev. (2) W. Prerequisite: Consent of instructor. Lecture 2 hours.
Stroka
Introduction to the role of cellular and molecular biology in developing new drugs, hormones, or therapeutic agents. PHARMACY

Lern
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

170. 08. Supervised Study. (1-5) F, W, Sp. Staff
A study directed under supervision of a member of the faculty with the approval of the chairman of the department. PHARMACY

179. Laboratory Project. (1-5) F, W, Sp. Staff
A laboratory research project under direction of a member of the faculty with the approval of the chairman 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 special 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

Pharmaceutical Practice

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

J. R. Nielsen
A survey of laws relating to landlord-tenant situation, property division, alimony 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

Staff
Group studies of selected topics in pharmacy administration. PHARMACY

180B-C. Legal Problems in Health Care. (2-2) F, W. 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 chairman of the department. PHARMACY

104. Physical Therapy Practice. (5) F. Prerequisite: Completion of course work in summer term in the Physical Therapy Curriculum. Open only to students enrolled in the Curriculum, or by consent of program director. Lecture 2 hours. Lab 4 hours.
Richards, Byl
Second course in a series of four courses in physical therapy procedures. Assessment, goal setting, treatment, evaluation and problem solving of musculoskeletal pathologies. A library review of the literature is also required in preparation for the development of a research proposal. PHYS THER

104C. Physical Therapy Procedures. (5) W. Prerequisite: Completion of course work in summer term and fall quarter. Open only to students enrolled in the Curriculum, or by consent of program director. Lecture 2 hours. Lab 8 hours.
Radka, Chape, Byl
Continuation of Physical Therapy Procedures series. Basic neurophysiological and neuroanatomical principles of normal and pathological motor function presented. Various physical therapeutic concepts of assessment, goal setting, treatment planning, treatment, evaluation, and problem solving presented for the patient with neurologically dysfunction. Patient demonstrations included; field work coordinated through PT 104A. PHYS THER

104D. Physical Therapy Procedures. (3) Sp. Prerequisite: Completion of course work in summer term, fall and winter quarters. Open only to students enrolled in the Curriculum, or by consent of program director. Lecture 2 hours, Lab 4 hours.
Sadowsky, Richards
Continuation of Physical Therapy Procedures series. Physical therapy approach to assessment and treatment of pediatric conditions. Therapy, assessment, treatment, physiological and functional ramifications of ambulation, prosthetics, and orthotics. Patient evaluation and treatment of dysfunction of the cardiorespiratory, vascular, and musculoskeletal systems. Patient demonstrations; practical applications in field work in PT 410A. PHYS THER

105. Physical Med & Rehabilitation. (3) W. Prerequisite: Completion of course work in summer term. Open only to students enrolled in the Curriculum, or by consent of program director. Lecture 3 hours.
Berrol
Course covers rehabilitation of hospitalized medical and surgical patients. Early total immobilization of the multiply handicapped person. Participation emphasis on brain damage, spinal cord injuries and cerebrovascular accident. PHYS THER

106D. Specialty Medical Management of Disease: Internal Medicine. (5) W. Prerequisite: Completion of course work in fall quarter. Open only to students enrolled in the Curriculum, or by consent of program director. Lecture 3 hours.
Ross
Course presents the diagnostic and medical concerns that guide the internist in decision making. Outlining the contraindications, precautions, and prognoses helps guide the physical therapist in designing management programs for patients with primary or secondary internal medical problems. The health care team and team relationships are also presented. PHYS THER

106E. Specialty Medical Management of Disease: Psychiatry. (2) Sp. Prerequisite: Completion of course work in fall quarter. Open only to students enrolled in the Curriculum, or by consent of program director. Lecture 2 hours.
Byl
Course presents the psycho-social diagnostic and management concerns of patients with medical problems, those with common emotional and social problems, and those challenged with adjustment to physical disability. The physical therapist learns techniques of history taking and counseling appropriate to physical therapeutic management strategies. PHYS THER

108. Basic Medical Procedures. (2) Sp. Prerequisite: Completion of course work in summer term, fall and winter quarters. Lecture 1 hour. Lab 2 hours.
Simpson
Presentation of basic procedures for total and emergency care of the patient. Emphasis on interpretations of vital signs, temporary emergency interventions, sterile techniques, wheelchair prescription, burn evaluation and treatment, as well as communication in various situations. PHYS THER

109B. PT Practice and Administration. (2) F. Prerequisite: Completion of coursework in summer session 3. Open only to physical therapy students in the Curriculum, or by consent of program director. Seminar 2 hours.
Byl
This series of seminars builds a foundation of knowledge in health care administration, including reimbursement, management, budgeting, financial planning, third-party payers, Medicare, Medicaid, and trends in physical therapy education and practice. PHYS THER

110. Orthopedics: Diagnosis & Treatment. (2) F. Prerequisite: Completion of PT 200, PT 201, PT 202 and concurrent enrollment in Pathology 135 01. Open only to students enrolled in the Curriculum, or by consent of program director. Lecture 2 hours.
Hollander
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: Diagnosis & Treatment. (2) W. Prerequisite: Completion of PT 200, Anatomy 103 01, and Pathology 135 01. Open only to students enrolled in the Curriculum, or by consent of program director. Lecture 2 hours.
Lowenstein
Course presents the diagnostic and medical principles which guide decision making and clinical manage-
ment by the neurologist. Contradictions, precautions, and diagnosis of the different neurological diseases are discussed to guide decision making by the physical therapists. PHYS THER.

112. Pediatrics: Diagnosis & Treatment. (3) Sr. Prerequisite: Upper division coursework in human development and Pathology 135.01. Open only to students enrolled in the Curriculum, by consent of program director. Lecture 1 hour. Lab 1 hour.
Kaufman
Course presents the diagnostic, developmental, behavioral, and medical principles of clinical management for normal young children and those with acute/ chronic disorders. Considerations, precautions, and prognosis are discussed as they impact physical therapy management. PHYS THER.

198. Supervised Study. (1-5) Sr., F, W, Sp. § Prerequisite: Enrollment in the Curriculum and approval by instructor. Open only to students enrolled in the Curriculum in Physical Therapy. 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) Sr., F, W, Sp. § Prerequisite: Enrollment in UC/FSFU Program in Physical Therapy and approval of student faculty advisor and program faculty. Open only to students enrolled in the Curriculum in Physical Therapy, or by consent of program director. Staff
Student conducts a laboratory research project under the direction of a faculty member with the approval of the chairperson of the department. PHYS THER.

200. Neuromusculoskeletal Anatomy. (6) Su. § Prerequisite: Upper division human anatomy and human physiology, by consent of instructor. Open only to students enrolled in the Curriculum. Lecture 3 hours. Lab 9 hours.
Melzack
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 considered through lecture, dissection laboratories, studies of presections, and weekly integrative clinical seminars. PHYS THER.

201. Kinesiology & PT Assessment. (3) Su. § Prerequisite: Anatomy and psychology. Coursework in kinesiology, exercise physiology, anatomy, and psychology. Open only to students enrolled in the Curriculum, by consent of program director. Lecture 2 hours. Lab 4 hours.
Richards
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 laboratory setting. PHYS THER.

202. Therapeutic Exer. and Modalities. (2) Su. § Prerequisite: Completion of prerequisite course work in exercise physiology and human physiology. Open only to students enrolled in the Curriculum or by consent of program director. Lecture 1 hour. Lab 3 hours.
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.

203. Advanced PT Practice & Theory I. (4) Jr. § Prerequisite: PT 701 and PT 702 or their equivalent and concurrent enrollment in the Kaiser Orthopaedic Physical Therapy and Clinical Residency Program. Open only to students enrolled as a graduate student at UCSF or SFSPH, or by consent of program director. Lecture 2 hours. Lab 6 hours.
Staff
This course includes intensive, advanced analysis of the Australian manual therapy theory, subjective and objective assessment techniques, as well as treatment techniques for the cervical, thoracic, and lumbar spine and the shoulder and hip joints. PHYS THER.

204. Advanced PT Practice & Theory II. (O) § Prerequisite: PT 203 and concurrent enrollment in the Kaiser Orthopaedic Physical Therapy and Clinical Residency Program. Open only to students enrolled as a graduate student at UCSF or SFSPH, or by consent of program director. Lecture 3 hours. Lab 6 hours.
Staff
A continuation of PT 203 and includes prioritizing patient complaints, progressing treatment at optimal rates, discharge planning, home exercise programs, ergonomic analysis, functional 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) Jr. § Prerequisite: PT 200 or equivalent. Open only to students enrolled in the graduate program in physical therapy. Lecture 1 hour. Lab 1.5 hours.
McKenzie
This course is designed for physical therapists. Using prospected (and/or dissected) cadavers, the student is expected to relate the structure to clinical kinesiology, biomechanics, and the pathologic state. Students are expected to critically review research in applied anatomy. PHYS THER.

206. PT Diagnosis of Phys Dysfunction. (2) Sr. § Prerequisite: Enrollment in UCSF/SPH Physical Therapy Program or by consent of program director. Seminar 2 hours.
Bly and Staff
Using clinical case examples, this seminar focuses on historical-taking, clinical assessment, clinical measurement, and signs and symptoms as they apply to making a physical diagnosis and appropriately classifying problems. PHYS THER.

210. Pharmacology & Radiology for PTs. (2) Sr. § Prerequisite: Enrollment in UCSF/SPH Physical Therapy Program or by consent of program director. Lecture 2 hours.
Bly and Sp. § Prerequisite: Survey course of pharmacology and radiology of common pharmaceuticals, social, and neuromusculoskeletal systems. Pharmacological topics include principles, indications, adverse reactions. Radiological topics include principles, indications, advantages, disadvantages of appropriate radiological techniques for assessing skeletal and soft tissue lesions. PHYS THER.

220. New Dimensions in PT. (2) Sr., F, W, Sp. § Prerequisite: Enrollment in UCSF/SPH Physical Therapy Program or by consent of faculty advisor or instructor. Seminar 2 hours.
Radika and Staff
Topics to be specified in Class Schedule. Selected topics reflecting developing directions in physical therapy (e.g., pain control, rehabilitation engineering, ambulation in neuropsychiatric patients, prematurity, high-risk infants, TMJ problems, craniosacral therapy). May be repeated for credit when topics vary. PHYS THER.

250. Research Sem in PT. (1-4) F. § Prerequisite: Completion of PT research seminar through PT 253. Enrolled in UCSF/SPH Physical Therapy Program or by consent of program director.
Sadowsky
Problem solving, designs methodologies, data analytic 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 Methodology. (2) Su. § Prerequisite: Open only to students enrolled in the Curriculum or by consent of program director. Lecture 2 hours.
Bly
Logic of inquiry, principles of research design, and methodologies appropriate to scholarly activity in physical therapy. Includes review and critical appraisal of research designs used in physical therapy and practical problem solving. Foundation course for developing a research project. PHYS THER.

252. Research Sem: Critique of PT Lit. (1) W. § Prerequisite: Completion of a course in statistics. Open only to students enrolled in the Curriculum, or by consent of program director. Seminar 3 hours.
Bly
The first seminar of a research series focusing on problems of research in physical therapy, practical statistics, writing abstracts and critiques of research, literature review, including a literature review on the student's proposed research topic. PHYS THER.

253. Research Sem: Proposal Critique. (1) Sp. § Prerequisite: Grade B or better in PT 250. Open only to students enrolled in the Curriculum or by consent of program director. Seminar 3 hours.
Bly
Converting the research question to a research hypothesis, and proposing writing including preparation of a proposal for a research project. PHYS THER.

254. Research Sem: Data Analysis. (1) Su. § Prerequisite: Completion of PT research seminar 730, 252 and 253. Enrolled in UCSF/SPH Physical Therapy Program or by consent of program director. Seminar 1 hour.
Bly
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.

410. Clinical Clerkship. (2) W. § Prerequisite: Completion of academic coursework with overall B average. Open only to students enrolled in the Curriculum, or by consent of program director. Clinic 1 day/week.
Radika
Students observe and assist the physical therapy clinician in the provision of assessment. Students provide physical therapy treatment services in one practice setting, one day a week for 11 weeks. PHYS THER.

411. Clinical Clerkship. (2) Sp. § Prerequisite: Completion of academic coursework with overall B average. Open only to students enrolled in the Curriculum, or by consent of program director. Clinic 1 day/week.
Radika
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.

412. Clinical Clerkship. (9) Su. § Prerequisite: PT 410 and PT 411. Open only to students enrolled in the Curriculum, or by consent of program director. 40 hours/week, 5 days/week for 6 weeks.
Radika
Students provide assessment, evaluation, and physical therapy treatment under the direct supervision of a physical therapist. Students must demonstrate satisfactory completion of this clerkship before progressing to the next clerkship. PHYS THER.

413. Clinical Clerkship. (9) Su. § Prerequisite: PT 410 and PT 411. Open only to students enrolled in the Curriculum, or by consent of program director. 40 hours/week, 5 days/week for 6 weeks.
Radika
120. Mammalian Physiology. (2.5) F. Prerequisite: Physiology 125 or consent of instructor. 4 lecture hours. 1 lab hour. Conference 2 hours.

121. Mammalian Physiology. (5) F. Prerequisite: Completion of course work in sophomore year. 4 lecture hours. Conference 2 hours.

122. Neuroscience for Pharmacy. (4) F. Prerequisite: Physiology 125 or consent of instructor. 3 lecture hours. 1 lab hour. Conference 1 hour.

123. Biochemistry and Biophysics. (5) F. Prerequisite: Chemistry 101 or consent of instructor. 4 lecture hours. Conference 1 hour.

124. Molec & Cellular Approaches to Cardiovascular Disease. (1.5) S. Prerequisite: Physiology 100 or equivalent. Lecture 1 hour. Conference 0.5 hour.

125. Research in Physiology. (3 per week) So, F, W. Prerequisite: Consent of instructor. Lecture and lab to be arranged.

126. Medical Scholars Program Workshops. (1) W. Prerequisite: Consent of instructor (this course is available to graduates in the UCSF Medical School Program, which prepares students for research careers in academic medicine). Dallman.

Workshops in organ systems physiology, offered concurrently with the required courses in School of Pharmacy, may be taken separately by graduate students with consent of instructor only. Lecture 2 hours. Conference 0.5 hour.

Ganong and Staff
Study of the integrative systems of the mammalian organism, particularly the gastrointestinal and endocrine systems. PHYSIOLOGY

120.1 Mammalian Physiology. (2.5) F. Prerequisite: Physiology 125 or consent of student in School of Pharmacy. Open only to students enrolled in the curriculum in Physical Therapy. Or by consent of instructor. Lecture 2 hours. Conference 1 hour.

Ganong
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. 4 lecture hours. 4 lab hours. Conference 2 hours.

121. Mammalian Physiology. (5) F. Prerequisite: Completion of course work in summer term. Open only to students enrolled in the curriculum in Physical Therapy or by consent of instructor. 4 lecture hours. Conference 2 hours.

122. Neuroscience for Pharmacy. (4) F. Prerequisite: Physiology 125 or consent of instructor. Lecture 3 hours. Lab 1.5 hours. Conference 1 hour.

123. Biochemistry and Biophysics. (5) F. Prerequisite: Chemistry 101 or consent of instructor. Lecture 4 hours. Conference 1 hour.

124. Molec & Cellular Approaches to Cardiovascular Disease. (1.5) S. Prerequisite: Physiology 100 or equivalent. Lecture 1 hour. Conference 0.5 hour.

125. Research in Physiology. (3 per week) So, F, W. Prerequisite: Consent of instructor. Lecture and lab to be arranged.

126. Medical Scholars Program Workshops. (1) W. Prerequisite: Consent of instructor (this course is offered under the UCSF Medical Scholars Program, which prepares students for research careers in academic medicine). Dallman.
Effect of sex roles, self-esteem, attitudes, and values of clinicians on treatment of sexual problems. Case studies, role playing, group discussion. Film used to develop skills in introductory sex counseling. Readings, research project, or special interest paper may also be done. PSYCH 160.02. Addiction. (3) F, W, Sp. Prerequisite: Consent of Department of Psychiatry.

160.03. Community Psychiatry. (3) F, W, Sp. Prerequisite: Consent of Department of Psychiatry.

160.04. Geriatric Psychiatry. (3 per week) F, W. Prerequisite: Consent of Department of Psychiatry.

160.05. Child Psychiatry. (3 per week) F, W. Prerequisite: Consent of Department of Psychiatry.

160.06. Depression and Suicide. (3) F, W, Sp. Prerequisite: Consent of Department of Psychiatry.

401. Coen Methaphotography. (1) S. W. Required for first-year resident in Psychiatry. Seminar 1 hour.

402. Intro to Clinical Interviewing. (1) S. W. Prerequisite: Required for first-year residents in Psychiatry. Seminar 1 hour.

403. Intro to Psychopharmacology. (1) S. W. Required for first-year residents in Psychiatry. Seminar 1 hour.

404. Intro to Child Development. (1) S. W. Required for first-year residents in Psychiatry. Seminar 1 hour.

410. Forensic Psychiatry. (1) S. W. Required for second-year residents in Psychiatry. Seminar 1.5 hours.

411. Psychopharmacology. (1) F. W. Prerequisite: Required for first-year residents in Psychiatry. Seminar 1 hour.

412. Group Therapy. (1) F. W. Required for second-year residents in Psychiatry. Seminar 1 hour.

413. Psychosomatics. (1) S. W. Prerequisite: Required for second-year residents in Psychiatry. Seminar 1 hour.

441. Psychophysiology. (1) F. W. Prerequisite: Required for second-year residents in Psychiatry. Seminar 1 hour.
Psychiatry

483. Principles of Therapeutic Meth. (1) F, W. Sp. Prerequisite: Required for first-year child psychiatry fellows, or consent of instructor. Seminar 1 hour.

1. Phillips

Discussion of philosophy and practice of clinical work with patients. Includes history, principles, and methods of child psychiatry as well as prerogatives of child development and modalities of treatment. PSYCHIATRY


1. Binger 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.

2. Fiole

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.

1. Gelber

Participation with senior staff member to discuss ongoing dynamics of psychotherapeutic work with adolescents. PSYCHIATRY

488. Child Psychiatry Clinical Conf. (1) F, W. Sp. Prerequisite: Required for first- and second-year child psychiatry fellows, or consent of instructor for others. Conference 1.5 hours.

1. 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) F, W, Sp. Prerequisite: Required for first-year child psychiatry fellows; others with the consent of the instructor. Seminar 1 hour.

1. Reece

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) S,S2. Prerequisite: Required for first-year child psychiatry fellows or consent of instructor for others.

1. D. Morrison

Seminar is focused on the most common and prevalently used methods of assessing intelligence, educational achievement, perceptual-motor integration, and personality as children. Actual testing materials as well as supporting research are covered. Participation is required. PSYCHIATRY

491. Base Methodology in Child Psych. (1) F, W. Sp. Prerequisite: Required for second-year child psychiatry fellows, or consent of instructor. Seminar 1 hour.

1. D. Morrison

Review of basic experimental design and methodology such as reliability and validity of rating scales, statistical techniques, scientific 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.

1. Shatzkin

Discussion of goals, attitudes, and skills required in child psychiatry consultation/intake 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.

1. Shatzkin

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) F. Prerequisite: Required for second-year child psychiatry fellows, or consent of instructor. Seminar 1 hour.

1. 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.

1. 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. (1,5) Su, F, W. Sp. Prerequisite: Required for second-year child psychiatry fellows, or consent of instructor. Seminar 1 hour.

1. Phillips

Discussion of supervision of general psychiatry residents and medical students. PSYCHIATRY

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Psychiatry/Psychology

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497. Adolescent Psychiatry. (1,5) F, W. Sp. Prerequisite: Required for second-year child psychiatry fellows, or consent of instructor. Seminar 1 hour.

1. M. Schuster

Discussion of clinical problems of adolescents. PSYCHIATRY


1. Binger, Lowe

Review of biological bases and psychopharmacological approaches to child and adolescent psychiatry. PSYCHIATRY

499. Child and Adolescent Forensic Seminar. (0.75) S,S2. Prerequisite: Required for second-year child psychiatry fellows. Seminar 2 hours.

1. Tett

A seminar discussing the major aspects of forensic child and adolescent psychiatry relevant to the practice of the clinician. Topics covered include child/hood sexual abuse, trauma, court evaluation, and custody issues. Required for Child Psychiatry Fellows. PSYCHIATRY

Psychology

180.01. Seminar in Psychology. (1) W Seminar 1 hour.

1. Plainfield

Weekly discussions in which students' clinical cases are analyzed by dynamic application of behavioral theory. DENT PUB HLTH


1. Plainfield

This course integrates students' basic training from the specialty courses in demonstration of the psychological concepts and principles of individual treatment. Approaches to treatment may then be planned to the practitioners' awareness of the unique needs of patients. DENT PUB HLTH

180.03. Adv Psychol for Dental Hygiene. (1) Sp Seminar 1 hour.

1. Plainfield

Seminar discussions on the emotional aspects of interpersonal transactions among office personnel, therapist, and patient. DENT PUB HLTH

180.05. Stress among Hlth Professionals. (2) F Seminar 2 hours.

1. 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.

1. C. Lewis
Course will focus on major issues, theories, and findings in child development. Topics covered will include attachment, Piagetian and other theories of cognitive development, language development, moral development and pro-social behavior, aggression, and self-esteem and competence. PSYCHIATRY

21A-B-C. Theories of Personality. (2-2) § F, W. Sp. Prerequisite: Graduate standing and consent of instructor. Psychology 21A is prerequisite to 21B & 21C, but may be taken independently. Seminar 2 hours. Enrollment limited. J. Fisher

Survey of major contemporary theories of personality, including some more recent, selected philosophic points of view; study of their structure, how they conceptualize personality development, how they relate to empirical phenomena, and what research is generated by them. PSYCHIATRY

212. Psychological Stress & Coping. (4) § Sp. Prerequisite: Consent of instructor. Seminar 4 hours. Offered in alternate years. Offered 1990-91. F. Cohen

Course examines stress and coping theory and research from clinical, field, and laboratory settings; measurement in stress research; the nature of coping and coping processes. PSYCHIATRY

222. Practicum in Program Evaluation. (2-4) § F, W, Sp. Prerequisite: Graduate standing and some experience in interviewing. Lab 3 hours. Seminar 6 hours during first 4-6 weeks. Blackwell

After an intensive seminar introduction to basic concepts of evaluation, students will carry out various evaluation projects on clinical programs in the School of Medicine. The length of the introductory period will depend on previous experience of students. PSYCHIATRY

230. Physiology for Health Psychologists. (4) § F. Prerequisite: Graduate standing in Health Psychologist or consent of instructor. Lecture 4 hours. Offered in alternate years. Offered 1990-91. 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

23A-B-C. Human Neurophysiology. (1-1-1) § W, F, Sp. Prerequisite: Consent of instructor. Seminar 3 hours. Yingling

A 2-day, half-day 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 neuronal and neurophysiological mechanisms underlying the generation and regulation of EEG and Event-related Potentials, their measurements and clinical use. Emphasis on the nature and limitation of inferences concerning brain activity obtainable from scalp recordings. PSYCHIATRY

248. Independent Study. (1-0-6) § 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. Staff

PSYCHIATRY

254A. Research Methods. (4) § Sp. Prerequisite: Consent of instructor. Lecture 4 hours. Offered in alternate years. Offered 1990-91. 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, use of archival data, and observational techniques. PSYCHIATRY

254B. Research Methods. (4) § Sp. Prerequisite: Consent of instructor. Lecture 4 hours. Offered in alternate years. Offered 1990-91. 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. Not offered 1990-91. Artiksson

Artiksson

Function and tasks of the health system with emphasis on the study of health system organizations and health services delivery from the perspective of living systems theory and organizational psychology. PSYCHIATRY

265. Stress & Biodata Disease. (4) § Sp. Prerequisite: Consent of instructor. Seminar 4 hours. Offered in alternate years. Not offered 1990-91. 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. Not offered 1990-91. N. Adler

Examination of the role that psychological and social factors can play in a variety of reproductively behaviors: pregnancy, obstetrical complications, postpartum reactions, infertility, contraceptive use and non-use, spontaneous and induced abortion. PSYCHIATRY

281A-B-C-D. Clinical Research Seminar. (1-5 to 5) § F, W, Sp. Prerequisite: Consent of instructor. Seminar 1.5 hours. Artiksson

Seminar discussions of contemporary research in clinical psychology. Issues covered include major problems in conducting clinical research, skills and methods required in clinical research, and career development for the clinical psychologist. Course is intended primarily for advanced clinical psychology students. PSYCHIATRY

285A-B-C-D. Intermediate Family Therapy. (1-3-3 to 3) § S, Sp. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 2 hours. Four-quarter course. Hatcher

Stages in family development, communications analysis, role definitions, family cycles, power and resistance systems, growth models of family therapy, and intervention techniques. Emphasis on clinical and practical issues, videotape presentations of families in treatment, clinical supervision of ongoing cases. PSYCHIATRY

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

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

140.11. Radiation Oncology Clerkship-UC. (1.5 per week) 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 clinic, and see demonstrations on the use of newer radiotherapeutic techniques. RADIOLOGY

140.35. Radiation Oncology Clerkship-UCB. (1.5 per week) F, W, Sp. Prerequisite: Medicine 131A-B-C.

J. Castro

Participation in examination of cancer patients under treatment in radiation oncology. Students participate in rounds, conferences, and clinic, and see demonstrations on the use of newer radiotherapeutic techniques. RADIOLOGY

140.6. Radiation Oncology Clerkship-MZ. (1.5 per week) Su, F, W. Sp. Prerequisite: Medicine 131A-B-C.

J. Castro

Participation in examination of cancer patients under treatment in the Claire Zellerbach Sarcom Tumor Institute at MZ. Students participate in rounds, conferences, and clinic, and see demonstrations on the use of newer radiotherapeutic techniques. RADIOLOGY

150.01. Research Selective. (1.5 per week) Su, F, W. Sp. Prerequisite: Medicine 131A-B-C.

Dewey

Individual research in radiation oncology by arrangement with the chairperson of the department. Students work under close supervision of a member of the staff. RADIOLOGY


Rounds include presentation of patient cases with discussions of diagnosis and treatment as well as biologic implications. Frequent guest lectures are used to cover important aspects of oncology. RADIOLOGY


Seminar includes discussions of the diagnosis, treatment, and results of specialty oncology problems, including head and neck, gynecologic, oncologygic, dermatologic, lymphomatous, and general malignancies. RADIOLOGY


Study of principles of radiobiology and their application to radiotherapy. Seminars deal in depth with textbooks, selected readings, and prepared seminars leading to understanding of mechanisms of action of radiation in clinical radiotherapy. Oriented to radiotherapy fellows and residents. RADIOLOGY

423. Therapeutic Treatment Planning. (10) Su, F, W, Sp. Prerequisite: Residents assigned to therapeutic radiology and attending radiologists. V. Smith

A 1-hour workshop course to provide residents in therapeutic radiology with the elements of treatment planning and dose calculations. RADIOLOGY

424. Therapeutic Radiology Physics. (1) W. Sp. Prerequisite: Residents assigned to therapeutic radiology. Lecture-symposium 1 hour. J. Weaver

A lecture-symposium course with practical sessions to provide residents with a basic knowledge of radiological physics with special reference to those aspects relating to therapeutic radiology. RADIOLOGY
T. Phillips Residents, under supervision, are responsible for diagnosis, treatment, and follow-up of patients referred to radiation therapy from the wards and outpatient clinic. 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 and 103, Medicine 130, Pathology 102, and Psychiatry 130; concurrent assignment in Medicine 131A-B-C. Lecture 1 hour. Lab 1 hour. Carlson Course provides instruction in basic aspects of therapeutic and diagnostic radiology and nuclear medicine. Illustrations of diagnostic and therapeutic modalities in specific disease states provides instruction in use of radiologic tools. RADIOLOGY

140. Advanced Roentgen Diagnosis. (1.5 per week) Su, F, W, Sp. Prerequisite: Radiology 140.03 or 140.09 or 140.17. Consent of instructor. Carlson Advanced clinical clerkship for students interested in a career in academic radiology. Students observe clinical work, observe and participate in research, and write a term paper. RADIOLOGY

140.02. Off-Campus Clerksip. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 131A-B-C. Carlson Clinical clerkship in approved hospital by special arrangement and approval of the 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. Carlson, S. Ross, Colangelo Clerkship in radiology for third- and fourth-year students. Observation of procedures, review of pathologic, radiopathology, 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. Hansen Observation of basic nuclear medicine procedures and participation in diagnostic work employing radiotopic 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 & VMCT. (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 Acquaint students with available techniques in diagnostic radiology, including nuclear medicine, ultrasound, computed tomographic scanning, angiography, other special procedures, conventional X-ray examinations, floroscopy, and provides an introduction to "routine" film interpretation. Students have assignments at VAF, VMCT, community hospitals. RADIOLOGY

140.16. Basic Nuclear Medicine STA. (1.5 per week) Su, F, W, Sp. Prerequisite: Fourth-year standing. Corbus, T.ouya Imaging techniques including nuclear cardiology, single photon emission tomography, and computerized processing at St. Agnus Medical Center, Fermen. RADIOLOGY

140.17. Clinical Radiology. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor. Wall Students may be involved in clinical diagnostic procedures such as body and vascular computed tomography, ultrasound, fluoroscopy, 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

150.01. Research in Radiology. (1.5-5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and approval of instructor. For students seriously interested in a career in academic medicine. Carlson, S. Ross A research project under the direction of a member of the faculty. RADIOLOGY

170.01. Clinical Application of Anatomoy & Pathology. (1-2) F, W, Sp. First-year standing. Lecture 1 hour. 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 critical thinking, and useful habits in understanding disease, its origins, development, and clinical manifestations. RADIOLOGY

170.08. Nuclear Medicine Physics & Imaging. (2-2) 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 radionuclide, nuclear instrumentation and gamma-ray imaging techniques. RADIOLOGY

170.09. Introduction to Nuclear Medicine. (3.5) Su, F, W, Fall 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, including bone in vivo and in vitro, and therapy with radiopharmaceuticals. 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 contract reactions. RADIOLOGY

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

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

220. Radiol Phys for Physicists. (1) F, W, Sp. Prerequisite: Bachelor's or higher degree in the physical sciences. Staff Seminars provide physicists with an in-depth knowledge of radiologic physics. RADIOLOGY

400. Diagnostic Radiology Seminar. (1) Su, F, W, Sp. Lecture 1 hour. H. Goldberg 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 correlating surgical and laboratory work, special studies, library and film research. RADIOLOGY

401. Diagnostic Case Rounds. (2) Su, F, W, Sp. Margulis, Gooding Films of interesting cases from the daily work are presented and reviewed. Roentgenograms of surgically and pathologically proven 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. Margulis Seminars require preparation and presentation of roentgen findings on patients under discussion at medical, surgical, pediatric, obstetric and gynecologic, and departmental conferences and seminars on congenital heart disease, disease of the gastrointestinal tract, and orthopedics. 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 contract reactions; indications for, conduct of, interpretation of special radiologic procedures. RADIOLOGY

405. Radiologic Research. (1-8) Su, F, W, Sp. Elective Margulis Numerous research projects are conducted in the department and facilities are available for new ones. Residents are encouraged to take advantage of these opportunities.

408. Radiology Specialty Seminar-SFGH. (3) Su, F, W, Sp. Couloss Interdepartmental seminars in which the radiologic picture of problem cases with either 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 radiologic picture of problem cases either of diagnostic or therapeutic nature is presented. These include medical-surgical, clinicopathological, chest, medical X-ray, urology, radiology, neuropathological, surgery conferences; consultative tumor board; and surgical and orthopedic grand rounds. RADIOLOGY

410. Radiost Effects on Genus & Clones. (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 chromosomal and chromatin interaction with biological material. RADIOLOGY

412. Pathology. (1) Fu, F. W., Sp. VA Hinchcliffe Course includes review of surgical pathology material and attendance at autopsy rounds. RADIOLOGY

414. Physics of Diagnostic Radiography. (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 ultrasonic 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 tissue, 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. Hattner and Staff. Seminar 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


451. Clinical Diagnostic Radiology. (1 per week) Su, F., W., Sp. Prerequisite: Radiology 450. Margulis 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 Akini 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. SFCH Coulson 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

460. Approaches to Maxillofac Prosthod. (1) F. W., Sp. Lecture 1 hour. Zlotolow Course is designed to acquaint residents with multidisciplinary aspects of maxillofacial prosthetics. Lectures will be given on maxillofacial prosthodontic techniques, oncology, head and neck surgery, plastic surgery, oral surgery, therapeutic radiology, psychology, and related oral biology. ROSTOR DENT

489.01. Clinical Maxillofacial Prosthod. (1-4) F. W. Sp. Lab variable. Zlotolow Residents and advanced prosthodontic students will observe and perform maxillofacial prosthodontic services for patients in the Maxillofacial Clinic. A detailed case history will be required each quarter. Attendance at related tumor board conferences and field trips to other therapy centers. ROSTOR DENT

Restorative Dentistry

110A. Intro to Restorative Dentistry. (F) W. Prereq: Concurrent enrollment in RD 115A. Lecture 2 hours. Brazy and Staff An introductory lecture course including tooth morphology, development and form of primary and permanent dentition, biomechanical effects on cavity preparation, and theory of cavity design and preparation. ROSTOR DENT

110B. Intro to Restorative Dentistry. (W) W. Prerequisite: RD 110A, 115A. Concurrent enrollment in RD 115B. Lecture 4 hours. Brazy, McNell, Marshall, Yip Continuation of introductory course. Topics include application of individual tooth and arch forms to interact relationships; the physics, chemistry, and metallurgy of materials used in dentistry; physical and chemical effects of dental materials (gypsum, cements, resins, plastics, and metals); instrumenation and procedures in cutting tooth structure. ROSTOR DENT

110C. Intro to Restorative Dentistry. (Sp. Prerequisite: RD 110B and 115B. Concurrent enrollment in RD 115C. Lecture 4 hours. Brazy, Holmes, McNell, Marshall, Yip Topics include physical and chemical responses to denatured proteins, principles of articulation, cast mounting, and waxing prosthodontics; biological background and clinical application of techniques used in complete denture prosthodontics; principles and procedures of intracoronal restoration of teeth. ROSTOR DENT

115A. Intro to Restorative Techniques. (F) W. Prerequisite: Concurrent enrollment in RD 110A. Lab 6 hours. Brazy, Hamaguchi Introductory laboratory course in restorative dental techniques. Topics include study of individual tooth form and its relationship to adjacent and opposing structures. ROSTOR DENT

115B. Intro to Restorative Techniques. (W) Sp. Prerequisite: RD 110A and 115A. Concurrent enrollment in RD 115B. Lab 9 hours. Brazy, Hamaguchi, Yip Continuation of restorative dental laboratory course. Topics include basic techniques of fixed prosthodontics and operative cavity design and preparation. ROSTOR DENT

115C. Intro to Restorative Techniques. (W) Sp. Prerequisite: RD 110B and 115B. Concurrent enrollment in RD 115C and 116. Lab 9 hours. Brazy, Hamaguchi, Yip Continuation of restorative dental laboratory course. Topics include basic techniques of fixed prosthodontics and operative cavity design and preparation. ROSTOR DENT


120A. Restor Dent Techniques Theory. (O) Pre-F. F. Prerequisite: RD 110C, 115C, 116. Concurrent enrollment in RD 125A. Lecture 6 hours/week for 4 weeks Pre-F, 3 hours/week for 10 weeks F. Brazy and Staff. Instruction in theory and principles of cast dental restoration, including fundamentals of construction; fundamentals of partial denture design and construction. ROSTOR DENT

120B. Restor Dent Techniques Theory. (W) W. Prerequisite: RD 120A, 125A, 126A. Concurrent enrollment in RD 125A. Lecture 3 hours. Brazy and Staff. Theory and principles of dental restorations: rational for use of clinical restorative materials, manipulation and clinical application of restorative systems; introduction to endodontics, including background for clinical practice, including discussions of theory and principles in operative dentistry, fixed and removable prosthodontics. ROSTOR DENT

120C. Restor Dent Techniques Theory. (Sp. Prerequisite: RD 120B and 125B. Concurrent enrollment in RD 125C. Lecture 5 hours. Brazy and Staff. This course concludes the preclinical lecture series in restorative dentistry. Theories and principles in the disciplines of biomaterials, endodontics, fixed prosthodontics, operative dentistry, and removable prosthodontics are integrated, and clinical application of principles is stressed. ROSTOR DENT

125A. Restorative Dental Techniques. (2 Pre-F, 5 F) Pre-F. F. Prerequisite: RD 110C, 115C. 116. Concurrent enrollment in RD 120A. Lab 18 hours/week for 4 weeks Pre-F, 15 hours/week for 10 weeks F. Brazy and Staff. Laboratory instruction in the disciplines of fixed prosthodontics, operative dentistry, and removable prosthodontics. Topics include instruction in basic bridge construction, ceramic-metal restorations, cast gold restorations, and partial denture construction. ROSTOR DENT

125B. Restorative Dental Techniques. (W) Sp. Prerequisite: RD 120A and 125A. Concurrent enrollment in RD 120B. Lab 15 hours. Brazy and Staff. Continuation of laboratory instruction in the disciplines of endodontics, fixed and removable prosthodontics. Techniques include lab exercises, procedures involved in root canal therapy, instruction in ceramic-metal restoration, and the fabrication of immediate dentures. ROSTOR DENT

125C. Restorative Dental Techniques. (Sp. Prerequisite: RD 120B and 125B. Concurrent enrollment in RD 120C. Lab 15 hours. Brazy and Staff. Continuing laboratory instruction in the disciplines of operative dentistry and removable prosthodontics. Techniques include buildup of teeth, bases, liners, and casset removal; composite/veneers and the replacement of missing teeth. ROSTOR DENT

126A-B. Comprehensive Clinical Care. (= 4.5) Pre-F, F, W. Prerequisite: RD 120B and 125B. Concurrent enrollment in RD 120C and 125C. Clinic 6 hours/week for 4 weeks Pre-F, 3 hours/week F, W, Sp. Lecture 2 hours/week Pre-F, Brazy, Maxwell, and Staff. Thirty hours per quarter of clinic in comprehensive case workup of dental patients. Includes case history, clinical examination, diagnostic and treatment planning to meet the patient's total dental needs. ROSTOR DENT

130.01. Restorative Materials & Techniques: Theory. (O) W. Prerequisite: RD 125C, and 126C. Lecture 3 hours/week for 8 weeks. Twissler and Staff. Lectures to introduce students to the clinic. Emphasis is on clinical application of techniques taught in lab. Topics include diagnosis, occlusion, tooth preparation, temporization, and prosthodontics. ROSTOR DENT

Jeudresen, Rosenberg, Tueller, Braly, A. Green, Lacy

Continuation of RD 130.01, with emphasis on clinical application of restorative techniques. Topics include diagnosis and treatment of pulpal disease, tooth preparation and impression materials, diagnosis and treatment of dental emergencies, and treatment planning for the edentulous patient. RESTOR DENT

130.03. Clinic Application of Techniques. (3). W. Prerequisite: RD 130.02. Concurrent enrollment in RD 109. Lecture 5 hours.

Jeudresen, Tueller, Braly, Finzen

Continuation of RD 130.02, with emphasis on clinical application of restorative techniques. Topics include temporary restorations and occlusal therapies, rationale of capping techniques and pulp response to restorative treatment, and treatment planning for removable partial dentures. RESTOR DENT


Jeudresen, Rosenberg, Tueller, Braly, Chierici

Continuation of RD 130.03, with clinical application of restorative techniques. Topics include understanding why clinical failures occur with selected materials; biological response to restorative materials; pulp protection; pulp response to treatment; and prosthetic treatment of patients with congenital or acquired malformations. RESTOR DENT

137. Clinical Endodontics. (0-0-5) Su, F, W. Prerequisite: RD 120C, 125C, 126C. Concurrent enrollment in RD 130 lecture series required. Clinic variable.

Goodis

Clinical instruction and practice in the discipline of endodontics. Students are expected to pass a qualifying examination by the end of spring quarter of the third year. RESTOR DENT

138. Prosthodontics Clinic. (0-1) Su, W. Prerequisite: RD 120C, 125C, 126C. Concurrent enrollment in RD 130 lecture series required. Clinic variable.

Finzen

Clinical instruction and practice in the disciplines of endodontics, fixed prosthodontics, operative and primary care, and removable prosthodontics. Course is graded after student passes qualifying examinations at the end of spring quarter, third year. RESTOR DENT

139. Clinical Restorative Dentistry. (0-18) Su, F, W, Sp. Prerequisite: RD 120C, 125C, 126C. Concurrent enrollment in RD 130 lecture series required. Students are required to successfully complete a minimum of 5 units in RD 130. Clinic variable.

Tueller

Clinical instruction and practice in oral diagnosis and treatment planning. Students are required to pass a series of qualifying examinations by the end of spring quarter of the third year. RESTOR DENT

147. Clinical Endodontics. (0-0) Su, F, W. Prerequisite: Completion of RD 130.04, 137, 138, 139. Must be taken concurrently with RD 149. Clinic variable.

Goodis

Continuation of clinical instruction and practice in the discipline of endodontics. Students are expected to pass a clinical qualifying examination by the end of spring quarter of the fourth year. RESTOR DENT

148. Clinical Prosthodontics. (0-0) Su, F, W. Prerequisite: Concurrent enrollment in RD 149. Clinic variable.

Finzen

Continuation of clinical instruction and practice in the discipline of prosthodontics. Students are expected to pass a clinical qualifying examination by the end of spring quarter of the fourth year. RESTOR DENT


Tueller, Lacy

Continuation of clinical instruction and practice in oral diagnosis, treatment planning, and restorative dentistry. Students are required to pass a series of qualifying examinations by the end of spring quarter of the fourth year. RESTOR DENT


T. Curtis, Radke

Current and past prosthodontic literature will be studied and discussed. Students will learn to distinguish between appropriate, inaccurate, and inappropriate prosthodontic literature. RESTOR DENT


T. Curtis, Radke

A treatment plan will be discussed and developed for each patient after all diagnostic aids have been gathered. Students will become familiar with establishing an initial treatment plan prior to the seminar and for justifying it before the group. RESTOR DENT


T. Curtis, Radke

Staff and program consultants will present lectures on various aspects of fixed and removable prosthodontics and related subjects on a graduate level. RESTOR DENT


M. Wilkins

Course emphasizes the dietary requirements for the geriatric prosthodontic patient. A dietary analysis of the student and a prophetic patient currently under treatment will be required. RESTOR DENT

175B-C. Biomaterials Science. (2-2) W. Prerequisite: D.D.S. degree. Open to dental residue, postgraduate and postgraduate students only. Seminar 2 hours.

Jeudresen

Course covers biomaterial 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-TEMP Seminar. (0-8) Su, F, W. Prerequisite: Enrollment in postdoctoral specialty curriculum. Fourth-year dental students may take this course as an elective with permission of the instructor. Seminar 2 hours.

McNell

Allows students 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 specialists. RESTOR DENT


T. Curtis

Various types of removable prostheses will be fabricated using different techniques and treatment philosophies. RESTOR DENT


Noble

Fixed prosthodontics clinical procedures will be performed using a variety of treatment philosophies and articulating instruments. 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.

McNell

Participation in the Temporomandibular Joint Clinic applies knowledge of history-taking and differential diagnosis and utilizing such diagnostic techniques. RESTOR DENT

180.04. Advanced Operative Theory. (3) F. Prerequisite: Completion of RD 130.04. Lecture 1 hour.

Birtcil

 Lectures and televised demonstrations covering quadrant dentistry, waxed field techniques, complex restorations, analysis of related research, and clinical applications of the various restorative procedures. RESTOR DENT

180.05. Prosthetic Procedures. (1) W. Prerequisite: 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

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


Goods

Diagnosis, case selection, and management of pain and infection in endodontically-involved teeth; advanced techniques for treating difficult root canal systems; refinements in obturation of the root canal systems. RESTOR DENT

181.03. Fixed Pros Selected Topics. (1) Sp. Enrollment limited. Seminar 1 hour.

Linn

Individual staff members will offer seminar-type instruction on selected topics related to fixed prosthodontics. RESTOR DENT


Birtcil

Continuation of Restorative Dentistry 180.04. RESTOR DENT

182.03. Senior Restorative Elective. (1) W. Prerequisite: Enrollment required. Seminar 1 hour.

Mell

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
Sociology

130. Sociocultural Variations in Hlth. (3) J. W. Lecture 2 hours. Lab 3 hours.

R. Staples

Course addresses sociocultural variations in health with implications for nursing practice. SOC BEH SC


V. Olesen

Course analyzes sex roles in general and women's roles in particular in health care settings, with special emphasis on recruitment problems to health professions, images of women in therapeutic situations, and cross-cultural features of health care. SOC BEH SC


C. Harrington

Course addresses the organization of health care and its politics, with emphasis on both United States and international health issues. SOC BEH SC

198. Supervised Study. (1-5) J. W.

Staff

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

203. Social Psychology of Chronic Illness. (2-3) J. W. Prerequisite: Consent of instructor. Seminar 2 hours. Field work 0-3 hours.

G. Becker

Course provides discussion of problems faced by chronically ill persons and their families including crisis management, handling symptoms, managing regimens, social isolation, phases of disease, temporal 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) J. 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, specialists and specialization, professional and occupational ideologies, the sociology of work relationships, careers. SOC BEH SC


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) J. W. Prerequisite: Consent of instructor. Restriction: Doctoral-level students in nursing or sociology. Lecture 2 hours. Lab 3 hours.

V. Olesen

Course covers the relationship of social class, ethnic identification, group membership, family structure, occupation, and lifestyle to health and illness, and therapeutic interactions of lay persons and health professionals. SOC BEH SC

209. Sociology of Power. (2-4) J. W. Prerequisite: Consent of instructor. Restriction: 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. (3) J. W. Lecture 2 hours. Field work 3 hours.

C. Estes

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 variates. SOC BEH SC

212B. Sociological Theory. (3) J. W. Lecture 2 hours. Field work 3 hours. Required for graduate students in Sociology.

A. Clarke

Course consists of readings and discussions on interpretive 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 theory and method in the sociological study of pragmatism and interactionism. SOC BEH SC

212C. Sociological Theory: Contemporary. (4) J. W. Prerequisite: S212A and S212B or consent of instructor. Lecture 2 hours. Lab 6 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 variates. SOC BEH SC

214A. Field Research. (3) J. W. Prerequisite: Doctoral level. Lecture 2 hours. Field work 9 hours.

L. Schatzman, V. Olesen, A. Clarke

Course offers sociological perspectives on the dimensions and properties of research in natural, social settings. Focus is on data collection skills in negotiating nature, watching, listening, and recording of data. Emphasis is upon developing conceptual schemata in preparation for analysis. SOC BEH SC

214B. Qualitative Analysis. (3) J. W. Prerequisite: Doctoral level; Sociology 214A. Lecture 2 hours. Field work 9 hours.

L. Schatzman, V. Olesen, A. Clarke

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) J. W. Prerequisite: Doctoral level; Sociology 214A and 214B. Lecture 2 hours. Lab 3 hours.

Staff

Course provides qualitative analysis and the development of substantive and formal sociological theory. Emphasis is on student-generated data and their conceptualization. SOC BEH SC

215. Organizational Research. (2-4) J. W. Prerequisite: Sociology 216 encouraged but not required and consent of instructor. Lab 3-9 hours. Conference 1 hour.

E. Lorre

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
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.

225. Policy & Hlth Care Institutions. (3) F, W. Sp. Prerequisite: N287A or consent of instructor. Lecture 2 hours, Lab 3 hours.
R. Newcomer
Course describes and analyzes approaches to understanding the development of health policy and relationships between health policy and decision making within health care institutions. SOC BEH SCI

226. Famalies of the Third World. (3) F, W. Lecture 2 hours, Lab 3 hours.
N. Staples
Course examines family structures and dynamics among Third World peoples. Families to be discussed include African and Afro-Americans, Asian, Native Americans, and Latinos. Emphasis is on continuities in the family life of these groups in their native land and in the United States. SOC BEH SCI

229. Sociology of Stress. (3) F, W. Sp. Prerequisite: Consent of instructor. Restriction: Doctoral students only. Lecture 2 hours, Lab 3 hours.
L. Pearlstein
Course explores 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. SOC BEH SCI

Course examines the history and social psychology of AIDS in relation to health, illness, disease, and death. Includes demographic trends, the cost burden, and social problems of minorities, women, and caregivers, along with policy issues. SOC BEH SCI

231. Social Psychology of Aging. (3) F, W. Sp. Prerequisite: Consent of instructor. Restriction: Doctoral students only. Lecture 2 hours, Lab 3 hours.
L. Pearlstein
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. SOC BEH SCI

Y. Olsen
Advanced seminar dealing with theoretical and conceptual problems in various areas of social psychology. Recent developments in theory and concept will be reviewed. SOC BEH SCI

Course explores 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 SCI

Becker
Course examines the health status of the aged in the United States related to biological, behavioral, social, and environmental factors. Social, cultural, and economic factors affecting organization, financing, and delivery of health care to the aging population will be examined. SOC BEH SCI

235. Health Factors in Marriage & Family Behavior. (3) F, W, Sp. Prerequisite: Consent of instructor. Graduate standing. Lecture 2 hours. Lab 3 hours.
R. Staples
Course will explore how marital and family behavior generates mental and physical health problems. Topics are family violence, child abuse, sexually transmitted disease, suicide, psychological problems, and the relationship of marital status to morbidity and mortality. SOC BEH SCI

236. Race/Class Factors in Hlth Care Delivery. (3) W. Prerequisite: Consent of instructor. Graduate standing. Lecture 2 hours. Lab 3 hours.
R. Staples
Course examines racial and class membership impact on access to health care services, variations in the quality of those services, and how professional and subprofessional norms in the health care system are organized along racial and class lines. SOC BEH SCI

Schutzmann
Graduate introduction to history of sociological thought. Provides perspective and vocabulary for examining major schools of thought which constitute sociological tradition. Discussion of conceptual paradigms and their relationship to theory will provide understanding of sociological work. SOC BEH SCI

V. Olsen
Course offers students opportunity to work with both theoretical and research questions on the subject of women's participation in health and health services. Critical questions on appropriate methods, relationship to theory, and articulation of questions will be considered. SOC BEH SCI

239. Evaluation Research Methods. (3) F, W. Sp. Prerequisite: Sociology 214A and 214B. Non-doctoral students may enroll upon approval of instructor. Lecture 2 hours, Lab 3 hours.
R. Newcomer, L. Schatzman
Course analyzes field work as evaluation method, as applied to health care setting and programs. Emphasizes this training approach with quantitative methods predicted on analysis of outcomes. Conduct of such evaluative research, and relationship with audiences, such as policymakers, analysts. SOC BEH SCI

240. Older Women and Their Health. (2-4) F. Seminar 2 hours. Optional project for additional units.
V. Olsen, J. Zones
Course analyzes postmenopausal women's changing social roles and the interaction of actual and perceived role with health. Topics include demographic issues, economic trends, individual social and health status, policy implications for individuals and society. SOC BEH SCI

241. Women, Work & Health. (2-4) F. Seminar 2 hours. Optional project for additional units.
V. Olsen
How sociocultural systems place women in work roles, the implications for their health, their role in illness prevention and care of the sick. Analyzes "hidden careers," work and health in developing societies, relationship between gender and mobility-mortality patterns. SOC BEH SCI

242. Women's Health: Res. (2-4) Sp. Prerequisite: One or more women's health courses and one survey course in social research methods or social epidemiology. Seminar 2 hours. Optional project for additional units.

V. Olsen, J.Zones
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 SCI

243. Qualitative Research in Women's Health. (2-4) W. Prerequisite: One or more women's health courses and one course in qualitative methods. Doctoral students only. Seminar 2 hours. Optional project for additional units.
V. Olsen
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 analyze of data. SOC BEH SCI

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
Sociology

247. Policy Issues & Political Processes. (3) § Sp. Prerequisite: S160 or S219 or equivalent and/or Consent of instructor. Lecture 2 hours, field work 3 hours.

C. Harrington

248. Group Independent Study. (1-4) § F, W. Prerequisite: 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. SOCE BEH SC

249. Special Studies. (1-8) § 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 or analysis of empirical data, or the development of conceptual analysis or of methodologies. SOCE BEH SC

250. Women's Health: Socio-Cultural. (2-4) § F, W. Prerequisite: Consent of instructor. Lab 6-6 hours. Seminar 2 hours.

V. Olsen, E. Lewin

Exploration of the health status of women and the role of the health care provider. SOCE BEH SC

251. Women's Health: Socio-Historical. (2-4) § W. Prerequisite: Consent of instructor. Lab 6-6 hours. Seminar 2 hours.

A. Clarke

Sociological analysis of women's health status, roles as patient and provider, and the development of women's roles as patients will be discussed. SOCE BEH SC


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. SOCE BEH SC

253. Women's Health: Policy Issues. (2-4) § W. Prerequisite: Consent of instructor. Lab 0-6 hours. Seminar 2 hours.

V. Olsen

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. SOCE BEH SC

255. Environment and Health. (2-3) § F in alternate years. Offered 1990-91. Lab 0-3 hours. Seminar 2 hours.

L. Grun
course analyzes social, psychological, and biological perspectives about environmental influences on health. Reviews institutionalization, housing, and potential sources of environmental stress and their effects on adaptation across the life cycle. SOCE BEH SC

256. Introduction to Survey Research. (3) § Sp. Prerequisite: Biostatistics 183 and 185A or equivalent. Restriction: Doctoral level, non-doctoral students may enroll upon consent of instructor. Lecture 2 hours. Lab 3 hours.

R. Newcombe

course introduces sample theory, sample developments, and methods of survey research. Course provides fundamental skills for conducting their own research and large field surveys. SOCE BEH SC


V. LaBre
course explores the diversity of racial and ethnic variation and examines the health and aging experiences of minority elderly within the context of families, communities, and the nation. SOCE BEH SC

262. Health Care Economics. (5) § 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. SOCE BEH SC

266. Leadership in Long-Term Care. (3) § W, Sp. Prerequisite: Consent of instructor. Seminar 2 hours. Lab 3 hours.

C. Harrington

course examines leadership and administration in long-term care settings. Focuses on organization, budgeting, program planning, management, educational programs, and service delivery with emphasis on creative approaches and testing new models and theories. SOCE BEH SC

270A. Quantitative Methods I. (3) § F. Prerequisite: Doctoral students in Sociology or consent of instructor. Lecture 2 hours. Lab 3 hours.

R. Newcombe

course examines quantitative research methods used in sociological inquiry. The course is on scientific models, problem formulation, use of theoretical frameworks, levels of analysis, settings and strategies, specification of constructs, and selection of indices. SOCE BEH SC

270B. Quantitative Methods II. (3) § W. Prerequisite: S270A (Quantitative Methods I). Restriction: Doctoral students in Sociology or consent of instructor. Lecture 2 hours. Lab 3 hours.

R. Newcombe

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. SOCE BEH SC

270C. Research Methods Seminar. (3) § Sp. Prerequisite: S270A and S270B (Quantitative Methods in Sociological Inquiry I & II). Restriction: Doctoral students in Sociology or consent of instructor. Seminar 3 hours.

staff

Advanced seminar in research methods. Students will be able to appreciate the complexity of issues and challenge of integrating qualitative and quantitative research traditions through discussion and exercises which formulate alternate research approaches. SOCE BEH SC


staff

Seminar addresses professional and career issues for sociologists, including teaching, research, writing for publication, and presentation of papers at professional meetings. Focuses on career and educational planning, resume development, internships, mentors, and job interviews. SOCE BEH SC


staff

course addresses logic of research design and execution for students. Clarification of research question, delineation of work plan, and orientation to relevant theoretical literature or empirical data available. SOCE BEH SC

273. Demography of Health and Aging. (3) § W, Sp. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours.

M. LaPlante

course provides an overview of demographic studies of morbidity, disability, and mortality. Sociodemographic variations and changes over time in health and mortality profiles of populations and the relationship of morbidity, disability, and mortality trends will be covered. SOCE BEH SC

274. Sociology of Human Sexual Behavior. (3) § F, W, Sp. Restriction: Doctoral students in Sociology or consent of instructor. Seminar 2 hours. Lab 3 hours.

B. Staples

course examines contemporary sexual problems from a sociological perspective focusing on issues and their relationships to social structures. Topics will include sexually transmitted diseases, teenage pregnancy, sexual violence, sexual harassment, and incest. SOCE BEH SC

275. Mental Illness and the Elderly. (2-3) § W. Prerequisite: Consent of instructor. Lab 3 hours. Seminar 2 hours.

E. Lutie

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. SOCE BEH SC


G. Becker

course provides clinical experience in multidisciplinary assessment for sociologists, nurses, physicians, and other clinicians. Course includes application of social, psychological, economic, and other factors in assessment. SOCE BEH SC

277. Sociodology of Disability. (3) § W. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours.

M. LaPlante

course covers sociological models and theories of disability and handicap. Areas to be covered include definitions, utility of role theory, models of identification and causation, and sociological perspectives on disability policy. SOCE BEH SC

278. Sociology of Alcohol and Drugs. (2-3) § F in alternate years. Offered 1990-91. Lab 0-3 hours. Seminar 2 hours.

K. Wilkinson

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. SOCE BEH SC


B. Johnston

course introduces social and biological perspectives on nutrition and chronic illness. Examines interactions between nutritional factors, chronic illness, the

A. E. Benjamin, A. Clarke, V. Olden

Course examines research in social and behavioral aspects of AIDS/HIV related illnesses and critiques current methodology, collection, and analyses aspects of the research as well as the theoretical bases for the work. SOC BEH 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. SOC BEH SC

Speech and Hearing Science

201. Basic Hearing Mechanisms. (4) § F. Prerequisite: Consent of instructor. Lecture 3 hours, lab 1 hour. Offered 1990-91. Staff

Lectures and laboratory demonstrations covering anatomical and physiological 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. Not offered 1990-91. Staff

Lectures and laboratory demonstrations covering such topics as physiological and psychoacoustics of sound and speech coding; cochlear prosthesis; central sensory system organization; physiology of binaural hearing in avians and mammals; and evaluation of auditory binaural function in animals and man. OTOLARYN

203. Forebrain Mechanisms. (4) § Prerequisite: Consent of instructor. Lecture 3 hours. Lab 1 hour. Offered in alternate years. Not offered 1990-91. Staff

Lectures include forebrain representation of complex (including speech) and 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 anatomy, acoustic phonetics, the anatomy and physiology of speech production, and theories of speech perception. OTOLARYN

205. Language Science. (3) § Lab. Lecture 2.5 hours. Lab 2 hours. Offered 1990-91. Turner

This is the final course in a 2-year sequence (201, 202, 203, 205). The objective of this core curriculum is to provide students with a fundamental knowledge of the speech and auditory sciences. This course covers basic language science with emphasis on the cortical processing of language. OTOLARYN

210. Fundamentals of Auditory Neurobiology. (1) § F, W. Prerequisite: Consent of instructor. Lecture 1-3 hours.

Schneider

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. Not offered 1990-91. Staff

Review of the physics of sound as it applies to 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.

Turner

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


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.

Gardell 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 Psychophysics & Physiology. (3) § Sp. Lecture 3 hours.

Staff

A coordinated coverage of basic auditory functions. The physiology of the peripheral auditory system and basic perceptual correlates. Physiological sound, cochlear mechanics and microphonics, VIII nerve physiology, thresholds, masking, pitch, loudness, temporal and harmonic tuning, frequency analysis, binaural perception, and processing are included. OTOLARYN


Jenkins

Surgery

116. Clinical Clerkship in General Surgery. (1.5 per week) S, F, W. Prerequisite: Core curriculum in basic sciences; third-year standing.

Goodson

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
Surgery

111. Advanced Surgery Core Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Surgery 110.

Reilly
Students are seniors clerk on wards, in operating rooms at UC, SFGH, and VA. Round, seminar, and case discussions on surgical and laboratory based cases. Clinical clerkships in surgical specialties may be taken with prior approval of specialty department and Department of Surgery.

140.01. Advanced Surgery Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Surgery 110 and 111.

Reilly
Senior clinical clerkship in surgical pathology, with exposure to surgical and laboratory based cases. Clinical clerkships in surgical specialties may be taken with prior approval of specialty department and Department of 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.

Debas
Clinical clerkship in approved hospitals in other universities by special arrangement and approval of the chairpersons of the department and the dean.

140.03. General Surgery—PMC. (1.5 per week) Su, F, W, Sp. Prerequisite: Surgery 110.

Russell
Students will serve as acting interns on general surgical service; participate in preoperative assessment, postoperative management and postoperative care of patients; participate in outpatient clinics as well as selected physicians' offices; participate in daily ward rounds and attending conferences.

140.04. Vascular Surgery Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110, Surgery 110 and 111.

Kropes
Students serve as acting interns in the vascular surgery team, participating in preoperative, intraoperative, and postoperative management of patients, as well as consultation, rounds, and conferences.

140.05. Operable Heart Disease. (1.5 per week) Su, F, W, Sp. Prerequisite: Core curriculum in basic sciences and Medicine 110 or Surgery 110 and 111.

Turley
Participate in preoperative, intraoperative, and postoperative management of patients, as well as consultation, rounds, and conferences.

140.06. Emergency Medicine—SFGH. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 or Surgery 110 and 111.

Neighbo
Students will serve as operating room personnel and for surgical under supervision of attending surgeons. They will also participate in the supervision of postoperative care of patients. Clinical clerkships in surgical specialties may be taken with prior approval of specialty department and Department of 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 VA 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.


Parks
Clerkship offers an "organ systems" approach to critical surgical illness with experience in invasive and noninvasive monitoring and appropriate therapeutic interventions. Course is aimed at providing patient management experience and familiarity with basic science concepts and literature upon which surgical intensive care is based.

140.15. Burn Center Clerkship—VMC. (1.5 per week) Su, F, W, Sp. Prerequisite: Surgery 110 and 111. Fourth-year students only.

Parks
Provides training in burn care and repair of injuries sustained by thermal and electrical mechanisms.

140.16. Nutritional Support Service—SFGH. (1.5 per week) Su, F, W, Sp. Prerequisite: Surgery 110.

Hickey
Students will be instructed in the formulation and administration of parenteral and enteral feedings; the insertion of subcutaneous and central venous catheters; the management of anabolic problems; and participate in ward rounds at San Francisco General Hospital.

140.17. Pediatric Surgery. (1.5 per week) Su, F, W, Sp. Prerequisite: Surgery 110 and 111. Clinic 40.

DaLorimier, Harriston
The student works as an acting intern on a busy pediatric surgical service and in pre- and postoperative management and in the operation. An interesting, wide variety of situations is encountered.

140.18. Liver Transplantation. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110, Surgery 110. Ascher and Staff

Students participate in evaluation of potential liver recipients (including HLA-typing, coagulation, immunologic monitoring), observe the liver transplant procedure, participate in postoperative care (including immunosuppressive management and mecha-
Teaching Methodology


Staff
Course provides resources 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 microcomputer, teaching a single skill. GEN DENT


Staff
Practical teaching experience in selected courses under the supervision of members of the staff. GEN DENT

186.01A-B-C. Practice Teaching. (0-3, 0-3, 0-3) F, W, Sp. Lab 3 hours.

Staff
Practical teaching experience in selected courses under the supervision of senior members of the staff. GEN DENT

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 intern on the Urology Service at UC. They also attend rounds and scheduled seminars with residents and visiting staff.

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

Tanagho
Clinical clerkship in off-campus hospitals approved by the chairperson of the department and the dean.

140.03. Advanced Urology Clerkship—VA. (1.5 per week) Su, F, W, Sp. Prerequisite: Surgery 110.

R. D. Williams
Students work as intern on the Urology Service at VA. They also attend rounds and scheduled seminars with residents and visiting staff.

140.04. Advanced Urology Clerkship—SFCH. (1.5 per week) Su, F, W, Sp. Prerequisite: Surgery 110.

McAninch
Students work as interns on the Urology Service at SFCH. They also attend rounds and scheduled seminars with residents and visiting staff.

Urology Seminar and library research. UROLOGY

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

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


Tanagho
Seminar includes study of the basic sciences and urologic nontumorigenesis with members of the attending staff.


Tanagho
Course includes experimental investigation in urologic problems.


Tanagho
Seminar includes discussion of diagnosis and treatment of patients in the urology wards with the attending staff.


Tanagho
Conference includes presentation and discussion of urologic problems by the house staff and faculty.


UC Tanagho, SFCH McAninch, VA R.D. Williams
Five-year residents care for patients in the wards and outpatient clinics. Second- and third-year residents, under supervision, perform instrumental examinations on clinic patients. Senior residents, under supervision, perform instrumental and surgical procedures and have administrative, clinical, and teaching responsibilities.


McAninch
Interns rotate through urological wards. Under the direction of the attending staff they are responsible for the care of patients, including history-taking, physical examination, laboratory tests, and consultation.