This chapter is a compendium of the courses of instruction offered by the University of California, San Francisco. 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.

Inquiries about individual courses should be addressed to the indicated department or instructional unit for information that is not included here, nor in the separately published bulletins of the four schools or of the Graduate Division. These bulletins, available from the respective schools or the Graduate Division, indicate, for example, the place of various courses in the different established curricula. Faculty rosters may also be found in the bulletins of the four schools.

Course Descriptions—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 (ten's) 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**

- **ANATOMY**
  Department of Anatomy, School of Medicine.

- **ANESTHESIA**
  Department of Anesthesiology, School of Medicine.

- **BIOCHEM**
  Department of Biochemistry and Biophysics, School of Medicine.

- **CL PHARM**
  Division of Clinical Pharmacy, School of Pharmacy.

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

- **DERMATOL**
  Department of Dermatology, School of Medicine.

- **Epidemiology**
  Department of Epidemiology and International Health, School of Medicine.

- **FAM CM MED**
  Division of Family and Community Medicine, School of Medicine.

- **FAM HLTH**
  Department of Family Health Care Nursing, School of Nursing.

- **GR DEVEL**
  Department of Growth and Development, School of Dentistry.

- **HIST HL SC**
  Department of History of Health Sciences, School of Medicine.

- **LAB MED**
  Department of Laboratory Medicine, School of Medicine.

- **MED INF SC**
  Section of Medical Information Science, School of Medicine.

- **MEDICINE**
  Department of Medicine, School of Medicine.

- **MENT HLTH COM ADM**
  Department of Mental Health, Community, and Administrative Services, School of Medicine.

- **MICROBIOL**
  Department of Microbiology and Immunology, School of Medicine.

- **NEURO SURG**
  Department of Neurological Surgery, School of Medicine.

- **NEUROLOGY**
  Department of Neurology, School of Medicine.

- **OB GYN RS**
  Department of Obstetrics, Gynecology and Reproductive Sciences, School of Medicine.

- **OPHTHALMOL**
  Department of Ophthalmology, School of Medicine.

- **ORTHOSURG**
  Department of Orthopaedic Surgery, School of Medicine.

- **OTOLARYN**
  Department of Otolaryngology, School of Medicine.

- **PATHOLOGY**
  Department of Pathology, School of Medicine.

- **PEDIATRICS**
  Department of Pediatrics, School of Medicine.

- **PHARM CHEM**
  Department of Pharmaceutical Chemistry, School of Pharmacy.

- **PHARMACOL**
  Department of Pharmaceutical Pharmacology, School of Medicine.

- **PHARMACY**
  Department of Pharmacy, School of Medicine.

- **PHYS THER**
  Department of Physical Therapy, School of Medicine.

- **PHYSIOL NURS**
  Department of Physiological Nursing, School of Nursing.

- **PHYSIOLOGY**
  Department of Physiology, School of Medicine.

- **PSYCHIATRY**
  Department of Psychiatry, School of Medicine.

- **RADIOLOGY**
  Department of Radiology, School of Medicine.

- **RESTOR DENT**
  Department of Restorative Dentistry, School of Medicine.

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

- **STOMATOLOGY**
  Department of Stomatology, School of Dentistry.

- **SURGERY**
  Department of Surgery, School of Medicine.

- **UROLOGY**
  Department of Urology, School of Medicine.

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The gross structure and development of the human body is studied by means of dissection, demonstration, X-ray, surface development, and cross-sectional anatomy with special reference to the functional aspects of the structures examined. ANATOMY

103. Nervous System: Form & Function. (4-6) Cr. Pre-requisite: Consent of instructor required for graduate students. Lecture 5 hours. Lab 3 hours. H. Balston, Kryyber & Staff

The structure and function of the central nervous system is studied by lectures, conferences, demonstrations, and laboratories, with emphasis on the human nervous system and its organization in the human. Intended for students in the School of Medicine and as an introduction for graduate students. ANATOMY

103.01. Neuronanatomy. (2) SS. Pre-requisite: Completion of course prerequisites for admission to the University and the Curriculum in Physical Therapy. Open only to students enrolled in the Curriculum in consent of program director. Lecture 1 hour. Lab 3 hours. Garoutte

The structural organization and function of the central nervous system is presented through lecture and laboratory study of models, wet and dry demonstration. Special emphasis accorded to clinical function. ANATOMY

107. Neurornuscular Physiology. (2) W. Pre-requisite: Completion of course work in summer and fall. Open only to students enrolled in the Curriculum or consent of program director. Lecture 2 hours. Garoutte

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

115. Histology. (3) W. Lecture 2 hours. Martin and Staff

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

116. Gross Anatomy. (3) SS. Lecture 2 hours. Lab 3 hours. Sutherland and Staff

A study of the microscopic structure of the body and branches of dissection, demonstration, X-ray, surface development, and cross-sectional anatomy with special reference to the functional aspects of the structures examined. ANATOMY

150. Gross & Regional Anatomy. (2) Pre-requisite: Admission to the Dental Hygiene curriculum, School of Dentistry. Lecture 1 hour. Lab 6 hours. Fisher

The gross anatomy of the head and neck is studied by lectures and demonstrations. Clinical applications and functions of importance to the dental hygienist are emphasized. STOMATOLOGY

156C. Neurornanatomy. (2) W. Pre-requisite: Dental Hygiene standing. Lecture 1 hour. Lab 3 hours. Fisher

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

170. Advanced Head & Neck Anatomy. (1-5) Sp. Pre-requisite: General histology, gross anatomy of the head and neck, and oral histology. Lecture 1 hour. Lab 0-12 hours. R. D. Coleman

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

170.02. Survey of Congenital Defects. (2) Pre-requisite: Consent of instructor. Lecture 2 hours. McKenzie

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

170.09. Language of Anatomy. (1) & (2) Pre-requisite: Consent of instructor. Anatomical nomenclature and correlation with corresponding human anatomy. ANATOMY


Course covers anatomy as it relates to anesthesia and periodontal surgery. STOMATOLOGY

172. Clinic-Anatomy. (2) & (3) W. Prerequisite: Consent of instructor. Anatomical nomenclature and correlation with corresponding human anatomy. ANATOMY

174. Lymphatic System. (2) & (3) W. Pre-requisite: Consent of instructor. ANATOMY

Course covers instruction in various methods of chromosome banding and as well as cell cycle analysis by autoradiography. ANATOMY
Prerequisite: ANESTHESIA 110, Medicine 110, and Surgery 110.
Cohen, Michael
Clinical clerkship on techniques of intensive care with primary emphasis on respiratory, cardiovascular, and renal physiology. Patient population includes adult and pediatric patients with medical and surgical illnesses, a significant percentage of whom have undergone cardiac surgery. ANESTHESIA 110, Medicine 110, and Surgery 110.

185. General Anesthesiology (6) Prerequisite: Interns and residents. Clinical Hamilton and Staff Course covers the systemic effects of the various muscle relaxants, sedatives, and stimulants and the administration of general anesthetic agents. ANESTHESIA 110.

199. Laboratory Project (1-5) Su, F, W, Sp. Eger A laboratory research project under direction of a faculty member of the department. ANESTHESIA 110.

400. Anesthesia Staff Conference. (F, W, Sp.) R. D. Miller Course includes didactic lectures in sciences basic to the specialty of anesthesia, as well as case reviews, clinical discussions, and seminars on current medical literature in anesthesia. ANESTHESIA 110.

450. Anesthesia Clinical Work. (1/2-1) lab required for each week. Su, F, W, Sp. Required during the senior year of residency, and in either second or third year. R. D. Miller Residents are responsible for anesthetic care and management of patients in the operating rooms and outpatient departments, under close supervision of the faculty. Anesthesia and postoperative evaluation and care, observation, and reevaluation are covered. ANESTHESIA 110.

460. Special Assignment. (1/2-1) lab required for each week. Su, F, W, Sp. Elective for residents during either second or third year. UC Eger Assignments include inpatient care for patients in the operating rooms and inpatient care for patients in the recovery room. ANESTHESIA 110.

150.01. Anesthesia Research Project. (1-2) lab required for each week. Su, F, W, Sp. Prerequisite: Third or fourth-year status and consent of instructor. Hamilton and Staff Conduct research projects under the guidance of faculty members. Projects must be approved by an instructor involved in supervising the project. Hamilton and Staff may include or be limited to basic science research projects. ANESTHESIA 110.

ABH 120.01. Basic CPR (1/2) F, W, Sp. Lecture 1 hour. Hamilton and Staff Cohens, Cainan, Strong Two-week CPR skills course training students in basic life support skills: cardiopulmonary resuscitation and management of airway obstruction, and assessment of need to institute intubation. Missions include presentations by Anesthesiology faculty and skills practice for students. ANESTHESIA 110.

ABH 178. General Anesthesiology (6) Prerequisite: Interns and residents. Clinical Hamilton and Staff Course covers the systemic effects of the various muscle relaxants, sedatives, and stimulants and the administration of general anesthetics. ANESTHESIA 110.

ANTHROPOLOGY

200. Off-Campus Study. (0) F, W, Sp. Prerequisite: Approval of the graduate adviser. Open only to students enrolled in the graduate program in Medical Anthropology. Staff Full-time graduate study in the Medical Anthropology program through an interdepartmental program. EPID INTL HLTH.

205A-B. Intro to Sociocultural Aspects. (3-4) F, W, Sp. Prerequisite: Open only to students enrolled in the Medical Anthropology program. EPID INTL HLTH.

225. Contemporary Issues. (2-4) F, W, Sp. Prerequisite: Consent of instructor. Lecture 2 hours, plus 3 or 6 hours independent study for 3 or 4 units.

M. Clark Introduction to selected controversial and current issues in medical anthropology, including sociology; sociocultural impact of high technology medicine; abortion, euthanasia and the right to life; status of research on the etiology of mental disorders; advocacy, praxis and the social sciences. EPID INTL HLTH


Ablon, G. Becker Examining the social stigmatization of health conditions such as deafness, alcoholism, obesity, schizophrenia, physical and mental disabilities. Small self-help groups organized around such conditions will be examined. Students who have experienced such conditions will contribute to the course. EPID INTL HLTH


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

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

Kiefer Exploration of the relationship between culturally conditioned ways of perceiving, thinking, and communicating, and individual behavior and personality development. Application of cultural and personality theory findings in cross-cultural and regional settings. EPID INTL HLTH

231. Ethnopsychiatry. (2-3) F, W or Sp. Prerequisite: Consent of instructor. Lecture 2 hours, plus 3 hours independent study for 3 units.

M. Clark, Hargot 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 INTL HLTH

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

Kaufman Cross-cultural approaches to roles, status, social organization, and identity of aged populations. Cultural factors influencing the condition and adaptation of the aged in various societies. Topics to be covered include cultural attitudes and values, social relationships, and health problems. EPID INTL HLTH

234. Culture & Symbolic Systems. (2-3) F, W, or Sp. Prerequisite: Anthropology 225A or consent of instructor. Lecture 2 hours, plus 3 hours independent study for 3 units.

Staff Symbolic theory or symbolic research is concerned with the relationship between cultural symbols and their social functions. EPID INTL HLTH


Ablon 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, psychosocial, and anthropological perspectives. EPID INTL HLTH


Staff Popular medicine in the Third World with emphasis on how people use indigenous and biomedical health care resources. Theories of health belief, social and cultural dimensions of health and illness, social values, religious rituals, altered states of consciousness, and health procedures. EPID INTL HLTH

247. Contemporary American Society. (3) F, W, or Sp. Prerequisite: Consent of instructor. Lecture 2 hours, plus 3 hours independent study.

Ablon A research of anthropology oriented research on basic American values, social organization, and societal values. EPID INTL HLTH


Staff Groups of two or more collaborate on special problems in anthropology under the direction of faculty. Students may select areas related to their long-term interest and future research program. EPID INTL HLTH

249. Directed Reading. (1-5) F, W, Sp. Prerequisite: Consent of instructor.

Staff Independent study. EPID INTL HLTH


Staff EPID INTL HLTH

251. Social Gerontology. (2-4) W or Sp. Prerequisite: Consent of instructor. Lecture 2 hours, plus 3 hours independent study for 3 or 4 units.

K. J. Statt Overview of the theoretical, empirical, and applied literature on the social processes of aging in this country. Special emphasis on health-related problems and the delivery of services to the elderly. EPID INTL HLTH


Justice Combining the perspectives of anthropology and health policy, the course will examine the effects of culturally-bound beliefs and values on utilization of health care services and the impact of health policies on medical care in the United States and other countries. EPID INTL HLTH

260. Epidemiology & Med Anthro. (2-4) F, W, Sp. Prerequisite: Training in epidemiology and consent of instructor. Lecture 2 hours plus 3 or 6 hours independent study for 3 or 4 units.

F. Dunn, James Individual or small group directed reading and discussion of epidemiologic and medical ecological perspectives, methods, and findings relevant to the field of medical anthropology. EPID INTL HLTH

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

Staff Independent study. EPID INTL HLTH

298. Dissertation. (0) F, W, Sp. Prerequisite: Approval of the Ph.D. degree. EPID INTL HLTH

BIOCHEMISTRY

100. Human Metabolism. (5) W, Sp. Prerequisite: Interdisciplinary Studies 100; Cell and Tissue Biology or consent of instructor. Lecture 4 hours. Conference 2 hours.

Colby Lectures and conferences in the metabolism of carbohydrates, lipids, amino acids, and nucleotides, with emphasis on physiological regulation. Primarily for medical students. BIOCHEM


Colby Lectures in biochemistry include aspects of cell physiology and cellular ultrastructure, with emphasis on the area of connective and mineralizing tissues. Fundamental knowledge is presented in the context of its applicability to clinical health sciences. Primarily for dental students. BIOCHEM


Colby Conference 1 hour.

Colby Lectures and conferences in biochemistry including aspects of cell physiology and cellular ultrastructure, with some emphasis in the area of drug metabolism.

150.01 Research in Biochemistry. (1-1/2) F, W, Sp. Prerequisite: Consent of instructor.

Staff Research in biochemistry. BIOCHEM

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

Staff Research in biochemistry. BIOCHEM

240A. Structure of Macromolecules. (3) Sp. Prerequisite: Calculus, physical chemistry, organic chemistry, and an advanced course in biochemistry. Lecture 3 hours.

Agard Fundamental principles governing the behavior of, and modern techniques for study of biological macromolecules. Topics covered include: biophysics, dynamics, theory of polymer chemistry, studies of protein structure and function, nucleic acid structure and conformation.

200B. Light Microscopy and Electron Microscopy. (1-2) F, W, Sp. Prerequisite: Calculus, physical chemistry, organic chemistry, and an advanced course in biochemistry. Lecture and laboratory 4 hours. Lecture 3 hours. Laboratory 1 hour.

BIOCHEM

copy as applied to cell and structural biology. Topics to be included are bright and dark field, polarization, DIC and fluorescent microscopy, STEM, three-dimensional tomography, and 2D and 3D electron holography. BIOCHEM 200C.

Chromosome Structure & Function. (1/2) & Sp. Prerequisite: Calculus, physical chemistry, organic chemistry, and an advanced course in biology are recommended. Lecture 3 hours for one-half term. Sediat.

Structure and function of chromosomes in eukaryotes is discussed in depth, beginning with basic understanding of experiments leading to the most recent proposals for structure. Emphasis is both theoretical and experimental approaches to this area of cellular and molecular biology. BIOCHEM 200E.

Enzymology. (3) & F. Prerequisite: Calculus, physical chemistry, organic chemistry, introductory biochemistry, and an advanced course in chemistry, or consent of instructor. Lecture 3 hours. Offered in alternate years. Offered 1988-89. Santi, Kenyon.

Biologically important chemical transformations from the physical organic point of view, emphasizing catalytic mechanisms pertinent to enzyme reactions, and to the development of enzyme models that account for chemical and physical aspects of catalysis. Inorganic materials, enzymes, and enzyme catalysts. Techniques of investigating enzyme mechanisms and kinetics. BIOCHEM 210A-B.

Biological Regulatory Mechanisms. (3, 1.5) & F. W. Prerequisite: Calculus, physical chemistry, organic chemistry, introductory biochemistry, and an advanced course in biochemistry. Lecture 3 hours. Yamamoto.

Discussion of the discovery of principles forming the foundations of molecular and recent advances in rapidly developing areas of the field. Topics covered include: control of transcription, DNA replication, control mechanisms, and genome structure and organization. BIOCHEM 220.

Computation & Data Analysis. (3) & F. W. Prerequisite: Consent of instructor. Lecture 3 hours. Martinez.

Computer-aided mathematical methods for extracting information from both experimental and non-numerical data. Elements of error analysis, parameter estimation, equation solving, signal analysis, and word processing, with applications at the research level. Supportive instruction in a structured programming language. BIOCHEM 240. Introduction to Biomatematica, (3) & Sp. Lecture 3 hours. Mathematical modeling of enzyme kinetics, metabolic and hormonal control mechanisms, cooperative interactions of macromolecules, diffusion, passive and active transport, membrane models, excitation and conduction, flow, irreversible thermodynamics. Course offers experimental work on problem formulation and reading of current literature. BIOCHEM 240.

Specific Topics. (0-5) & F. W. Sp. Prerequisite: Consent of instructor. Lecture 1-5 hours. Staff.

Discussion of selected areas in biochemistry, biophysics, and biomatics. BIOCHEM 240.

Laboratory Rotation. (3) & F. W. Sp. Prerequisite: Consent of instructor. Lab 9 hours. C. Guthrie.

A laboratory rotation course to familiarize new graduate students with various approaches to biochemical and physical research. BIOCHEM 240.

Selected Topics. (0-5) & F. W. Sp. Lecture 1 hour. Alberts.

Lectures and discussion on topics of interest in biochemistry and biophysics. BIOCHEM 240.

Selected Topics. (0-1) & F. W. Sp. Lecture 1 hour. Staff.

Presentations of selected topics in biochemistry by graduate students in the Department of Biochemistry. BIOCHEM 240.

Macromolecular Structure & Dynamics. (2) & W. Prerequisite: Consent of instructor. Lecture 2 hours. Offered in alternate years. Offered 1989-89. A. R. Cooke, Strand.

Consideration of the structure, dynamics, and function of macromolecules along with a treatment of the methods used to probe aspects of molecular organization and dynamics. Emphasis will be on modern E.M., X-ray, and fluorescence, and magnetic resonance methods. BIOCHEM 240.

Protein Crystallography. (3) & W. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours. Offered in alternate years. Offered 1988-89. Stroud.

Principles of X-ray crystallography applicable to protein structural analysis will be presented in course oriented toward research level understanding of the field. Course will involve group participation and some experimental work. BIOCHEM 240.

Cell & Developmental Biology. (3) & Sp. 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 are discussed. BIOCHEM 240.


BIOCHEM 240.

Special Study. (1-3) & F. W. Sp. Staff.

Reading and conferences for properly qualified students under the direction of a member of the staff. BIOCHEM 240.

Thesis. (0) & F. W. Sp. Prerequisite: Advanced to candidacy and permission of the graduate advisor. Staff.

For graduate students engaged in writing the thesis for the master's degree. BIOCHEM 240.

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

For graduate students engaged in writing the dissertation for the Ph.D. degree. BIOCHEM 240.

BIOENGINEERING 190. Diff Equations for Biomed Use. (3) & F. W. Prerequisite: Introductory calculus. Lecture 3 hours. Glantz.

Course covers description of biological processes such as cardiovascular physiology, pharmacokinetics, instrumentation with ordinary differential equations, direct methods to solve equations and interpret the results, linearly ordered Explore logarithmic, sigmoid, and cosine functions; eigenvalues, time constants, and half-lives. BIOCHEM 240.

Protein Crystallography. (3) & W. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours. Offered in alternate years. Offered 1989-89. Stroud.

Principles of X-ray crystallography applicable to protein structural analysis will be presented in course oriented toward research level understanding of the field. Course will involve group participation and some experimental work. BIOCHEM 240.

Cell & Developmental Biology. (3) & Sp. 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 are discussed. BIOCHEM 240.


BIOCHEM 240.

Special Study. (1-3) & F. W. Sp. Staff.

Reading and conferences for properly qualified students under the direction of a member of the staff. BIOCHEM 240.

Thesis. (0) & F. W. Sp. Prerequisite: Advanced to candidacy and permission of the graduate advisor. Staff.

For graduate students engaged in writing the thesis for the master's degree. BIOCHEM 240.

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

For graduate students engaged in writing the dissertation for the Ph.D. degree. BIOCHEM 240.


An introduction to the dental field by discussing the basics of material science and the properties of commonly used materials in the practice of dentistry. RESTOR DENT.

BIOEQUIPMENT 180. Algebra & Calculus for Biomed. (3) & Sp. Prerequisite: Consent of instructor. Licko.


BIOEQUIPMENT 200. Off-Campus Study. (0) W. Prerequisite: Approval of the graduate advisor. Open only to students enrolled in the graduate program in Biophysics. Staff.
201. Cellular Biophysics. (3) W. Prerequisite: Biochemistry 200A. Lecture 3 hours.

202. Thrombin activated. Natural systems and metabolic pathways; cell to cell interaction and muscle contraction; cell membranes and cell communication; cell cycling and cell death. 3 lecture hours. 3 laboratory hours.

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

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

207B. Image Cytometry: Theory, Methods & Applications, (3) Sp. Prerequisite: Consent of instructor. Lecture 2 hours.

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

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

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

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

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

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

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

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

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

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

Biophysics/Biostatistics

117. Organic Chemistry Laboratory. (2) Semester. Prerequisite: Chemistry 112 or equivalent. 2 lecture hours. 3 laboratory hours.

118. Advanced Organic Chemistry. (3) W. Prerequisite: Chemistry 112 or equivalent. 3 lecture hours. 3 laboratory hours.

119. Physical Chemistry Laboratory. (2) Semester. Prerequisite: Physical Chemistry 112 or equivalent. 2 laboratory hours. 2 lecture hours.
Physical organic chemistry; the structure of molecules and its relationship to mechanisms of reaction. PHARM CHEM

205. Advances in Synthetic Methods. (2) F. Prerequisite: Chemistry 113 and 160 or equivalent. Lecture 2 hours.
J. Craig
Recent advances in synthetic methods, comprising specific oxidizing agents, reducing agents, and other specific reagents. PHARM CHEM

208. Advanced Organic Chemistry. (3) F. Prerequisite: Chemistry 113 and 165 or equivalent. Lecture 3 hours.
Craig, Whitney
Terpenes and steroids. Occurrence, chemistry, stereochemistry and structure-function relationships of natural products such as cardiac glycosides, fat-soluble vitamins and steroids including steroidal and non-steroidal hormones. PHARM CHEM

209. Chemistry of Heterocyclics. (3) F. Prerequisite: Chemistry 113 and 165 or equivalent. Lecture 3 hours.
Craig, Kenyon
A survey of the main nitrogen, oxygen, and sulfur-containing heterocycles. PHARM CHEM

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

261. Advanced Physical Chemistry. (2) F. Prerequisite: Chemistry 260 or equivalent. Lecture 2 hours. Silver
Theory and applications of chemical kinetics. PHARM CHEM

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

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

CLINICAL DENTISTRY
Staff
Responsibility for patient dental care in the words and comprehensive clinical situation under the direction of the attending staff. Dental consultant, treatment and treatment planning are coordinated with medical care. Residents take histories and perform physical examinations, laboratory tests, and dental treatment. STOMATOLOGY

CLINICAL PHARMACY
110. Orientation. (2) F. Conference and field observation 3-4 hours. R. Levin
An introduction to the scope of pharmaceutical practice including field trips to and participation in various settings where the pharmacist and patient interact. CL PHARM

130. Therapeutics. (6) F. Prerequisite: Successful completion of all required first- and second-year courses or consent of instructor. Lecture 5 hours. Conference 2 hours.
Koo, Kapusnik
Orientation to selected areas of medical practice, the clinical evaluation and comparison of drugs used in these areas, and the role of pharmacists in drug combinations and products. CL PHARM

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

132. Therapeutics. (7) F. Prerequisite: Clinical Pharmacy 131 or consent of instructor. Lecture 6 hours. Conference 2 hours.
Dong, Stagg
Continuation of Clinical Pharmacy 131. CL PHARM

133. Nutrition. (3) F. Prerequisite: Clinical Pharmacy 133 standing. Lecture 3 hours.
McSweeney
Clinical aspects of nutrition in ambulatory and institutional practice with emphasis on special needs of different populations. Nutritional supplements, enteral and parenteral products will be discussed as they apply to these populations. CL PHARM

134. Topics in Pharmacy Administration. (2) F. Prerequisite: Third- or fourth-year standing. Lecture 2 hours.
Kishi
Survey of major world health problems, and programs and agencies concerned with their control. Relationships of pharmacy to such topics as emergency medical services, communicable diseases, nutrition, sanitation, and nutritional and drug counseling for the mentally and physically disabled, dental hygiene, mental health, and public health administration. CL PHARM

135A. Drug Information Orientation. (1½) Su, F, W, F. Prerequisite: Third-year standing. Concurrent or subsequent enrollment in Clinical Pharmacy 130, 131 or 132.
L. Hart
Orientation to clinical services including patient interview techniques and monitoring; training and actual experience in literature retrieval, analysis and dissemination of drug information. CL PHARM

135B. Drug Information Orientation. (1½) Su, F, W, F. Prerequisite: Clinical Pharmacy 135A.
L. Hart
Continuation of Clinical Pharmacy 135A. CL PHARM

140A. Inpatient Clinical Clerkship. (9) Su, F, W, F. Prerequisite: Successful completion of all first-, second- and third-year courses of Clinical Pharmacy 130 series comprehensive examination. Clinic 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 explore patients' specific drug information questions. CL PHARM

140B. Inpatient Clerkship–UCSD. (9) Su, F, W, F. Prerequisite: Successful completion of all first-, second- and third-year courses of Clinical Pharmacy 130 series comprehensive examination. CL PHARM

140C. Inpatient Clinical Clerkship–UCSD. (9) Su, F, W, F. Prerequisite: Successful completion of all first-, second- and third-year courses of Clinical Pharmacy 130 series comprehensive examination. CL PHARM

140A. Inpatient Clinical Clerkship–UCSD. (9) Su, F, W, F. Prerequisite: Successful completion of all first-, second- and third-year courses of Clinical Pharmacy 130 series comprehensive examination. CL PHARM

148A. Inpatient Clerkship–UC. (9) Su, W, F, W. Prerequisite: Successful completion of all first-, second- and third-year courses of Clinical Pharmacy 130 series comprehensive examination. CL PHARM

148B. Inpatient Clinical Clerkship–UCSD. (9) Su, F, W, F. Prerequisite: Successful completion of all first-, second- and third-year courses of Clinical Pharmacy 130 series comprehensive examination. CL PHARM

148C. Inpatient Clinical Clerkship–UCSD. (9) Su, F, W, F. Prerequisite: Successful completion of all first-, second- and third-year courses of Clinical Pharmacy 130 series comprehensive examination. CL PHARM

148A.1. Inpatient Clerkship–UCSD. (9) F, W, Sp. Prerequisite: Clinical Pharmacy 148A.1A or 148A. Clinic 40 hours per week for six weeks.
Sauer and Staff
Supervised clinical pharmacy experience in an outpatient setting. Students develop and explore their roles in an interdisciplinary health care team, take medication histories, monitor drug therapy, provide patient education and explore patients' specific drug information questions. CL PHARM


148A.1A. Inpatient Clerkship–UCSD. (9) F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year courses of Clinical Pharmacy 130 series comprehensive examination. CL PHARM

149. Ambulatory Externship/Clerkship. (13) F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year courses of Clinical Pharmacy 130 series comprehensive examination. A. Leavens and Staff
Supervised clinical experience in an outpatient setting. Students develop and explore their roles in an interdisciplinary health care team, take medication histories, monitor drug therapy, provide patient education and explore patients' specific drug information questions. CL PHARM

150. Pharmacy Systems. (3) F, W, Sp. Prerequisite: Third-year standing or higher. Lecture 1 hour. Conference and special project 6 hours.
Herford
Orientation to outpatient and inpatient 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

150.20. Drug-Induced Disease Problems. (3) F, W, Sp. Prerequisite: Pathology 132. 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, pathogenesis, site of origin, and its management. Assessment of collection and analytic methods of adverse drug reactions identification and evaluation of literature will be considered. Special project will be assigned. CL PHARM

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

150.40. 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.
Levy
Preceptorship for Clinical Pharmacy 110 conferences. One sophomore and one junior preceptor per conference will be responsible for conducting oral presentations. One senior conference will be responsible for taking students on tours of clerkship sites. CL PHARM

150.50. Oncology Seminar. (2) F. Prerequisite: Second-year or fourth-year pharmacy student in good standing; graduate nursing students in the Oncology seminar program. Seminar 2 hours.
Ignoffo
Discussion in detail of topics in oncology that focus upon tumor staging and classification, hormonal management of various neo-plastic disorders or cancer-induced pathologies. CL PHARM

Shimomura, W. E. Smith
Course provides students with an overview of management and increased awareness of major components of pharmacy services administration. CL PHARM
Clinical Pharmacy

Clinical Pharmacy

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187.80. Drug Information—MILILB. (1-8) F, W, Sp. Prerequisite: Fourth-year standing and consent of instructor. Shimomura, Towne, Schweiger Students will be provided the opportuni ties to develop the necessary skills required to work in a drug information service, which includes organization and evaluation of drug literature, drug literature evaluation, and effect on verbal and written communication of drug literature. CL PHARM

187.81. IV Additives—UCL. (1-8) F, W, Sp. Prerequisite: Fourth-year standing and consent of instructor. Shimomura, Ming Students participate in the activities of an intravenous additive service in a large university teaching hospital. Students will learn about aseptic technique, compatibility and stability of drugs in intravenous solution, total parenteral nutrition, pre-filled syringe programs, home hyperalimentation and bagged CL PHARM

187.82. Drug Information—UCLA. (1-8) F, W, Sp. Prerequisite: Fourth-year standing and consent of instructor. Shimomura, Vrabel An on-line experience in a drug information center serving a multidisciplinary teaching hospital. Through a series of experience modules, in addition to didactic information, research projects and reports are due by the center, students will learn to demonstrate competence in drug literature evaluation and drug information retrieval skills. CL PHARM

187.83. IV Additives—UCLA. (1-8) W, Sp. Prerequisite: Fourth-year standing and consent of instructor. Shimomura, Casselman 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 and medication therapy. CL PHARM

188.01. Oncology—UCL. (1-8) 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 work with pharmacists in the Medical Intensive Care Unit (MICU) and satellite pharmacist coordinating both clinical and distributive pharmacy services. Students will be exposed to disease therapy as it relates to different disease states seen in the unit. CL PHARM

188.06. Surgical Intensive Care—UCL. (1-8) 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 be placed as a liaison from the Department of Clinical Pharmacy to the Surgical Intensive Care Unit. He/she, under the supervision of a pharmacist, will assume responsibility for the pharmacologic management of critically ill patients. CL PHARM

188.07. Gastroenterology—Clinical Nutrition—UCL. (1-8) 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 clerkship affords the student an extensive experience in clinical pharmacy services offered by the Gastroenterology and Clinical Nutrition services at UCL Medical Center. The student will manage patients skills are required for patients and become an integral member of the Gastroenterology Consult Team. CL PHARM

188.08. Microcomputer Applications in Pharmacy Practice—UCL. (1-8) F, W, Sp. Prerequisite: Successful completion of all first- and second-year course work. Clinical Pharmacy 148 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

188.09. Neoplastic Intensive Care—UCL. (1-8) 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 become members of Neoplastic Intensive Care Team, attend rounds, conferences, monitor and evaluate drug therapy, and provide drug therapy-related consultation. CL PHARM

188.10. Medical Intensive Care—UCL. (1-8) 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 pharmacists in the Medical Intensive Care Unit (MICU) and satellite pharmacist providing both clinical and distributive pharmacy services. Students will be exposed to disease therapy as it relates to different disease states seen in the unit. CL PHARM

188.12. Infectious Diseases—UCL. (1-8) F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year course work and comprehensive examination Sauer, King Students will actively participate in the UCL Medical Center Infectious Disease Consult Service. The student will have the opportunity to develop skills in drug therapy. CL PHARM

188.16. Oncology/Shepherd Community Hospitals. (4-8) F, W, Sp. Prerequisite: Fourth-year standing only Sauer, Spencer, Jue A supervised clinical pharmacy experience in inpatient and outpatient settings which allows students to develop skills in clinical pharmacy settings involved with oncology practice. Through observation and performance, students will develop and explore their roles as clinical pharmacists. CL PHARM

188.17. Gastroenterology—Clinical Nutrition—UCL. (1-8) 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 clerkship affords the student an extensive experience in clinical pharmacy services offered by the Gastroenterology and Clinical Nutrition services at UCL Medical Center. The student will manage patients skills are required for patients and become an integral member of the Gastroenterology Consult Team. CL PHARM

188.20. Oncology/Sutter Community Hospitals. (4-8) F, W, Sp. Prerequisite: Fourth-year standing only. Sauer, Spencer, Jue The student will be placed as a liaison from the Department of Clinical Pharmacy to the Surgical Intensive Care Unit. He/she, under the supervision of a pharmacist, will assume responsibility for the pharmacologic management of critically ill patients. CL PHARM

188.21. Cardiovascular Disease—Clerkship. (1-8) 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 clerkship affords the student an extensive experience in clinical pharmacy services offered by the Gastroenterology and Clinical Nutrition services at UCL Medical Center. The student will manage patients skills are required for patients and become an integral member of the Gastroenterology Consult Team. CL PHARM

188.30. OPTION Care. (1-8) F, W, Sp. Prerequisite: Completion of all first-, second-, and third-year required course work. Sauer, Fox Students will participate in selected areas of home health care pharmacy. Students will develop skills in antimicrobial, internal nutrition, diabetic training, asthma therapy, and abdomen management. Students in a home setting and a skilled nursing facility (convalescent hospital) setting. CL PHARM

188.31. Pharmacy Consultation: Skilled Nursing Facility. (1-8) F, W, Sp. Prerequisite: Successful completion of all first-, second-, and third-year required course work and the comprehensive examination Sauer, DiGiambattista The student will work in the long-term care setting with the learning clinical and state regulations mandate frequency of drug regimen, review and pharmacy system operations. Projects may be DUR, resource in nursing personnel or a pharmacy director. 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, Okura, Dager Pharmacy students will participate in various operations within a home health care pharmacy. Areas include IPN, ophthalmic, and home antibiotic therapy. Clinical monitoring and recognition of drug interactions will be emphasized. CL PHARM

188.40. Veterinary Medicine—UCL. (1-8) F, W, Sp. Prerequisite: Successful completion of all first-, second-, and third-year required course work and consent of instructor. Sauer, Elos, Martin The student will participate in the teaching and dispensing activities of a pharmacy practice involved in veterinary medicine. Through observation and performance, students will develop and explore their roles as clinical pharmacists. CL PHARM

188.60. Supervised Study. (1-8) F, W, Sp. Staff Library research and directed reading during the academic year. Approval of the Director. CL PHARM

189.20. Research and Training Fellowship. (1-8) F, W, Sp. Prerequisite: Successful completion of all first-, second-, and third-year required course work. Sauer, Fox Students will participate in selected areas of home health care pharmacy. Students will develop skills in antimicrobial, internal nutrition, diabetic training, asthma therapy, and abdomen management. Students in a home setting and a skilled nursing facility (convalescent hospital) setting. CL PHARM

190.25. Pharmacology—Clinical Pharmacy. (1-8) F, W, Sp. Prerequisite: Successful completion of all first-, second-, and third-year required course work. Sauer, Fox Students will participate in selected areas of home health care pharmacy. Students will develop skills in antimicrobial, internal nutrition, diabetic training, asthma therapy, and abdomen management. Students in a home setting and a skilled nursing facility (convalescent hospital) setting. CL PHARM

198.00. Community Dentistry. (1-8) F, W, Sp. Staff Library research and directed reading during the academic year. Approval of the Director. CL PHARM

198.05. Technician—Dental Laboratory. (1-8) F, W, Sp. Prerequisite: Successful completion of all first-, second-, and third-year required course work. Sauer, Fox Students will participate in selected areas of home health care pharmacy. Students will develop skills in antimicrobial, internal nutrition, diabetic training, asthma therapy, and abdomen management. Students in a home setting and a skilled nursing facility (convalescent hospital) setting. CL PHARM

198.20. Supervised Study. (1-8) F, W, Sp. Staff Library research and directed reading during the academic year. Approval of the Director. CL PHARM

COMPUTER DENTISTRY

168. Community Health Methods. (2) W. Lecture 1 hour. Lab 3 hours. Silverstein Dental hygiene students work in the North Oakland community with the Chicago Health Youth Project staff. Students are assigned to area schools where oral screening is done in the home visit. DENT PUB HLTH

CRANIOFACIAL ANOMALIES

170.21. Craniofacial Function. (2) F. Prerequisite: Enrollment in postgraduate programs or craniofacial dentistry programs or consent of instructor. Lecture 2 hours. A. Inski

This course emphasizes those properties of the neurovascular system that modify the craniofacial morphology and structure. GR DEVEL

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

Diagnostic, preventive, 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 postgraduate programs or craniofacial 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 morphological anomalies and associated impaired functions and therapeutic needs of the individual. GR DEVEL

186.01. Abnormal Orofacial Development. (1) F, W. Sp. Prerequisite: Fourth-year standing or consent of instructor. Seminar and clinic 3 hours. Chiorici, Vargervik

The pathogenesis of jaw deformities, malocclusions, and speech disorders associated with congenital or acquired anomalies. Instruct in diagnosis and preventive and corrective treatment methods is given in the clinic. GR DEVEL

DENTAL AUXILIARY UTILIZATION

120. Use of Dental Auxiliaries. (V) Sp. Prerequisite: General Dentistry. (111) L. Lecture 1 hour for one half of quarter. Ino

Clinical Pharmacy/Community Dentistry/Craniofacial Anomalies/Dental Auxiliary Utilization
DENTAL HEALTH EDUCATION

150A. Intro to Dental Health Educa-
tion. (2) F. Lecture 2 hours. 
Ishida 

160. Community Dental Health. (2) W. Prerequisite: Dental Health Edu-
cation 150A. Lecture 2 hours. 
DeVinny 

161. Curriculum Planning & De-
sign. (3) F. Lecture 3 hours. 
M. Walsh 

163. Dental Auxiliary Utilization/Dental Health Education/Dental Hygiene

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

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

19B. C-A. Introduction to Dental Hygiene. (2-2-2) F, W, S. Lecture 2 hours. 
Heckman 

160C. Jurisprudence & Office 
Mgmt. (1, 2) W, S. Lecture 1 hour 
W, 2 hours S. 
Kern 

161. Orientation to Dentistry. (2) W. Prerequisite: Dental Hygiene 151. Lecture 2 hours. 
Poupart 

162A. Research Design. (2) F. Prerequisite: Dental Hygiene 152, Dental Public Health and Hygiene 121. Lecture 1 hour. 
Poupart 

162B. Research Design. (0-4) W, F. Prerequisite: Research Design. Lecture 0-4 hours. 
Poupart 

163A. B-C. Adv Clinical Dental Hy-
giene. (0-2, 0-2) F, W. Heckman 

169. Laboratory Project. (1-5) F, W. S. Lecture 1 hour. Lab 0-12 hours. 
W. Walsh 

180B. Advanced Concepts. (1) W. Prerequisite: Dental 4 and Dental Hygiene 2 students. Lecture 1 hour. 
Silver, Iro 

Advanced management of resources in 
the dental practice will be cover-
ded. The topics to be dis-
cussed are auxiliary personnel, time 
and directed effort. DENT PUBL HLTH 

180C. Practice Management. (1) W. Prerequisite: Dental 4 and Dental Hygiene 2 students. Lecture 5 hours. 
Weitelt 

A five-lecture course concentrating on 
business problem which imme-
diately impact on the practitioner-
performing private practice. It will fo-
cus on efficient and effective strat-
egies in allocation of time, money, 
critical effort, business effort (front 
ofice), and outside consultant ef-
fort. DENT PUBL HLTH 

DENTAL HYGIENE 

100. Clinical Dental Hygiene. (1-2) SS. Prerequisite: Dental Hygiene 155A-B, 159, and approval of the chairperson of the division. Clinic 4-6 hours. 
Staff 

Course provides additional clinical 
dental hygiene experience before en-
rolling into the second year clinic. DENT PUBL HLTH 

150A-B-C. Introduction to Dental 
Hygiene. (2-2-2) F, W, S. Lecture 2 hours. 
Heckman 

Role of dental hygienist in dentistry: 
emphasized on objectives and 
principles of prevention and 
treatment approach. Pre-authored 
materials include a course study 
and evaluation of student work. 
Introduction to anatomy, physiology 
and pathology of oral cavity is in-
cluded. DENT PUBL HLTH 

152. Introduction to Research. (1) 
W. Prerequisite: To be taken con-
currently with Dental Public 
Health and Hygiene 121. Lecture 1 hour. 
Poupart 

Concurrent with Dental Public 
Health and Hygiene 121, each stu-
dent will prepare an annotated bib-
lography on a research topic of 
choice. DENT PUBL HLTH 

155A-B. Intro to Clinical Dental 
Hygiene. (2-2) W, F, L. Lab 3 hours. 
Clinic 3 hours. W, Lab 6 hours. 
Beckman 

Laboratory and clinical experiences 
in patient evaluation, record keep-
ing, case presentation and in-
nstrumentation techniques for 
providing preventive-oriented dental 
hygienic treatment. DENT PUBL HLTH 

100A-B-C. Clinical Dental Hy-
giene Seminar. (0-2, 0-2) F, W, Heckman 

Clinical laboratory seminar to dis-
cuss clinical procedures and patient 
management skills of Dental Hy-
giene 155A-B. DENT PUBL HLTH 

159. Clinical Oral Propalxyses. (2) 
F. Prerequisite: Dental Hygiene 
155A-B Clinic 6 hours. 
Heckman 

Continuation of clinical exper-
ience from Dental Hygiene 155A-B and an additional dental hygiene 
curriculum in courses of 
moderate to advanced stages of 
periodontal disease. DENT PUBL HLTH 

100A-B-C, Clinical Seminar. (0-1, 
0-1, 0-1) F, W, S. Prerequisite: 
Concurrent enrollment in Dental 
Hygiene 109A-B-C Lecture variable. 
W. Walsh 

Lecture and seminar in clinical poli-
cies and procedures related to oral 
care treatment planning, periodontal 
maintenance therapy, clinical pho-
totyping and case presentations. 
Lectures will give case presentations 
during upcoming quarters. DENT PUBL HLTH 

188. Advanced Clinical Functions. 
(2) F. Lecture 1 hour. Lab 3 hours. 
W. Flombeck 

Study of the anatomical, physiologi-
ocal, pathological and periodontal 
aspects of the administration of 
local anesthetics, nitrous oxide- 
and oxygen sedation, and performance of 
special suction and students 
obtain didactic and clinical experi-
ences in these functions. DENT PUBL HLTH 

189. Community Health Clinic. 
(0-2-2) F, W, S. Prerequisite: Res-
earch Design. Lecture 2 hours. 
Poupart 

Community health clinic clinic 
where students are given oppor-
tunities to work with the poor 
and underserved. Students have the 
opportunity to complete a cap-
stone project. DENT PUBL HLTH 

190A-B-C. Clinic 9 hours F; 15 
hours W, S. 
Kerner 

Advanced clinical dental hygiene 
techniques including periodontal 
maintenance therapy, pain control, 
and restorative care in cases of 
moderate to advanced stages of 
periodontal disease. DENT PUBL HLTH 

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

A seminar for dental hygiene 
students enrolled in the Master's 
Program in Oral Biology with a 
special track in Dental Hygiene. In-
cluded are issues and research re-
lated to oral care in a mechan-
istic manner. Current literature 
will be critically reviewed by students 
under faculty supervision. 
Clinical, or guest lecturers. DENT 
PUBL HLTH 

202. Curriculum Theory and Design in 
Dental Hygiene. (3) F. Lecture 3 
hours. 
W. Walsh 

Analysis of theories and research 
in education, with an emphasis on 
curriculum development, teaching 
strategies and evaluation methods 
for use in planning educational pro-
grams in schools of dental hygienic. 
DENT PUBL HLTH 

203A-B-C. Current Topics II. (1-1-1) 
F, W, S. Prerequisite: UH 
201A-B-C. Seminar 1 hour. 
W. Walsh, Ishida 

A seminar for dental hygiene 
students enrolled in the Master's 
Program in Oral Biology with a 
special track in Dental Hygiene. In-
cluded are issues and research re-
lated to dental hygiene in a system-
atic manner. Current literature 
will be critically reviewed by students 
under faculty supervision, by 
clinical, or guest lecturers. DENT 
PUBL HLTH 

301. Teaching Practicum in Dental 
Hygiene Education. (1) F. F, W, 
Prerequisite: Dental Hygiene 202. 
Lab 3 hours. 
W. Walsh 

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

DENTAL JURISPRUDENCE 

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

The course broadens student insight 
into the legal problems and obliga-
tions of dental practice. DENT 
PUBL HLTH 

DENTAL PUBLIC HEALTH AND 
HYGIENE 

Basic principles of biostatistics. 
Introduction to concept of experi-
ence sampling. Sampling techniques, 
indices, independent and dependent 
variables. Critical review of re-
search patterns in preventive den-
tistry. DENT PUBL HLTH 

111. Problems in Dental Practice. 
(1) F. Lecture 1 hour. 
Wycoff and Staff 

Seminars designed to introduce the 
student to current social and 
professional problems in dentistry. 
Topics include idenitiffie, community, 
national, and professional 
problems and how they are met. 
DENT PUBL HLTH 

112. Ethics in Dentistry. (1) W. 
Prerequisite: Dental Public Health 
116 and concurrent enrollment in 
Dental Public Health and Hygiene 110. Lecture 1 hour. 
Pollick and Staff 

Basic principles of bioethics. Issues 
of informed consent, refusal, with-
holding, withdrawing treatment, 
costs and benefits, confidentiality, 
privacy, paternalism in the profes-
sional/client relationship. Codes of ethics. Other ethical dilemmas. 
DENT PUBL HLTH 

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

Lectures and lab in present an 
understanding of dental disease, 
fluoride history; evaluation indices; 
dental health and disease in chil-
dren; data analysis; dental screen-
ing in San Francisco schools; den-
tal public health. DENT PUBL HLTH 

120. Behavioral Sciences. (1) W. 
Lecture 1 hour. 
Gelber 

Introduction to the basic concepts, 
themes, and findings of the social 
sciences. Emphasis is on the appli-
cation of these concepts and models 
of reasoning to pressing social prob-
lems and the delivery of health ser-

cies. DENT PUBL HLTH 

121. Dental Practice Management. 
(1) W. Prerequisite: Dental Public 
Health and Hygiene 110, 111, 112, 
113. Lecture 1 hour. 
Pollick and Staff 

Dental Practice management and 
the health sciences. The dental 
activities on dental care. Basic principles of practice management. Role of den-
tal auxiliaries. Financial arrangements, legal responsibilities, inter- nal management. Emphasis will be placed on objective methods of system analysis and using the dental school as a case study. 

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 teeth and arch form to interarch relationships as seen on endodontic morphol- ogy. DENT PUB HLTH

175. Dental Public Health Practice & Clinic. (1-9) Su, F, W, Sp. Prerequis- ite: 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 Prevention Dental Service. The program will learn about marketing strategies, computer billing services, office management, and the delivery of preventive dental services. DENT PUB HLTH

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

A seminar course designed to pro- vide an overview of research de- signs, data collection strategies, methods of collecting and interpret- ing data, and assessment of threats to validity. Hypothesis development, protocol preparation, and grant writing will also be included. DENT PUB HLTH

DENTAL TECHNICS

185. Intro to Basic Dental Technics. (2) SNS. Lab 18 hours for three weeks. Hooks
Teach general orientation to the basic technics taught in the first year of dentistry such as morphosity, pros- thodontics, biomaterials, operative dentistry. RESTOR DENT

DERMATOLOGY

150. First-Year Coordinated Instruction—Medicine 131A-B, F, W. Lecture demonstration and section work devoted to the supervised examination of patients. Freyer
Clinical—Family and Community Medicine 110 includes lectures and case demonstrations on the examination and diagnosis of dermatological diseases. This includes instruction in physical diagnosis, history-taking, clinical and diagnostic and therapeutic procedures. 140.01. Advanced Dermatology Clerkship. (1/4 per week) Su, F, W, Sp. Prerequisite: Consent of instructor. Wintrow
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. (1/4 per week) Su, F, W, Sp. Prerequisite: Consent of instructor. Wintrow
Clinical clerkship in approved hospitals by special arrangement and approval of the dean and chairman of the department. DERMATOL
140.03. Advanced Dermatology Clerkship—Fresno. (1/4 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 Dermatol- ogy. (1/4 per week) Su, F, W, Sp. Prerequisite: Dermatology 140.01. Odorn, Wintrow, Resnick
Four-week block rotation. Students will work with inpatient dermatology residents and share primary respon- sibility for inpatients, hospital consultations and postnasal day care center patients. DERMATOL
140.05. Advanced Clinical Dermatol- ogy. (1/4 per week) Su, F, W, Sp. Prerequisite: Dermatology 140.04. Odorn, Wislon, Resnick
Students will function as clinical clerks with primary responsibility for patients seen in an outpatient clinical setting. Responsibilities will include diagnosis, patient manage- ment, and therapy of common cuta- neous diseases. Course duration is four to six weeks. 150.01. Dermatology Research. (1/4 per week) Su, F, W, Sp. Prerequisite: Consent of instructor. Wintrow
A research project under the direc- tion of a member of the faculty. DERMATOL
160.01. Clinical & Research Clerk- ship. (1-5) Su, F, W, Sp. Prerequisite: Consent of instructor. Wintrow
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 in- structor. Wintrow
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. Wintrow and Staff
Residents prepare and present case histories of patients at conferences, making reference to appropriate literature, special studies and labora- tory work. Conferences include discussions of developments in research by staff members and faculty from other UC de- partments 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
Malach and Staff
Recent literature in dermatology. Includes assigned reading with required reports which are evaluated by members of the faculty. DERMATOL
403. Specialty Seminar. (2) F, W, Sp. Seminar 2 hours. Wintrow and Staff
Seminars include discussions, re- quired reading, and reports on der-matology and related basic sciences such as morphology, myology, histo- pathology, and parasitology in relation to dermatological conditions; and medicine as it relates to the skin. DERMATOL
452. Off-Campus Clerkship. (1/4 per week) Su, F, W, Sp. Prerequisite: Consent of instructor. Wintrow
Seminars involve the revision of recent clinical cases of special inter- est. Cases are presented by the faculty and resident staff. DERMATOL
505. Research. (3) F, W, Sp. Lab 5 hours. Wintrow
Instructor in the conduct of re- search projects dealing with electron microscopy. Emphasis is placed on the histology 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 cell development and de- cay, immunology, biochemistry, pharmacology, biochemistry, genetics, and pathology. Over a three-year period, course covers all aspects of basic sciences relevant to dermatology. DERMATOL
507. Cutaneous Microbiology. (2) Su, F, W, Sp. Prerequisite: Consent of instructor. Lecture 2 hours. Aly
Course is designed to familiarize dermatology residents with the tech- niques of isolation and identification of dermatophytes, skin bacte- ria, and viruses. Occasional lectures on special topics are given. DERMATOL
Clinical care clerkship in approved hospitals by special arrangement and approval of the dean and chairman of the department. DERMATOL
508. Cutaneous Microbiology. (2) Su, F, W, Sp. Prerequisite: Consent of instructor. Lecture 2 hours. Aly
A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. DERMATOL
201. Hormone Structure & Func- tion. (3) F, W. Prerequisite: Basic course in biochemistry recommended. Consent of instructor. Lecture 3 hours. Cramer
Cytology and its applications to dermatology. Course covers current and historical aspects of the use of cytology in dermatology. DERMATOL
224. Neuroendocrinology. (4) F, W. Prerequisite: Consent of instruc- tor. Lecture 2 hours, Seminar 1 hour. Conference 1 hour. Course will not be offered for fewer than four students. R. Weiner, P. Goldsmith, Dallman
Mechanisms for regulation of endocrine function by the central nervous system and the influence of hormones on the nervous system are considered in view of anatomi-
101. Fundamentals of Epidemiology. 10. 3 lecture 2 hours. Seminar 1 hour.

Ernst, Petruski

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 reading and interpretation of research reports, and assessment of patient risk factors for use in clinical practice. EPID INTL HLTH

140.02A. Clinical Clerkship Abroad. (1%-7/week) Su, F, W, Sp. Prerequisite: Nine months of clinical work and Epidemiology and International Health 150.01 or consent of instructor. R. Goldsmith, Braveman

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 INTL HLTH

140.02B. Off-Campus Clerkship. (1%-7/week) Su, F, W, Sp. Prerequisite: Consent of chairperson and instructor. Petruski and Staff

Clerkships in clinical epidemiology in off-campus settings. EPID INTL HLTH

140.03. Epidemiology. (1%-7/week) Su, F, W, Sp. Prerequisite: Medicine 110 and consent of instructor. Gehler

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 responsibilities, may be arranged. EPID INTL HLTH

140.04. Refugee Screening Clinic-SFGH. (1%-7/week) Su, F, W, Sp. Prerequisite: Medicine 110, Pediatrics 110, and consent of instructor. De Lay

Diagnosis and treatment of refugees from culturally diverse populations. Clinical experience with variety of tropical diseases and medical problems in family practice associated with these cultures. Guided reading and possible attendance at Tropical Medicine-Diseases Clinics, UCSF and Leprosy Clinic, SMIC. EPID INTL HLTH

150.01. Medicine in Developing Countries. (1%-7/week) W. Prerequisite: Epidemiology and International Health 100 or consent of instructor. R. Goldsmith

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

150.02. Research Abroad. (1%-7/week) Su, F, W, Sp. 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 is available principally for epidemiological studies and for research in tropical medicine, medical parasitology, medical anthropology, and topics in international health. EPID INTL HLTH

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. Petruski and Staff

Survey and discussion of milestone papers in the knowledge base of the epidemiology of the major sites of cancer. Emphasis is on ecological and methodological aspects and applications to prevention. EPID INTL HLTH

170.05. Intro to International Health. (2) W. Lecture 2 hours. F. Dunn and Staff

Lectures and discussion to survey the history, organization, structural, major activities and topics that comprise the field of international health. EPID INTL HLTH

170.07. Leprosy Laboratory Project. (1-5) Su, F, W, Sp. Prerequisite: Consent of instructor. De Lay

A laboratory research problem of leprosy under the guidance of a member of the staff of the Leprosy Research Unit at San Francisco General Hospital. The unit's major research areas are the pharmacology, immunology, and chemotherapy of leprosy in animals and man. EPID INTL HLTH

170.08. International Health Policy: Isolation, Quarantine and International Health at the level of policy. EPID INTL HLTH

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

Survey of epidemiological and medical ecological approaches—historical and contemporary—to understanding of psychiatric disorders. EPID INTL HLTH

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

Mustacchi

Seminar on selected topics in occupationally-related diseases with specific emphasis on their epidemiology, preventive, and compensatory aspects. Discussion with emphasis on the concept of disability and of the physician's basic role and responsibilities in determining its level. EPID INTL HLTH

180.01. Tropical Medicine Clinics. (1-2) Su, F, W, Sp. Prerequisite: Epidemiology and International Health 100 and six months of clinical experience. Clinical 4-8 hours. Gilchrist, Grierson and Staff

Examination of patients in the Tropical Medicine Clinics under staff supervision. Topics include classification of the common infections with the Infectious Diseases Service; patients seen have both paraclinical and clinical aspects of tropical diseases. EPID INTL HLTH

180.04. Research Design. (2-3) SS, F, W. Prerequisite: Consent of instructor. Seminar 2 hours. F. Dunn and Staff

Lectures and discussion to survey the history, organization, structural, major activities and topics that comprise the field of international health. EPID INTL HLTH

180.05. Maternal & Child Health-De Vol Catr. (1-2) SS, F, W. Prerequisite: Consent of instructor. Arkohl

Lectures and discussion to review major factors affecting maternal and child health in developing countries, including the impact of poverty, nutrition, infectious diseases, maternal and infant health, organization of ambulatory care, setting of priorities, and utilization of local people as birth attendants. EPID INTL HLTH

180.07. Environmentally Induced Disease. (1) SS, F, W. Prerequisite: Consent of instructor. F. Dunn

Topics include pesticides, hazardous wastes, indoor and outdoor air pollution, natural disasters, pollutants, and the relationship of nutrition to environmentally induced diseases. EPID INTL HLTH

180.08. Epidemiology. (2) SS, F. Seminar 2 hours, plus student presentation. A. R. Moss

Topics in epidemiology and epide-miological methods from the public policy point of view, including risks associated with air pollution, and environmental and occupational carcinogenesis. Other topics may include decision of health policy and the politics of environmental epidemiology. EPID INTL HLTH

185.01. Tropical Medicine Lectures. (1) SS, F, W. Prerequisite: Epidemiology and International Health 101. Lecture 1 hour. F. Goldsmith

Lectures on the history, friends, and ambitions of tropical medicine, tropical diseases and their treatment. Emphasis will be on the selection of patients who are suitable for rehabil-itation and the interdisciplinary approach to rehabilitation. FAM CM MED

185.07. AIDS Family Practice Preceptorship. (1%-7/week) Su, F, W. Prerequisite: Consent of instructor. Rodnick

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

185.30A-B-C. Family Practice Clerkship. (1%-7/week) A, B, and C are offered in all of the following quarters: Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Consent of instructor. C. L. Galin

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

185.30A-B-C. Family Practice Clerkship. (1%-7/week) A, B, and C are offered in all of the following quarters: Su, F, W, Sp. Prerequisite: Consent of instructor.
140.40 A Nat in Salinas; B = SHH at Fort Ord; C = other sites.

Course strengthens students' clinical skills and exposes them to hospitals with family practice residency programs. Provides opportunities to participate in health care in rural and/or underserved areas. FAM CAM MED

140.40 Adv Inpatient Fam Med Cksp. (1½ per week) Su, F, W, Sp. Prerequisite: Senior medicine clerkship.

R. Goldschmidt, M. Johnson
The Family Practice Inpatient Service at SFPC provides a practice approach to hospitalized adult patients with diverse medical problems. Students function as members of the multidisciplinary inpatient team at a junior intern level. Afternoons are held daily. FAM CAM MED


Students receive practical training in emergency medicine, in emergency prehospital care, and in the care of the critically injured patient in the emergency room. Daily emergency medicine case conferences and occasional conferences augment clinical experience. FAM CAM MED

140.60 A-B-C-D. Clinical Geriatrics. (1½ per week) F, W, Sp. Prerequisite: Medicine 110 and Neurology 110 and consent of instructor. Barbaccia, Werdegard and Staff

A = San Francisco; B = Fresno; C = St. Mary’s; D = Other. Students supervised by attending staff are assigned to a variety of clinical settings: outpatient departments, adult day centers, nursing homes, acute hospital, also home care. Students will attend multidisciplinary care conferences, didactic sessions, geriatrics consultation rounds. FAM CAM MED

140.70. Primary Care Clerkships. (1¾ per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Neurology 110 and consent of instructor. Braveman, Drickey, Goldsmith, Petiti

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

150.01. Research. (1½ per week) Su, F, W, Sp. Prerequisite: Consent of instructor. Rodnick, Barbaccia and Staff

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


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

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

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

160.03. Family Practice Preceptorship. (1¼ per week) Su, F, W, Sp. Prerequisite: Medical student standing. Consent of instructor. Field work 4-12 hours.

Rodnick
Non-block assignment with a family physician in a private office or community clinic for a minimum of four hours a week. Pre-clinical students observe their preceptors in order to gain an introduction to family care. FAM CAM MED

160.04A. Introduction to Sports Medicine. (2) F. Prerequisite: Medical students only. Lecture 2 hours.

Rodner
Physical medicine ranging from youth athletes to senior participation. Emphasizes evaluation and prevention of injury, conditioning, and rehabilitation, directed at the community. Course consists of lectures and clinical field work. FAM CAM MED

160.04B. Advanced Sports Medicine. (2) W. Prerequisite: Family and Community Medicine 160.04A. Medical students only. Lecture 2 hours. Lab optional 1 hour.

Renner
Diagnosis, treatment, and rehabilitation of specific athletic injuries organized by anatomical areas, basically by body part. Emphasis on non-surgical treatment per European and American techniques. Therapeutic, diagnostic, and surgical services for children and adults with development disabilities. FAM CAM MED

160.05. Mission Community Btht Elective. (1–3) Su, F, W, Sp. Prerequisite: Consent of instructor. Lab 2–4 hours. Field work 2–8 hours.

D. Sanchez, D. Fink
Explores health care attitudes, health problems and health care resources in the multi-ethnic Mission Area of San Francisco. Students receive clinical assignments in one or more community health and social service agencies. Field experience is analyzed in seminars and tutorials. FAM CAM MED

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

Ransom, Braveman, Segal
Introductory principles of family medicine are discussed in class and discussion groups led by family physicians. Preceptorships with family physicians in private offices and community clinics are included to familiarize a family and present a case report. FAM CAM MED

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

Werdegard and Staff
Explores in systematic lecture readings and discussions of current issues in health care issues or special content areas related to family and community health. Topics are developed and prepared according to faculty student interests. FAM CAM MED

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

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

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

L. Crain
Resource overview with reading assignments and field observation of the spectrum of community and institutional services, including assessment, diagnostic, and behavioral therapy, and counseling services for children and adults with developmental disabilities. FAM CAM MED

170.04. Rehabilitation in Primary Care. (2) Su, F, W, Sp. Prerequisite: Consent of instructor. Lab 2–4 hours. Field work 2–8 hours.

Byl, Berrol
Counseling medicine and other health sciences students to the principles of rehabilitation and common therapeutic treatments. Emphasis will be on the development of a basic theoretical framework on which the student can build clinical rehabilitation skills in practice. FAM CAM MED

170.05. Rehabilitation Medicine. (2-5) F, W, Sp. Prerequisite: Consent of instructor. Field work 4-8 hours.

L. Crain
Through individualized arrangements, courses provide an introduction to preceptorships in rehabilitation services for children and/or adults with chronic or disabling problems. FAM CAM MED


Braveman, Koreck, Vasquez-Vega
A practical course designed to develop basic skills in overcoming cultural barriers to health care for Spanish-speaking persons. FAM CAM MED


Guttentag
Exploration of the theoretical premises of Western epidemiology: relationships to other disciplines, such as anthropology, demography, and cultural attitudes; trends of the holistic approach; dynamics of patient-physician relationships; operational concepts such as the clinical entity. FAM CAM MED


Guttentag
An exploration of the comprehensive role of the physician as provider of long-term health care. Students will learn to recognize priorities in patient care, with an emphasis on patient, as one of a whole person. FAM CAM MED


Braveman, Koreck and directed reading under supervision of a member of the faculty of the approval of the director of the department. FAM CAM MED

475.01. Western Medical Attitude. (1) F, W, Sp. Prerequisite: Consent of instructor. Lecture 1 hour.

Guttentag
An exploration of the theoretical premises on which Western medicine rests: its relationship to other disciplines, the structure of patient-physician relationships, its operational concepts, such as optimal versus inadequate or superficial examinations, the concept of the clinical entity. FAM CAM MED

475.02. Theoretical Problems of Cln Med. (1–3) F, W. Prerequisite: Consent of instructor. Lecture and seminar 1–3 hours.

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


Lecture-seminar on the basic concept of preventive medicine, the integration of preventive medicine into clinical practice, the evaluation of community health care, and the role of the practicing physician in influencing policies on population health. FAM CAM MED


Braveman, Sanchez, Koreck
An introduction to demographic, political/economic, anthropological, and sociologic issues of importance for the health of diverse Latino subcultures in the US. FAM CAM MED


Ranis
Lecture-seminar format is used to cover most aspects of the organization and function of the health care system. Students will study managed care, managed-manpower, hospitals, ambulatory care, planning regulation and control, government programs and health services research. FAM CAM MED


Braveman, Koreck and directed reading under supervision of a member of the faculty of the approval of the director of the department. FAM CAM MED

68 Family and Community Medicine

69 Family and Community Medicine
GENETICS

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

In-depth analysis of genetic mechanisms in selected procarceous, eucaryotes. Topics include genetic exchange (conjugation, generalized and specialized transduction, transformation), recombination (general, site-specific, " illegitimate"), mapping, mutagenesis (in bacterial, yeast, and mammalian cells), mobile genetic elements, gene expression, molecular biology, cell cycle, and position effects. BIOCHEM

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

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

220. Current Topics. (4) F, W, Prerequisite: Consent of graduate adviser. Seminars. Ikemizawa and Staff

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


See also Biochemistry core offerings.
R. Lim
The course is designed to stimulate group discussion on the principles of emergency medical care. Topics include transportation, disaster planning, triage, cardiphrenic resuscitation, management of shock, head and neck injuries, as well as special problems related to dentistry. STOMATOLOGY

171. Physical Diagnosis. (2) Su. Prerequisite: Enrollment in a postgraduate specialty program or consent of instructor. Lecture 2 hours. Zien
Prepared to prepare the oral surgeon to conduct a physical examination as a preliminary evaluation before performing oral surgical procedures. Techniques of examination are demonstrated and practiced in the classroom; examination of pathologic conditions is conducted bedside. STOMATOLOGY

172. Oral Biology Conferences. (1) W. Prerequisite: Postdoctoral standing. Silverman, Ware and Staff
Conferences include case presentations by interns and residents, and seminars covering selected subjects in oral biology relevant to clinical and preventive dentistry. STOMATOLOGY

HUMAN DEVELOPMENT AND AGING

200. Off-Campus Study. (0) W, F. Sp. Prerequisite: Approval of graduate adviser.
Staff
Full-time graduate study in the Human Development and Aging program through the intercampus exchange or consortium program. PSYCHIATRY

Bliwise, Lieberman, Rosow, Kifer
Psychological and sociological theories and methods in the study of the human life cycle. Topics include models of development, life course, adult socialization, aging and social stratification, intergenerational issues, cognition, historical and demographic perspectives, personality, stress, transitions, age-comparative coping, and psychopathology. PSYCHIATRY

Students work on their own research interests in terms of problem formulation, research design, and/or operationalization. Emphasis depends on the student's individual needs. PSYCHIATRY

204. Personal Development. (2) F. W. Sp. Prerequisite: Consent of instructor. Lecture 2 hours.
Kiefer
Representative works from behavioral science literature and world poetry and prose are brought to light in the study of personality development in adult life. Comparison of the two fields is made with the development of personality in some personal relations with social, historical, and psychological changes. PSYCHIATRY

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

207. Methods of Survey Research. (3) F, W. Sp. Prerequisite: Consent of instructor. Lecture 3 hours, plus field work.
Pearlin
Course covers the major tasks of survey research. Topics include conceptualization, the development of indicators and measures, the construction of questionnaires, sampling, field testing, interviewing, and analysis are covered. PSYCHIATRY

208. Psychosocial Change in Adulthood. (3) F, W. Sp. Prerequisite: Consent of instructor. Lecture 3 hours.
Fiske
An advanced course for students familiar with social sciences and clinical studies of adult change. Emphasis will be on in-depth critiques of study, process, stress, adaptation, and other conceptual models. PSYCHIATRY

210. Socialization to Old Age. (3) F, W. Sp. Prerequisite: Consent of instructor. Lecture 3 hours.
Fiske
A seminar in adult socialization theory, with prospective socialization to an aged role as a special concern. Major issues involve norms for older people, the structure of socialization situations, and the pressures of normal aging on the elderly. The collection and analysis of empirical data, and the development of conceptual and methodological models. PSYCHIATRY

250. Research Project Seminar. (6) F, W, Sp. Prerequisite: Graduate standing in Human Development and Aging and consent of instructor. Seminar 4 hours. 6 hours additional research work.
Bliwise, Roseman and Staff
Students are required to conduct individual research projects. Seminar is organized around methodological issues including reliability, validity and development of scales and measures, and specific problems related to formulation of goals of the studies and collection and analysis of data. PSYCHIATRY

249. Special Studies. (2-8) F, W. Sp. Prerequisite: Consent of instructor.
Staff
Students select special problems to investigate on an individual or collaborative basis. These studies may be conducted within the laboratory and in the computer-aided and analysis of empirical data. PSYCHIATRY

Staff
PSYCHIATRY

296. Dissertation. (0) F, W. Sp. Prerequisite: Admission to candidacy and permission of the graduate adviser. Lecture 2 hours, given in alternate weeks.
Staff

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

HUMAN SEXUALITY

159. Human Sexuality. (1/4) & Sp. Lecture 1 1/2 hours. Offered in alternate years. Offered 1968-69. R. Day
Social, behavioral, and clinical aspects of human sexuality are covered in a series of lectures. Lectures will cover recent didactic material. PHARMACY

INTERDEPARTMENTAL STUDIES

100. Cell & Tissue Biology. (10) F. Lecture 7 hours. Lab 4 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 to function. The histology of endocrine and reproductive systems is covered in a form extended for students in the School of Medicine and for beginning graduate students. ANATOMY & BIOCHEM

135. Reproduction Growth & Devel. (3) F. Lecture 3 hours.
Bliwise, Bliwise, and Staff
Course is designed to trace the biological mechanisms concerned with conception, development of the fertilized ovum, and fetal life, and postnatally to the maturity. OB GYN RS

LABORATORY MEDICINE

140.01. Clinical Pathology. (1 1/4 per week) F, W. Prerequisite: Consent of instructor. One year of medical school and consent of instructor. Gottfried
Laboratory sessions and seminars on aspects of clinical chemistry, hematology, microbiology, blood banking, and serology are held in the clinical laboratories at UC and SFGH. LAB MED

140.05. Clinical Pathology—13MC. (1 1/4 per week) F, W. Prerequisite: Medicine 110 and consent of instructor. Gottfried
Gottfried
Laboratory sessions and seminars on aspects of clinical chemistry, hematology, microbiology, blood banking, and serology are held in the clinical laboratories at SFGH. LAB MED

Morton, Gottfried, Noll
Residents prepare summaries of selected clinical cases which present problems in correlation of clinical and laboratory data. Residents and faculty discuss relevant literature with special reference to technical aspects of tests discussed and interpretation of results. LAB MED

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

MEDICAL INFORMATION SCIENCE

159. Laboratory Project. (1-5) F, W, Sp. Staff
A laboratory research project under directed supervision. Consent of instructor, with the approval of the chairman of the department. MED INF SC

201. Content & Format of Information. (2) W. Prerequisite: Medical Information Science 250 or equivalent. Lecture 2 hours. Whiting-O’Keefe
Consideration of the uses of medical information and its content, organization, and format to serve these uses. Particular emphasis is on the medical record systems (both computerized and manual) as a medium of medical and health information communication. MED INF SC

202. Development of Medical Information Systems. (2) W. Prerequisite: Medical Information Science 250. Staff
Lecture 2 hours. Starkweather
A survey of past, present, and future medical information systems. Methods of design and development. Advantages of various hardwared and software choices. The use of existing tools and modular elements in the assessment of needs in different settings. Meeting user needs for control and integration of computer-based services. MED INF SC

210A. Systems Programming. (4) F. Prerequisite: Consent of instructor. Lecture 3 hours. Lab 3 hours.
Wolf
Programming languages and processors in computer system architecture and organization; operating systems; programming languages and their design. MED INF SC

210B. Software Engineering. (4) W. Prerequisite: Medical Information Science 250 or equivalent, or consent of instructor. Lecture 3 hours. Lab 3 hours.
Langley
Programming languages; software engineering concepts; specification and design of software systems; software reliability. MED INF SC

72 Hospital Dentistry/Human Development and Aging

73 Human Sexuality/Interdepartmental Studies/Laboratory Medicine/Medical Information Science
222. Systems Analysis of Medical Care. (4) § W. Lecture 4 hours.
Stimson
Describes the use of operations research and systems analysis as aids to design, management or evaluation of medical systems. Application of operations research techniques to hospitals and other health care facilities is studied within a systems framework. MED INF SC 225.
290. Dissertation. (0) § 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. MED INF SC 225.
Design of Systems. (2) § W. Prerequisite: Consent of instruc-
tor. Lecture 2 hours.
Blos
The design of various medical information systems is examined. Successful components of the systems will be studied in detail, with respect to cost, performance, and acceptability. Field trips to existing systems will be made. MED INF SC 240. Data Base Management. (3) § W. Prerequisite: Medical Information Science 210B or equivalent, or consent of instructor. Lecture 3 hours.
Staff
Course covers techniques for logical and physical data base organization, including database data, approaches to large scale data base management, security and privacy, data description languages, and query languages. MED INF SC 247. Introduction to Med Info Sci. (2) § F, W. Seminar 2 hours.
Blos
Course covers the treatment of a number of formal and conceptual tools which form the basis of information science, such as the nature of information and communication, and the problem of representation of knowledge. MED INF SC 250. Research. (1-8) § F, W. Sp. Staff
Staff
Selected topics in medical information science. Subjects chosen will range from special areas of medical informa-
tion science to hardware, software, and systems studies. MED INF SC 290.
110. Medicine Core Clerkship—UC—SPGH-VA-MZ-VAP/VMC-L (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 131A-B-C and 132A-B-C. Open to UCSF students only.
UC Papadakis, SPGH Hober, VA Tien, MZ Woebier.
VAP/VMC Freeman, L Miller
Students are part of the ward team with the house staff and faculty.
Bedside instruction in history-taking, physical diagnosis, selected seminars from general medicine, including the psychiatric aspects of medicine, and presentations and demonstrations of relevant cases. MEDICINE 110.
11. Mechanisms of Disease. (1.5 per week) Sp. Prerequisite: Fourth-year standing in medical school.
Kane
An in-depth study of the mecha-
nisms involved in serious disease processes. Emphasis on acquisition of basic science information by phar-
macists and on the logical develop-
ment of pharmacology and planning of intervention based on principles and current information from basic science. MEDICINE 112.
11. Responsibilities of Med Prac. (1.5 per week) Sp. Prerequisite: Medicine 110 and Surgery 110. Lo
Course will discuss economic forces, ethical and legal issues, social and cultural factors, and govern-
mental policies affecting medical practice. It will define professional responsibilities and the context of these influences and the resulting forms and trends in medical prac-
tice. MEDICINE 113A-B-C. Intro to Clinical Medi-
cine. (1-2.5) § F, W, Sp. Prerequisite: First-year standing or con-
sent of instructor. Lecture 1 hour. Section 2 hours. Section 4 hours F, W; 4 hours Sp.
B. Lewis
Interdepartmental instruction in: interviewing skills and techniques; basic physical examination and interpretation of symptoms relating to locomotor system, eye, ear, upper respiratory tract, and skin; and so-
cial responsibilities of medical prac-
tice. Lectures, clinical demonstrations, conferences, preceptorship in ambulatory care setting. MEDICINE 132A-B-C. Intro to Clinical Medi-
cine. (0.5 per week) Su, F, Sp. Prerequisite: Anatomy 100, 102, and 103; Biochemistry 100A-B; Medicine 121A-B-C; Microbiology 100A and 100B (may be taken concurrently); Pathology 101 and 102 (may be taken concurrently); Physiology 100 and 101; or consent of instructor. Lecture 5 hours, F, W; 1 hour Su, F; 2 hours F, W; 2 hours work 4 hours F, Sp. 6 hours W.
B. Lewis
Continuation of interdepartmental course on pathophysiology of disease and techniques of collecting and as-
sessing clinical data, including history-tak-
ing, physical examination, selected seminars from general medicine, including the psychiatric aspects of medicine, and presentations and demonstrations of relevant cases. MEDICINE 140.01. Acting Internship—UC—VA—SPGH-VA-MZ (1.5 per week) Su, F, W, Sp. Prerequisite: Completion of Medicine 110.
UC Papadakis, SPGH Hober, VA Tien, MZ Woebier, L Miller.
VAP/VMC Freeman, SPGH Hober
Students are assigned patients on the staff and private wards. They are supervised by attending and resi-
dent staff. They present patients on ward rounds, assist with pro-
drugs, and attend specialty confer-
ences. All students are involved.
MEDICINE 140.02. Off-Campus Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Approval of third- and fourth-year coordinator. Papadakis
Clinical clerkship in off-campus training hospitals by department.
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.
Jensen, Tager
Clinical exposure to inpatients and outpatients. Students will see patients and consults with clinicians infected diseases. Lecture, clinical demonstrations, conferences, preceptorship in ambulatory care setting. MEDICINE 140.05. Cardiology—PMC. (1.5 per week) Su, F, W, Sp. Prerequisite: Metric 110 or consent of instruc-
tor.
Gragoratos
Students participate in various clinical cardiological activities and at- tend related teaching conferences and patient rounds. They are in-
structed in the cardiological examination and participate in daily and weekly teaching sessions. MEDICINE 140.07. Oncology-SFGH. (1.5 per week) F, W, Sp. Prerequisite: Medicine 110.
R. Cohen
Under supervision of attending and house staff, students review pathol-
ogy and relevant clinical laboratory data, interpret bone marrow slides, and work up and present patients on the wards and outpatient clinics. Participate in conferences and seminars. MEDICINE 140.12. Geriatrics—VA. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110.
Longo
Students are assigned patients on the Geriatric Evaluation Unit team. Students will have su-
2,021. Private Practice. (1.5 per week) F, W, Sp. Prerequisite: Medicine 110. Approval of third- and fourth-year coordinator. Stud-
ent must make arrangements with private-practice physician.
Papadakis
Weekly experience with an intern-
2,022. Pathophysiology-Car-
cinomas. (0.5 per week) F, W. Prerequisite: Medicine 110. Pediatrics 110 or Surgery 110. Minimum class size 20.
Sebastian, Dohrmann
Pathophysiology of neoplastic disease. Students learn methods of histological examination, histological examination, electron microscopy, critical literature analysis courses. Lecture, laboratory, clinical laboratory, group discussion of students' research of controversial topics. MEDICINE 2.023. Pathophysiology-Hematology. (0.5 per week) F, W. Prerequisite: Medicine 110. Hematology 110 or Surgery 110. Minimum class size 15.
Sipstein, Steiseng, Dallas, Kies

74 Medical Information Science/Medicine

75 Medicine
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 literature critically. Reading lists. MEDICINE

140.22C. Pathophysiology-Neural Disease. (6) F. Sp. Prerequisite: Medicine 110; Pediatrics 110; Surgery 110. Enrollment limited. Sebastien, Sleisinger. Intensive review of renal physiology and pathophysiology. Two seminars per day. Two-volume syllabus of journal articles provided. Students participate in discussions and learn to evaluate literature critically. MEDICINE

140.22D. Pathophysiology-Oncology. (6) F. W. Sp. Prerequisite: Medicine 110, Pediatrics 110 or Surgery 110. Sleisinger, Leipold. 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 literature critically. Reading lists. MEDICINE

140.22E. Pathophysiology-Dermatolymph Disease. (6) F. W. Sp. Prerequisite: Medicine 110, Pediatrics 110 or Surgery 110. Sleisinger, Leipold. 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 literature critically. Reading lists. MEDICINE

140.22F. Pathophysiology-Therapeutics. (6) W. Prerequisite: Medicine 110 or Pediatrics 110 or Surgery 110. Minimum class size 15; maximum class size 30. Sebastian, Berti. Emphasis on applied pathophysiology and clinical therapeutics. Lectures and case-oriented workshops presenting the principles of therapeutics with application to specific therapy of common cardiovascular, respiratory, gastrointestinal and infectious diseases as well as diabetes. MEDICINE

140.26. Critical Care–M2. (1/2 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and fourth-year standing. Udley, Woehler. Primary emphasis is on the management of patients in Coronary Care Unit and Intensive Care Unit. Includes teaching in the use of cardiac monitor, ventilator, and dialysis, and related aspects of critical care medicine. MEDICINE

140.27. Cardiopulmonary–C3. (1/2 per week) Su, F, W, Sp. Prerequisite: Medicine 110. Enrollment limited. Sebastien, Sleisinger, Baron. Emphasizes biochemical and physiological concepts that determine nutritional management of problems in clinical medicine. Students attend lectures on cardiopulmonary and presentations and are encouraged to evaluate literature critically. Reading lists. MEDICINE

140.28. Infections Disease–SFGH. (1/2 per week) Su, F, W, Sp. Prerequisite: Medicine 110. J. Mills. Course includes active consultation service arranging three new consults per day. Daily patient rounds; weekly combined infections disease/pediatrics mini-rounds and infectious diseases rounds. Two half-day clinics in cardiology and medical clinics and seminars, and teaching exercises of endocrinology and metabolism. Lecture topics: history and treatment of infections disease and pathology. MEDICINE

140.29. Hematology–UC. (1/2 per week) Su, F, W, Sp. Prerequisite: Medicine 110. Buehler, Katz. Students based at Moffit Hospital, twelfth floor south, act as assistants to faculty to discuss clinicology as well as hospitalized endocrine patients; attend endocrine and metabolic clinics and seminars, and teaching exercises of endocrinology and metabolism. Lecture topics: history and treatment of infections disease and pathology. MEDICINE

140.32. Pulmonary Disease–UC. (1/2 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and fourth-year standing. Four half-day clinics in pulmonary and cardiology rounds with special emphasis on radiology, cardiac medicine, and allergy. Four half-day clinics in cardiology and medical clinics and seminars. MEDICINE

140.33. Coronary Care at Moffit/Long. (1/2 per week) Su, F, W, Sp. Prerequisite: Medicine 110. C. A. Anthony, K. A. Sheikh. Students work as interns in the Coronary Care Unit and attend all regular teaching conferences and seminars. MEDICINE

140.34. Renal Disease–UC. (1/2 per week) Su, F, W, Sp. Prerequisite: Medicine 110. Cogan. Group, consisting of residents and interns, followed in the Renal Service at UCSF. AE. M. White, S. E. S. R. G. B. C. Becker. Students evaluate patients in hospital and clinic settings. Special emphasis is given to consultation presentations from the General Surgery and General Medicine Clinics. MEDICINE

140.35. Cardiology–SFGH. (1/2 per week) Su, F, W, Sp. Prerequisite: Medicine 110. Cheftlin, Rapaport, N. Goldschlag, Morelli, Dohrmann, Sung. Students see patients in consultation on wards and clinics, read electrocardiograms, review cases with cardiac consultants, and attend all seminars and conferences. MEDICINE

140.36. Emergency Medicine–UC. (1/2 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and fourth-year standing. Schumaker. Students serve 40 hours per week as externs working and sharing responsibilities with residents and interns. Lectures and emergency medicine conferences are held but emphasis is on bedside instruction. MEDICINE

140.37. Emergency Medicine–H. (1/2 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and fourth-year standing. Simon. Students serve 40 hours per week as externs working and sharing responsibilities with residents and interns. Lectures and emergency medicine conferences are held but emphasis is on bedside instruction. MEDICINE

140.39. Pulmonary Disease–UC. (1/2 per week) Su, F, W, Sp. Prerequisite: Medicine 110. Buehler, Katz. Students examine patients in Chest Clinic, on the wards and in RCU, and participate in pulmonary and cardiology rounds. They participate in pulmonary function and radiology conferences. They present in pulmonary and cardiology rounds. AE. M. White, S. E. S. R. G. B. C. Becker. Students are responsible for evaluation and presentation of gastroenterological patients on medical and surgical wards. Work-up is thoroughly discussed with gastroenterology staff. Students may also observe GI techniques including sigmoidoscopy, colonoscopy, endoscopy, liver biopsies. Conferences held weekly in conjunction with Surgery. Pathology and Radiology. MEDICINE

140.40. Toxicology & Occup Med. (1/2 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and fourth-year standing. AE. M. White, S. E. S. R. G. B. C. Becker. Students evaluate patients in hospital and clinic settings. Special emphasis is given to consultation presentations from the General Surgery and General Medicine Clinics. MEDICINE

140.43. Rumenology & Immunology–VA. (1/2 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and fourth-year standing. AE. M. White, S. E. S. R. G. B. C. Becker. A four- to twelve-week introduction to rumenology and immunology, offering both clinical and laboratory experience. The student will participate in inpatient and outpatient care and take part in didactic and laboratory sessions of the research program. MEDICINE


Soperstein, Arnaud. An introduction to the diagnosis and treatment of endocrine-metabolic diseases. Areas covered are those endocrinopathies involving the
Medicine 132A-B. Lecture 1 hour.
M. Goldman Instruction in basic electrophysiologic principles and interpretation of electrocardiograms. MEDICINE. 170.05. EKG Interpretation. (1) W. S. Prequisite: Medicine 132A. Lecture 1 hour.
Rapaport Review of physical principles of electrocardiography and clinical application of electrocardiographic interpretation. MEDICINE.
170.07. Non-Invasive Lab Cardiology. (1) Sp. Prerequisite: Medicine 170.05. Lecture 1 hour.
Rapaport Fundamentals of non-invasive laboratory cardiology procedures will be discussed. Techniques and role of electrocardiography, stress electrocardiography, Holter monitoring, phonocardiography, and carotid sinus reflexes will be covered. Students should be familiar with this material. MEDICINE.
Coa, Nestle Focus on research interests of UCSF faculty. Provides broad introduction to campus research, primarily reading and analyzing research publications. Speaker's talk includes discussion of personal background, present research, background description on research area, and discussion of future research plans.
170.10. Intro to Occupational Medicine. (1) W. Lecture 1 hour.
La Dou Practice of occupational medicine as related to the presentation, recognition, and treatment of disease and injuries resulting from employment. Interaction of economic, political, and social forces bearing on worker health problems. Emphasis is given to the enterprise of the community and consumer. MEDICINE.
La Dou Workshop concerned with environmental medical problems. MEDICINE.
La Dou Course covers the physiology and psychology of normal aging, health care problems of the elderly, including the special medical problems of rehabilitation medicine, use of medications, health care policies, multidisciplinary geriatric health care teams, and sexuality in old age are reviewed. MEDICINE. 170.15. Art and Science of Health Services Research. (2) F. Prerequisite: Graduate training in applied health services research, e.g., public health, medical sociology, health economics, preventive medicine, epidemiology. Luft This course covers issues from the design and writing of grant proposals to the analysis of demographic techniques, presentation of results, publication strategies, and project management. Students should be involved in a dissertation or major project. MEDICINE.
180. Industrial Toxicology. (2) Su, F, W, Sp. Prerequisite: Consent of instructor. Lecture 2 hours.
Rapaport To provide understanding of the basic principles of toxicology as related to workplace environment and workers' health. Emphasis is on chemicals including heavy metals and pesticides, methods of surveillance, principles of acute and chronic toxicity testing. Includes lectures, student presentations, and discussion. MEDICINE.
180.02. Theory of Biomedical Ethics. (1-2) W, Sp. Prerequisite: Graduate standing and consent of instructor. Seminar 2 hours. Paper required for 2 units.
Hassel, E. Ethics: A brief introduction to Bioethics, followed by a case-oriented approach to the understanding and use of those basic biocultural principles necessary to understand and resolve frequently encountered biocultural dilemmas in medical practice.
188.01. Nation's Health. (2) F, W, 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 120 and Sociology 220. MEDICINE.
P. Lee, Hafon An introduction to the application of policy research methods to current policy issues; an interdisciplinary seminar. MEDICINE.
188.03. Economics of Health. (2) F, W, Sp. Lecture 2 hours.
P. Lee, Luft This course will demonstrate how economic concepts and tools can be applied to problems in the health care system. Specifically: measurement of output; demand for care, insurance, and incentives; supply of physicians' services; health sector planning; and an alternative view of the. MEDICINE. 188. Supervised Study. (1-5) Su, F, W, Sp. Prerequisite: Consent of instructor and approval of third- and fourth-year coordinator.
Papadakis A supervised research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. MEDICINE.
199. Laboratory Project. (1-5) Su, F, W, Sp. Prerequisite: Consent of instructor and approval of third- and fourth-year coordinator.
Rapaport A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. MEDICINE.
P. Lee, H. Lipton Examines the health status of the aged in the U.S. and of relevant biomedical, behavioral, sociocultural and environmental factors. Social, cultural and economic factors affecting the organization, financing, and delivery of health care to the older population are examined. MEDICINE.
400. Medical Staff Seminars. (2) F, W, Sp. UC R. K. Root, SFCH Rapaport, VA Siegelsen Interns and residents prepare and present case histories of patients at medical staff conferences including references to the literature, laboratory work, and special studies. Faculty members and visiting professors discuss the cases and present new developments to their respective fields of medicine. MEDICINE.
401. Interdepartment Clinical Conference. (4) F, W, Sp. R. K. Root A series of discussions is conducted in the various subspecialties of internal medicine. Students take an active part in the presentation and discussion of the problems involved, including reference to the literature, clinical demonstrations, and directed student participation. MEDICINE.
402. Medical Library Seminar. (1½-2) F, W, Sp. VA Siegelsen Seminars on recent literature in internal medicine, with assigned reading, required reports, and evaluation of presented material by interns, residents, and faculty. MEDICINE.
403. Specialty Seminar. (2) F, W, Sp. R. K. Root Seminars are conducted in the fields of gastroenterology, hematology, cardiology, electrocardiography, endocrinology, nephrology, dermatology, pulmonary medicine, allergy, rheumatology, laboratory medicine, occasional formal reports and patient presentations are required. MEDICINE.
404. Specialty Seminar. (2) F, W, Sp. SFCH H. Williams and Staff Seminars are conducted in cardiology, hematology, gastroenterology, infectious diseases, metabolic diseases, and pathology, involving discussions, required reading, and reports. MEDICINE.
405. Specialty Seminar. (4) F, W, Sp. VA Siegelsen Seminars are conducted in cardiology, electrocardiography, hematology, gastroenterology, radiology, fluid and electrolyte balance, endocrinology, and nephrology. Introduces students to the teaching of clinical and surgical conferences, treatment board, dermatology, cardiology, and nephrology residency conference. MEDICINE.
406. Research Elective. (1-10) Su, F, W, Sp. UC R. K. Root, SFCH, Rapaport, VA Siegelsen Interns and residents prepare and present case histories of patients at medical staff conferences including references to the literature, laboratory work, and special studies. Faculty members and visiting professors discuss the cases and present new developments to their respective fields of medicine. MEDICINE.
407. Clinico-pathologic Conference. (1-4) F, W, Sp. SFCH H. Williams, VA Siegelsen Residents and faculty members actively participate 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 correlation, and laboratory work. MEDICINE.
408. EKG Interpretation. (2) Su, F, W, Sp. Sadowski Seminars (individual instruction) for residents in medicine and trainees in cardiology by cardiac consultants in the interpretation of all electrocardiograms and fluorosangiograms taken at UC. MEDICINE.
450. Clinical Medicine. (10) Su, F, W, Sp. SFCH H. Williams, UC R. K. Root Residents are responsible for the care of patients under the direction of the attending staff, and participate in student teaching. Third-year, senior, chief and junior residents provide teaching and consultation service in the hospitals and outpatient clinics. MEDICINE.
451. Clinical Medicine-MZ. (10) Su, F, W, Sp. Woebker Residents are responsible for the care of patients under the direction of the attending staff, and participate in student teaching. Senior residents provide responsibility for the instruction and evaluation 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.
J. Goodman Lectures on the fundamentals of immunology. Small group seminars on patient-related problems in this field. MICROBIOL.
100B. Medical Microbiology. (6) Prerequisite: Microbiology 100A-B. Lecture 3 hours. Lab 3 hours. Conference 1 hour. Equivalent to Microbiology 121B.
W. Levinson Pathogenesis of infection by bacterial, viral, parasitic, and fungal agents. Mechanisms of diagnosis, treatment, and epidemiology of diseases. Laboratory demonstrations. Emphasis on the medical importance of the principles of immunity and the clinical relevance of materials studied. MICROBIOL.
116. Microbiology and Immunology in Dentistry. (6) W. Lecture 4 hours. Lab 6 hours.
Feltin, DeFranco Comprehensive presentation of microorganisms including bacteria, fungi, viruses, fundamentals of infection and resistance, immunity, immunologic defense mechanisms, and abnormal states and demonstrations on indigenous oral flora and applications of microbiology in dentistry. MEDICINE.
120. Microbiology in Pharmacy. (3) Lecture 3 hours. Lab 3 hours. Lecture Fundamentals of microbiology for pharmacy students with emphasis on mechanisms of diseases production by bacteria, fungi and viruses. Antibiotics, mode of action and genetics, chemotherapeutic agents, hospital infections, immunization. MICROBIOL.
121. Immunology. (2) Sp. Prerequisite: Biochemistry 120A-B. Re-
198. Supervised Study. (1-5) § Su, F, W, Sp. Prerequisite: Consent of instructor.
Staff
Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. MICROBOL

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

201. Cellular Immunology. (3) F. Prerequisite: General knowledge of immunology and biochemistry. Lecture 2 hours. Offered in alternate years. Offered 1988-89.
DeFranco, J.W. Goodman
Course covers chemical and genetic basis of immunoregulatory properties of immunocompetent cells, cell interactions in the immune system, and regulatory circuits. MICROBOL

204. Immunology of B Cells. (3) § F. Prerequisite: General knowledge of immunology. Lecture 3 hours. Grosschedl
Course will cover the molecular biology of immunoglobulins and the cellular properties of the humoral immune system. MICROBOL

208. Molec Biology of Animal Viruses. (3) § F. Prerequisite: General knowledge of nucleic acid structure and chemistry and multiplication of viruses. Lecture 1½ hours. Seminar 1½ hours. Offered in alternate years. Offered 1988-89.
Varmus, Ganem, J.M. Bishop, Levinson
The nature of viruses: dynamics of virus-cell interaction with emphasis on animal virus systems; control of expression of virus-specific information in virus and temperate infections, and role of viruses in malignant transformation of cells. MICROBOL

J. Goodman and Staff
Small group tutorial in which topics and correlative reading will be selected by students for discussion under the guidance of faculty members. MICROBOL

210. Research Problems in Mycolgy. (1-5) § F. Prerequisite: Microbiology 100A, 100B and 206. Lab and conference.
Hilde
Participation in research problems in a microbiology laboratory. This is not a structured laboratory methods course, but rather a practical research experience involving basic research with pathogenic fungi. MICROBOL

215. Laboratory Rotation. (2-4) § F, W, Sp. Prerequisite: Consent of instructor.
DeFranco, Ganem
Laboratory research for one quarter with a departmental faculty member to familiarize new graduate students with experimental approaches to microbiological and immunological problems of current interest. MICROBOL

220. Selected Topics Seminar. (1) § F, W, Sp. Seminar 1 hour. Staff
General microbiology: individual research of advanced graduate students, assisted speakers and staff members. Reviews of special topics and journal articles by advanced students. MICROBOL

Seminar in which graduate students present their thesis research. MICROBOL

250. Research. (1-4) § F, W, Sp. Staff
Seminars in which graduate students present their thesis research. MICROBOL

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

NEUROLOGICAL SURGERY
Grosslehner—Neurology 110.
Students serve as clinical clerks in the inpatient and outpatient clinics.

C.B. Wilson
The student will become a member of the house staff, attending ward rounds, working up patients, assisting at operations, and taking night call on rotation with a resident. Limited to one student per hospital. NEURO 110A

140.02. Off-Campus Clerkship. (1½ per week) Su, F, W, Sp. Prerequisite: Neurology 110.
Pitts, F. Weinstein
Clinical clerkship in approved hospitals by special arrangement, and approval of the dean and chairperson of the department. NEURO SURG

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

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

Pitts, P. Weinstein
Interns rotate through neurological surgery wards. Under the supervision of the attending staff, they are responsible for the care of patients, including history-taking, neurological 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.

Layzer
Students are assigned patients for study under supervision of attending and resident physicians. They attend ward rounds, attending rounds, grand rounds, conferences and lecture-seminars, participating in diagnostic management of common clinical problems and psychiatric aspects of neurological disorders.

140.01. Acting Internship Neurology. (1½ per week) Su, F, W, Sp. Prerequisite: Neurology 110 and consent of instructor.
Bird
Recent literature in neurology and neurological surgery is presented. Discussion by members of the faculty in attendance and by resident physicians from other schools interested in this field. NEURO SURG

C.B. Wilson
Clinical clerkship in approved hospitals by special arrangement, and approval of the chairperson of the department. R. Fishman

460. Advanced Neurology Clerkship—VA. (1½ per week) Su, F, W, Sp. Prerequisite: Neurology 110 and consent of instructor.
Faden
Students serve as clinical clerks in the inpatient and outpatient clinics. Attendance at departmental clinical rounds, seminars, and conferences is required. Prior arrangements must be made. NEUROLOGY

470. Advanced Neurology Clerkship—VA. (1½ per week) Su, F, W, Sp. Prerequisite: Neurology 110 and consent of instructor.
Margolin, Felixman
Advanced students will have the opportunity to broaden and enrich their clinical experience and expertise. Opportunity will be given to participate in didactic and case conference presentations. The opportunity exists for subspecialty clinical experiences (e.g., behavioral neurology, neuromuscular disease).

480. Pain Mechanisms and Management—VA. (1½ per week) Su, F, W. Prerequisite: Neurology 110 and consent of instructor.
R. Fishman
Clinical clerkship in approved hospitals by special arrangement and approval of the dean and the chairperson of the department. NEUROLOGY
and consent of instructor. Enrollment limited.

Fields, Barbara, McKay
Diagnosis, medical and surgical management of patients with chronic pain. Students will participate in conferences and rounds of the multidisciplinary pain service at UCSF's Parnassus campus. Direct patient contact will be under supervision of attending physicians (neurologists, neurosurgeons, anesthesiologists, psychiatrists). Students will learn to do sensory examinations and simple local anesthesia nerve blocks. They will learn pain management for acute post-operative patients, cancer pain, neuro- pathic pain, headaches and low back pain. They will be expected to identify major psychological aspects of acute and chronic pain.

NEUROLOGY


R. Fishman
Opportunities for research in one of the department's laboratories or arrangement with the chairperson of the department. NEUROLOGY


R. L. Davis, Baringer
Tissue pathology of diseases of the nervous system will be explored in greater depth in the postmortem room and by gross and microscopic techniques. NEUROLOGY

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

Berrol, Byl, Barnes
Diagnosis, medical management, and psychosocial problems of the major disabling conditions including spinal cord injury, closed head injury, cerebral palsy, and multiple sclerosis, chronic pain, muscular dystrophies, congenital pediatric problems. Focus on disabling conditions and review of sexual issues and therapeutic interventions. NEUROLOGY

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

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

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

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


R. Fishman
Seminars covering selected subjects in the basic sciences relevant to the field of neurology including neurochemistry, neuropathophysiology, and neuropathology. NEUROLOGY

Conferences include 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 these respective fields. NEUROLOGY


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


R. L. Davis
Course involves pathologic and clinical-pathologic research into various aspects of neurology. Specific subjects of research are chosen in concert with the attending staff of the department. NEUROLOGY


R. Fishman
Clinical and basic research in neurobehavioral disease. After consultation with assignees to one of the several departmental laboratories will be possible. NEUROLOGY


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

Residents are responsible for the care of patients under the direction of the attending staff, and participate in student teaching. They are given the inpatient, outpatient and consultant clinics. NEUROLOGY

Residents learn interpretation of electroencephalograms in the supervision of experienced electroencephalographers. They interpret electroencephalograms on patients they have seen clinically, with individual instruction as available. Instruction is accredited by the Board of Certification of the American Electroencephalographic Society. NEUROLOGY

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


R. L. Davis
Residents spend three months or more performing supervised autopsies and neuropathologic and studies of brain, nerve and muscle. NEUROLOGY


Berg
Course offers experience in the diagnosis and management of children with acute and chronic neurological disorders. Outpatient clinics and ward work are included in the instruction. NEUROLOGY


R. Fishman
Clinical and basic research in neuroendocrine dysfunction. After consultation with assignees to one of the several departmental laboratories will be possible. NEUROLOGY

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

NEUROSCIENCE

201. Principles of Neuroscience. (4) F. Prerequisite: Admission to Neuroscience Program or permission of instructor. Conference 2 hours. Conference 2 hours.

Hall and Staff
A one introductory course emphasizing basic principles of cellular, molecular, and integrative neuroscience.

202. Principles of Neuroscience. (4) F. Prerequisite: Admission to Neuroscience Program or permission of instructor. Conference 2 hours. Conference 2 hours.

Hall and Staff
A one introductory course emphasizing basic principles of cellular, molecular, and integrative neuroscience.

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

Reichard
A laboratory rotation course to familiarize new neurological graduate students with various aspects of neurophysiology, research. PHYSIOLOGY

220. Selected Topics. (1-8) F, W. 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 on one seminar per quarter. PHYSIOLOGY

222. Advanced Cellular Neurobiology. (3) § Sp. Prerequisite: Neurobiology 201A-B-C and consent of instructor. Seminar 3 hours.

Staff
Given each year in the spring, quarter on a rotating basis. Representative topics include neurobiology of peptides, ion channels, sensory transduction, synaptic function with students reading and presenting papers from the current literature. PHYSIOLOGY

224. Advanced Neuroscience. (3) § W. Prerequisite: Neuroscience 201A-B-C and consent of instructor. Seminar 3 hours.

Staff
Given each year in the winter quarter on a rotating basis. Representative topics include immunology, molecular neurobiology, cell surface in development. Seminar format with students reading and presenting papers from the current literature. PHYSIOLOGY

226. Advanced Integrative Neuroscience. (3) § F. Prerequisite: Neuroscience 201A-B-C and consent of instructor. Seminar 3 hours.

Staff
Given each year in the fall quarter on a rotating basis. Representative topics include the visual system, pain, the auditory system, higher functions of the nervous system. Seminar format with students reading from the current literature. PHYSIOLOGY

230. Experimental Neurobiology. (5) § SS. Prerequisite: Consent of instructor. Lecture and lab.

Y. N. Jan
Laboratory course designed to acquaint students with electrophysiologic and anatomical methods used in studying peripheral and central nervous systems. Techniques involve in vitro and in vitro manipulation of living nerve fibers, intracellular recording, iontophoresis, dye injection, tracing of neuronal pathways. PHYSIOLOGY

250. Research. (1-9) § F, W, Sp. Prerequisite: Consent of instructor. Laboratory. 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 nurs- ing process: fundamental nursing, terminology, facts, trends, and their application to nursing practice. PHYSICAL NURS

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 physiological, psychosocial, and sociocultural aspects of regulating response mechanisms to stress. PHYSICAL NURS

150. Maternal-Child Nursing. (9) F. Prerequisite: Admission to Articulated B.S.M.S. Program. Lecture 2 hours. Lab 21 hours.

M. Savedra
Principles of application and theories to nursing care given during the life process of reproduction, nurture, and development, and alterations due to stressors during pregancy and child development from birth to adolescence. FAM HLTH

106. Psychiatric Mental Health Nurs. (9) F. Prerequisite: Admission to Articulated B.S.M.S. Program. Lecture 2 hours. Lab 21 hours.

J. Lipson
Principles and dynamics of personal- ity and family development. Application of the nursing process with clients who have coping problems resulting from stressors in selected developmental or situational crises. MENT HLTH COM ADM

122. Physiological Processes--The Life Course. (9) F. Lecture 3-5 hours.

M. Muwasesse
Examines content in regulation, sensation, perception, and motion as it relates to the response of organ- isms in man at the cellular level. PHYSIOLOGICAL

124. Professional Nursing Practice. (1) F. Prerequisite: Admission to Articulated B.S.M.S. Program. Lecture 1 hour.

B. C. Pemberton
Course provides an introduction to the basis for professional practice and problems related to role change and reorientation in academia. Emphasis will be on use of theoreti- cal approaches as the basis for pro- vocating nursing care. MENT HLTH COM ADM

127. Adaptation in Acute Illness. (5) F. Prerequisite: Admission to Articulated B.S.M.S. Program. Nursing 125 or concurrent enrollment. Lecture 2 hours. Lab 3 hours. Seminar 2 hours. C. West
Course describes and explores concepts related to the nursing care of the acutely ill patient. Description of behavior, factors, and their relationship to nursing actions appropriate to the concepts will be compared and contrasted across a variety of acute illnesses. PHYSICAL NURS


J. Norbeck
Introduces basic research concepts, language, process, logic, and methods into the types of research as well as the meaning and use of nursing theory. Engages students in skill development in performing research including effective reading, thinking, and writing to improve research. MENT HLTH COM ADM

129. Health Assessment. (3) F. Lecture 2 hours. Lab 3 hours.

C. Hoogewezen
Course presents a basis for health assessment of clients within an ad- aptative-developmental framework of nursing. Emphasizes data collection throughout history, physical examination, clinical studies, establishment of clients assisting clients altering health status. Laboratory for integration of theory and skill mastery. FAM HLTH

131. Psychosocial Adaptation. (4) 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 psychiatric reactions to actual or potential health problems. Interventional and environmental frameworks are presented as integral components of both assessment and intervention. MENT HLTH COM ADM

122. Care of Aged & Chronically Ill. (3) § W. Lecture 3 hours.
C. Harrington
Nursing in health promotion and meeting special needs of the elderly and chronically ill. Demographic and functional assessment, alternatives for providing long-term care, and care management in acute, long-term, and community care settings will be covered. FAM HLTH

133. Family Health Care. (3) W. Prerequisite: Nursing 129. Lecture 2 hours. Lab 1 hour. Conference 2 hours.
J. Ventura
Course deals with the healthy family as the primary unit of health care management. Nursing process applied to promoting family health is emphasized, utilizing the adaptation-stress-framework. Community involvement with a family is an integral part of the course. FAM HLTH

135. Leadership in Nurses-Client Sys. (3) § W. Lecture 2 hours. Seminar 1 hour.
Staff
Course provides opportunities to develop a professional nursing role in a health care system appropriate to the student's area of interest. Knowledge and skill base to the professional nursing leadership role are the focus of the course. MENT HLTH COM ADM

137. Community Health Nursing. (8) Sp. Prerequisite: Nursing 124. Lecture 3 hours. Lab 15 hours.
S. Shapiro
Application of nursing, family, and community health theory to community health settings, focusing on assessing, planning, implementing, and evaluating nursing care with families, groups, and communities. Health planning and public policy will be examined. MENT HLTH COM ADM

N. Okamoto
Course deals with commonly used drugs, with emphasis on classification, use, rationale for choice, mode of action, and significant side effects. PHYSIOL NURS

181. Law & Nursing Practice. (2) § Sp. Lecture 2 hours.
D. Tennenhouse
Course presents fundamental and critical current issues in law with respect to the theory and practice of nursing. Emphasis is on legal considerations encountered in the everyday practice of nursing in both hospital and community settings. PHYSIOL NURS

J. Moreau
Course requires bibliographic search methodology; the style of scientific writing, American Psychological Association (APA) editorial format, and composition of the introductory paragraph. PHYSIOL NURS

T. Ayres
Theories and concepts of femininity, masculinity, and sexuality throughout the life cycle. Examination of the wide range of human sexual behavior. Content includes sexual roles, common sexual dysfunctions and therapies, masturbation, homoskeksuality, and sexuality in some health conditions. FAM HLTH

Staff
Groups of two or more collaborators in clinical investigations and studies of special problems related to nursing and health sciences, under the direction of faculty. Students may select study topics related to areas of interest.

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

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

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

202A. Theory Development. (3-4) § Sp. Prerequisite: Doctoral standing. Lecture 3 hours.
A. Meleis
Examines philosophically and analytically the history and relationship between philosophy, theory, and science. Provides knowledge and exposure to all stages of theory development, exploration and critique of epistemological and historical issues in nursing; scholarly exchange toward independent discovery. MENT HLTH COM ADM

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

202C. Theoretical & Conceptual Framework. (3-4) § Sp. Prerequisite: Doctoral standing. Lecture 3 hours.
A. Meleis
Comparative study and critical analysis of major theoretical models and theoretical literature with emphasis on biological phenomena. Concepts of interest to nursing are selected from health science disciplines and adaptation level theories. Examines the implications of nursing theories and research for nursing and research. MENT HLTH COM ADM

D. Oda
Course provides a study of theories and abilities related to facilitating professional consultation process relevant to nurses working in primary, secondary, and tertiary prevention services. Emphasis is on consultation strategies. Optional laboratory in practical consultation testing. MENT HLTH COM ADM

204. Hospice: Implications for Nursing. (3) § F. Prerequisite: Consent of instructor. Seminar 3 hours.
R. Ciminelli
Course explores history, function, and models of hospice care. Supportive physical, psychological, and social interventions to promote symptom control and family coping during end-of-life care. Student will develop special emphasis on AIDS. Research, legal, ethical issues, and nursing implications are discussed. FAM HLTH

206. Nug Mgt of Adult Psych Cond. (3) § W. Prerequisite: Nursing 227 and 219 or equivalent, and consent of instructor. Lab 3 hours. Seminar 2 hours.
P. L. Tofil
Seminar is designed for graduate psychiatric nursing students to examine outcomes in middle-years with focus on conceptual and methodological issues. Students will develop a focused research paper on an area of interest. MENT HLTH COM ADM

S. Laffey
Advanced study of the theory and research in the care of patients with pulmonary disease. Diverse theoretical perspectives for assessment of patients with pulmonary disease. Troubled families will be analyzed, including structural, strategic, and communication frameworks as well as psychocognitive. MENT HLTH COM ADM

211A. Introduction to Research. (3) § W. Prerequisite: Elementary statistics or equivalent. Lecture 3 hours.
W. Holzemer
Lectures and small group sections present an overview of the research process including the styles of research, the research attitude, logic, ethics, philosophy, and tools of inquiry. MENT HLTH COM ADM

211B. Patient-Family Teaching Critique. (3) § 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 consumerism. Emphasis on attitudes, insights, and abilities crucial to the appreciation, appraisal, and utilization of research in the health sciences. FAM HLTH

2112B. Maternal-Child Nursing Critique. (3) § W. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours.
M. Savedra
Crises both in maternal-child nursing with the intent to develop research consumerism. Emphasis on attitudes, insights, and abilities crucial to the appreciation, appraisal, and utilization of research in the health sciences. FAM HLTH

2112B. Survey of Health Status Research. (3-5) § F, W. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours. Enrollment limited. Preference given to community health nursing special student.
S. Laffey
Students will critically examine research on health status at the individual, group, and societal level. Emphasis is on the concept of health status, measurement, and implications of research approaches and findings for nursing practice. MENT HLTH COM ADM

2112B. Critique in Child Health Res Critique. (3) § W. Prerequisite: Nursing 211A and consent of instructor. Lecture 3 hours. Lab 3 hours.
J. Mattoon
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 and children, and impact of death of a child on the family. FAM HLTH

2112B. Neurosciences Research Critique. (3) § Sp. Seminar 3 hours. R. Sisson
This course presents the scholarly process of critiquing published research in neuroscience nursing. The focus are: evaluation of the research process, assimilating of the scientific basis for the specialty, and examination of implications of empirical findings for neuroscience nursing. PHYSIOL NURS

2112B. Crit. of Oncol Nursing Studies. (3) § Sp. Prerequisite: Consent of instructor. Seminar 3 hours.
M. Dodg, P. Halliburton
Presentation of the scholarly process of critiquing published research in oncology nursing. The focus are: evaluation of the research process, assimilating of the scientific basis for the specialty, and examination of implications of empirical findings for oncology nursing. PHYSIOL NURS

2112B. Crit. of Management Research. (3) § W. Sp. Prerequisite: N211A or consent of instructor. Lecture 3 hours. S. Sonegta
Nursing. Emphasis will be on evaluation of the research process, assimilating of the scientific basis for the specialty, and examination of implications of empirical findings for oncology nursing. PHYSIOL NURS

2112B. Research Critique: Critical Care. (3) § W. Prerequisite: N211A. Seminar 3 hours. V. Carriere
The course provides a critical analysis of studies which examine organizational behavior and administrative practice. The course covers attitudes, insights, and abilities crucial to the appreciation, appraisal, and utilization of research in management. MENT HLTH COM ADM

2112B. Research Critique: Critical Care. (3) § W. Sp. Prerequisite: N211A. Seminar 3 hours. V. Carriere

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 appraise, evaluate, and integrate research findings into clinical practice.

PHYSIOL NURS

211.12B. Critical Care Nursing. (3) [E] W. Prerequisite: Nursing 211A or consent of instructor. Lecture 2 hours. Lab 3 hours.

K. Pariente

Critical analysis of studies exploring the relationship of the workplace to health outcomes. 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

211.14B. Psychiatric/Helping Field Critique. (3) [E] W. Prerequisite: Nursing 211A or instructor's consent. Lab 3 hours. Seminar 2 hours.

L. Chaftz

This course will critique research in psychiatric nursing. It will focus on developing research consumerism with emphasis on attitudes, insights, and abilities crucial to the appreciation, appraisal, and utilization of research findings in clinical practice. MENT HLTH COM ADM

211.20B. Critique-Psychiatric/Pe- diatricle. (3) [E] W. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours.

S. Ferretti, D. Alfonso

Critique of studies reflects physiological or situational stressors in the high-risk perinatal and pediatric patient. Course will facilitate the appreciation, appraisal, and integration of research findings into clinical practice. FAM HLTH

211.21B. Cardiopulmonary Res Critique. (3) [E] W. Prerequisite: Nursing 211A or consent of instructor. Lecture 2 hours. Lab 3 hours.

N. Stotts

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

211.22B. Opioid Patient Care Res Eval. (3) W. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours.

V. Carrieri

Course critiques research studies in quality of patient care, emphasizing the utilization of a systematic critical process, methodologies employed in evaluation programs, and identification of major problems in patient care evaluation research. PHYSIOL NURS

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

J. Lipson

Seminar focuses on critical analysis of studies in selected areas of international cross-cultural health and nursing. Emphasis is on high risk groups and the use of these groups in the international community. MENT HLTH COM ADM

211.24B. Institutional Care of the Aged. (3) [W] Prerequisite: N211A. Seminar 2 hours. Field work 1 hour.

K. Kayser-Jones

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

211.51C. Res Methodologies for Clinical Nursing Questions. (3) [E] W. Prerequisite: Nursing 276 or consent of instructor. Lecture 2 hours. Lab 3 hours.

N. Stotts

Course applies research methodology to clinical nursing questions: formulation of clinical questions, design and sampling, research and quasi-experimental design, instrumentation, introduction to data analysis, including statistical methods and computer usage. PHYSIOL NURS

211.52C. Visual Data Study of Human Behav. (3) [E] W. Prerequisite: 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 behavior as it relates to health care. Includes the history of photography's impact on social and health policy and explores issues related to design, selection, and content analysis. FAM HLTH

211.53C. Illness Management Research. (3) [E] W. Prerequisite: Nursing 211A; or graduate course on research methods in social science, or consent of instructor. Lecture 2 hours. Lab 3 hours. Course may be repeated for credit. L. Reif

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

211.54C. Data-Gathering Methods. (3) [E] W. Prerequisite: One course in research design. Seminar 3 hours.

Staff

Course will focus on selection and construction of data-gathering tools in nursing research. Validity, reliability, and statistical significance of data gathering methods and coding and conducting a pilot study are included. PHYSIOL NURS & FAM HLTH

212A. Eval of Psychoanalytic The- ory. (2) [E] W. Prerequisite: Consent of instructor. Lecture 2 hours.

P. Underwood

This advanced seminar, open to graduate students, focuses on theory as an approach to understanding human behavior rather than as an approach to treatment. Emphasis is on evolution of theory and use of psychoanalytic concepts in nursing research. MENT HLTH COM ADM

212B. Social Issues in Psych Nurs. (2) [E] W. Prerequisite: M.S. students may take this course if they have completed N227A. Lecture 2 hours.

L. Chaftz

This course will examine historical and current social and cultural factors and mental illness related to the severely ill in urban environments and the problems of public health care setting. The emphasis is on implications for nursing research and practice. MENT HLTH COM ADM

213.01. Topics in Psychol-Sleep. (2) [E] W. Prerequisite: Consent of instructor. Lab ½ hour. Seminar ½ hour. Course may be repeated for credit.

Staff

Course explores theoretical and psychological bases of illness and hospitalization for children and their families. Focus is directed to managing trauma and promoting growth. Concurrent practicum recommended. FAM HLTH

218.04. Phenomena Common to the Nursing Care of Ill or Injured. (3) [E] W. Prerequisite: Nursing 276. Prior or concurrent enrollment in physiological sciences or the psychology of the person. Seminar 1 hour. Semester 2 hours. Lab 3 hours.

N. Stotts

Knowledge is organized around phenomena common to all or portions of the rehabilitation disciplines in terms of both clinical and research issues. PHYSIOL NURS

218.06B. Concepts in Critical Care Nursing. (3) [E] W. Prerequisite: Consent of instructor. Seminar 3 hours.

Staff

Course explores the needs of the critically ill patient. Physiological and psychological mechanisms and appropriate treatments are explored from the theoretical perspectives and contrasted with clinical practice. MENT HLTH COM ADM

218.18C. Critical Care Nursing. (3) [E] W. Prerequisite: Consent of instructor. Seminar 3 hours.

P. Skov

Course analyzes the needs of critically ill surgical patients. Physiological and pathophysiological mechanisms and surgical interventions are explored. Issues in clinical management are discussed from the theoretical perspectives and contrasted with clinical practice. PHYSIOL NURS

218.21C. Critical Care Nursing. (3) [E] W. Prerequisite: Physiology, NUrings. Seminar 1 hour.

M. Sottili, C. West

This course investigates the theoretical basis and the effects of drugs used in the clinical setting, as well as the effects of drugs used with the patient and critically ill patient. Research current will be used as the base. Clinical laboratory optional. PHYSIOL NURS

218.30. Research in Nursing. (3) [E] W. Prerequisite: Pedagogical psychology and N218A. Seminar 3 hours.

S. Ferretti, M. Tesler

Course analyzes concepts related to the management of acute ill pediatric patients. The theoretical basis of management is evaluated, compared, and contrasted with clinical practice. FAM HLTH

218.42. Concepts in Critical Care Nursing. (3) [E] W. Prerequisite: Consent of instructor. Seminar 2 hours.

Staff

Course explores concepts related to the management of acute ill pediatric patients. The theoretical basis of management is evaluated, compared, and contrasted with clinical practice. FAM HLTH

218.43. Concepts in Adult Medical Nursing. (3) [E] W. Prerequisite: Consent of instructor. Seminar 2 hours.

S. Ferretti, M. Tesler

Course analyzes the needs of the medical patient. Physiological and psychological mechanisms and appropriate treatments are explored. Issues in clinical management are discussed from the theoretical perspectives and compared, and contrasted with clinical practice. PHYSIOL NURS

218.45. Concepts in Oncology Nursing. (2) [E] W. Prerequisite: Consent of instructor. Lab 2 hours. Seminar 1 hour.

Staff

Course analyzes the needs of the cancer patient. Physiological and psychological mechanisms and appropriate treatments are explored from the theoretical perspectives and compared, and contrasted with clinical practice. PHYSIOL NURS

218.46. Concepts in Critical Care Nursing. (3) [E] W. Prerequisite: Consent of instructor. Seminar 3 hours.

Staff

Course analyzes the needs of the critically ill patient. Physiological and psychological mechanisms and appropriate treatments are explored. Issues in clinical management are discussed from the theoretical perspectives and compared, and contrasted with clinical practice. PHYSIOL NURS

218.50. Current Therapeutics. (1-5) [E] W. Prerequisite: Physiology, NUrings. Seminar 1 hour.

M. Sottili, C. West

Current therapeutic trends will be discussed. Emphasis will be placed on the use of drugs currently utilized with the ill or injured. Therapeu- tic aspects of interventions as well as side effects will be explored. Recent research will be used as the base. Clinical laboratory optional. PHYSIOL NURS

218.51. Illness or Injury Rehbaillitation. (2-3) [E] W. Prerequisite: Graduate standing. Nursing 218A. Seminar 2 hours. Lab optional 3 hours.

C. West

Examines the theoretical basis for rehabilitation of patients following physical illness or injury. Nursing theories which promote optimal adaption and development are evaluated utilizing relevant research as a base. Clinical laboratory optional. PHYSIOL NURS


L. Chaftz

This course critically examines diagnostic processes of the psychosocial human responses and their individual and social psychological disorders. Emphasis is on the use of assessment tools (i.e., Mental Sta- tus Examination, Psychiatric History, DSM-III-R, and PND-I) across diverse clinical areas and treatment settings. Issues in the use of assessment tools across diverse clinical areas and treatment settings. Issues in the use of assessment tools are examined. MENT HLTH COM ADM

220.01. Adv Sem in Nursing Research. (3) [E] W. Prerequisite: Consent of instructor. Seminar 2 hours. Course may be repeated for credit. Seminar 2 hours.

H. Wilson

This seminar guides doctoral students in the design and conduct of research in specialty areas in cross-cultural and international nursing and in clinical and community nursing. MENT HLTH COM ADM

220.02. Adv Sem in Nursing Research. (3) [E] W. Prerequisite: Successful completion of the qualifying examination. Course may be repeated for credit. Seminar 2 hours.

S. Gorter

A seminar which guides students in the design and conduct of research in specialty areas in family health care nursing. FAM HLTH
Factors contributing to mental health or illness, adaptive behaviors, specific psychopathologies, and the similarity or dissimilarity features of physical and mental illness are explored. PHYSIOL NURS

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

M. Lynch Course provides a conceptual approach to examine the psychological phenomena identified in the pediatric critical care population. The inter-relatedness of the responses, symptoms, processes, stresses, and interventions will be discussed. Specific and global factors of the phenomena identified in this population. FAM HILTH

225. Behavioral Issues in Fam Hlth. (3) S. Prerequisite: Consent of instructor. Seminar 2 hours every other week.

F. Dreier Seminar deals with advanced critical analysis and application of family, cultural and behavioral theories leading to family planning and family primary care. FAM HILTH

226A. Chronic Illness & Nursing. (3) F. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours.

J. Hallburg Course offers a study of problems related to chronic illness. Explores the interrelationship of various cultural, psychosocial, and pathophysiological factors involved in chronic illness. Field experience included. FAM HILTH

226B. Chronic Illness & Nursing. (3) W. Prerequisite: Nursing 226A or consent of instructor. Lecture 2 hours. Lab 3 hours.

J. Hallburg Course further explores the complexities involved in the illness careers 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 HILTH

227A. Theories of Psych Conditions. (2) F, W, S. Prerequisite: Lecture 2 hours.

J. Lipson This lecture-seminar will emphasize the comprehensive study and analysis of selected psychological and sociological theories of major psychiatric conditions. Both research findings and clinical data will be reviewed. MENT HILTH COM ADMI

227B. Theories of Psych Conditions. (2) F, W, S. Prerequisite: Consent of instructor or enrollment in the psychiatric mental health specialty area. Lecture 2 hours.

W. Wilson This course-seminar will emphasize the comparative study and analysis of selected biological theories of major psychiatric conditions. Both research findings and clinical data will be reviewed. MENT HILTH COM ADMI

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

S. Ferkecht The course emphasizes the critique of the statistical analysis of mental health care 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 HILTH

229. Comparative Research Meth- ods. (2) W. Prerequisite: Admis- sion to the professional graduate program and consent of instructor. One quarter of the theory (N 202 or N 290) and re- search (N 278) desirable. One quarter of theory, Nursing 202A, 202B, 202C or 290, 290, 290. 290, 290. 290. Theoretical review 278 recommended. Seminar 2 hours.

S. Gottner Underlying assumptions as well as design, measurement, and analytical issues pertinent to nursing research will be covered for various research methods. The advantages and disadvantages of approaches such as historical, descriptive, correlational, epidemiological, experimental, and decision making methods will be examined. FAM HILTH

230. Cardiovascular Physiolog- y. (3) W. Prerequisite: Lecture 3 hours.

P. Skow Course is a study of cardiovascular physiology, diagnosis and treatment of major cardiovascular disorders that provide the basis for the nursing management of this population. Emphasis will be on the cardiovascular aspects of illness. PHYSIOL NURS

231. Cardiac-Pulm-Renal Pathophysi- ology. (4) S. Prerequisite: Three units of advanced level organ system physiology or consent of instructor. Lecture 4 hours.

W. Worley A study of cardiac, pulmonary, and renal pathophysiological applications to nursing care of the critically ill adult patient. PHYSIOL NURS

232. Clinical Pharmacology in Pri- mary Care. (3) F, W, S. Prerequisite: Consent of instructor or enrollment in the psychiatric mental health specialty area. Lecture 3 hours.

S. Ehaves Course introduces the clinical application of pharmacology and therapeutics to the medical management of patients. Topics include selected medications used in primary care. Emphasis is placed on integration of drug therapy as one component of therapeutic management. MENT HILTH COM ADMI

233. Analysis of Visual Data. (2) F. Prerequisite: A grade of C or B in CS 122L (Visual Data: Study of Human Behavior), Lecture 2 hours.

B. H. McLain Emphasis is placed on the content analysis of photographic used as data source in research. Criteria measurements for analysis will be explained through student's own data. FAM HILTH

234-01. Specialty Research Semi- nars. (2) S. Prerequisite: Doctoral standing or consent of instructor. Seminar 3 hours.

S. Stott Course explores research in the student's area of specialization. Emphasis is placed on research design, methodology, and findings. Synthesis of the evaluation of study results is included. Seminar 278 recommended. Seminar 2 hours.

J. Hallburg Underlying assumptions as well as design, measurement, and methodological issues pertinent to nursing research will be covered for various research methods. The advantages and disadvantages of approaches such as historical, descriptive, correlational, epidemiological, experimental, and decision making methods will be examined. FAM HILTH

234-02. Specialty Research Semi- nars. (3) S. Prerequisite: Doctoral standing or consent of instructor. Seminar 3 hours.

J. Hallburg Course explores research in the student's area of specialization. Emphasis is placed on research design, methodology, and findings. Synthesis of the evaluation of study results is included. Seminar 278 recommended. Seminar 2 hours.

J. Hallburg Course explores research in the student's area of specialization. Emphasis is placed on research design, methodology, and findings. Synthesis of the evaluation of study results is included. Seminar 278 recommended. Seminar 2 hours.

D. Allison Theoretical sessions are related to methodology and techniques of conducting expert parent education groups. Apparent relevance to concerns of expert parent- ers encompasses childrearing and early child rearing. Concurrent practicum recommended, but not required. FAM HILTH

234-03. Specialty Research Semi- nars. (3) S. Prerequisite: Doctoral standing or consent of instructor. Seminar 3 hours.

R. Krambee Emphasis is on the critique of the design, methodology, and findings. Synthesis of the evaluation of study results is included in the identification of major research questions in the field of study. PHYSIOL NURS

234-04. Specialty Research Semi- nars. (3) S. Prerequisite: Doctoral standing or consent of instructor. Seminar 3 hours.

D. Goldman Course presents theoretical principles of the specialty research area. Emphasis is placed on the critique of the design, methodology, and findings. Synthesis of the evaluation of study results is included in the identification of major research questions in the field of study. PHYSIOL NURS

235A. Child Mental Health Counsel- ing I. (2) F, S. Seminar 2 hours.

S. Weiss Course covers major theories and research findings dealing with the physical, intellectual, and emotional development of the child from birth through school age. FAM HILTH

235B. Adolescent Development. (3) W. Prerequisite: Consent of instructor. Lecture 3 hours.

N. Svedera Course explores relevant theory, literature, and research findings dealing with adolescents. Seminar during the adolescent period. FAM HILTH

236. Adult Development: Young and Middle Adulthood. (3) S. Prerequisite: Graduate standing, Child Development, and consent of instructor. Lab 3 hours. Seminar 2 hours.

R. Merer This seminar, using an anthropological, sociological, and psychological perspective, will cover developmental theory and research from young adulthood through the middle adult years. Current issues in aging and senility will be discussed with an emphasis on implications for health care. FAM HILTH

237A. Family Primary Care I. (5) S. Prerequisite: Enrollment in Family Nurse Practitioner Program. Lecture 257. Lecture 5 hours.

B. McLain Theories, concepts and knowledge for comprehensive assessment and management of common health issues, conditions throughout the life cycle will be presented. Emphasis will be on primary care of the family. FAM HILTH

237B. Family Primary Care II. (4-5) S. Prerequisite: Consent of instructor. Lecture 4 hours.

D. Thompson Theories, concepts, and knowledge for comprehensive assessment and management of selected episodes, 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 HILTH

237C. Family Primary Care III. (4-5) S. Prerequisite: Consent of instructor. Lecture 4 hours.

S. Carroll Theories, concepts, and knowledge for comprehensive assessment and management of special problems in family primary care will be presented. Emphasis will be on care of the family unit. FAM HILTH

238. Collaborative Role Develop- ment. (1) S. Prerequisite: Consent of instructor and concurrent enrollment in the graduate program. Seminar 1 hour.

B. McLain, E. Osbourn Collaborative role analysis of issues and research related to

90 Nursing

91 Nursing

Course addresses client-centered and psychodynamic theories underlying individual counseling with special emphasis in the client-therapist relationship. MENT HILTH COM ADMI
242. Current Trends in Individual Psychotherapy Modalities. (2) F, W, Sp. Prerequisite: Consent of instructor. Staff Seminar is designed for graduate students in psychiatric nursing to examine and discuss theories and practice approaches of various individual psychotherapeutic modalities in current use. MENTHLM COM ADM

B. Feruta Seminar is designed for graduate students of psychiatric nursing to examine and discuss theories and practice of various group therapeutic modalities in current use. MENTHLM COM ADM

244A. Res Sem: Indiv, Fam, Comm. (2-4) F, W. 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.
M. Duffy, C. Gilliss Nursing 244A-B-C prepares students for original research through consideration of context, methods, and issues in an area of specialization. Nursing 244A focuses on evaluation of a context area and generation of research questions within it. MENTHLM COM ADM

244B. Res Sem: Indiv, Fam, Comm. (2-4) F, W. Prerequisite: Nursing 244A or consent of instructor. Lecture 2 hours, Independent study 0-6 hours.
C. Gilliss, M. Duffy Nursing 244A-B-C builds upon research content to prepare students to develop and defend a plan for original research. Nursing 244B focuses on identification of research questions and criticism and design/methods in an area of interest. MENTHLM COM ADM

244C. Res Sem: Indiv, Fam, Comm. (2-4) F, W. Prerequisite: Nursing 244B or consent of instructor. Lecture 2 hours, Independent study 0-6 hours.
C. Gilliss, M. Duffy Nursing 244C builds upon prior research content in the Ph.D. program to prepare students for original research through consideration of content, methods, and issues in the students’ areas of interest. PHYSIOL NURS

245. Pediatric Critical Care Assessment. (2) F, W, Sp. Prerequisite: Consent of instructor. Course given in conjunction with N 224 (Pediatric Clinical Therapeutics). Lecture 2 hours. M. Lynch

Course is a study of body systems development during embryonic, fetal, and postnatal growth. Emphasis is on normal anatomical and physiological development, critical periods of development, alterations, and transitions for extra-uterine adaptation. Implications for PNP and APN practice are explored. FAM HLTH

250. Research. (1-5) F, W, Sp. Prerequisite: Approval of instructor. Course given in conjunction with and study of consent of instructor. Staff
Course offers students an opportunity to engage in research with selected faculty.

250.01. Research Rotation. (1-6) F, W, Sp. Prerequisite: Approval of instructor. Course of first year of doctoral study and consent of advisor. Lab 3-18 hours.

250.02. Child Health Maintenance. (2-3) F, W. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 0-3 hours.
B. Durand Course provides exploration of theories, concepts and knowledge for comprehensive child health maintenance, encompassing prevention and promotion. Emphasis is on parents as participants in assessment, decision-making, and management of common health problems and normal developmental stressors in infancy and childhood. FAM HLTH

250.03A. Common Pediatric Illness Management. (2) F, W. Prerequisite: Consent of instructor. Lecture 2 hours. P. Jackson

250.03B. Common Pediatric Illness Management. (4) W. Prerequisite: Consent of instructor. Lecture 4 hours. P. Jackson

Course provides research, research, and knowledge for comprehensive assessment and management of common pediatric illnesses. Emphasizes the role of PNP in collaboration with pediatricians. Integrates history taking, physical findings, diagnosis, and management. FAM HLTH

251. Advances in Vascular Nursing. (3) SS1, SS2, SU, F, W. Pr. Pre- requisite: Consent of instructor. Learning modules 10 hours. P. Skov, C. Hubner Course examines the theoretical basis for prevention, intervention, and rehabilitation in peripheral vascular occlusive disease in children and management of complications. FAM HLTH

252. Int/Cross-Cultural Nursing Issues. (3) F, W, Sp. Prerequisite: Consent of instructor. Lecture 3 hours. A. Davis

Course examines selected international nursing issues including primary care nursing and nursing service, women’s roles and cultural rights. MENTHLM COM ADM

249. Indep Study. (1-6) F, W, Sp. Prerequisite: Consent of instructor. Lecture 1-6 hours.
A. Davis

254. Fetal-Newborn Development. (1) W. Prerequisite: Consent of instructor. Lecture 2 hours. M. Lynch

Course is a study of body systems development during embryonic, fetal, and postnatal growth. Emphasis is on normal anatomical and physiological development, critical periods of development, alterations, and transitions for extra-uterine adaptation. Implications for PNP and APN practice are explored. FAM HLTH

255.01. Pediatric Health Assessment. (3) Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3-6 hours.
A. Alkon, D. Goldman Course presents theoretical principles and assessment techniques for determining health status of children, including health history and physical examination. Focus is on collection and interpretation of clinical data. Laboratory and curricu- larmethods required. FAM HLTH

255.02. Child Health Maintenance. (2-3) F, W. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 0-3 hours.
B. Durand Course provides exploration of theories, concepts and knowledge for comprehensive child health maintenance, encompassing prevention and promotion. Emphasis is on parents as participants in assessment, decision-making, and management of common health problems and normal developmental stressors in infancy and childhood. FAM HLTH

255.03A. Common Pediatric Illness Management. (2) F, W. Prerequisite: Consent of instructor. Lecture 2 hours. P. Jackson

255.03B. Common Pediatric Illness Management. (4) W. Prerequisite: Consent of instructor. Lecture 4 hours. P. Jackson

Course provides research, research, and knowledge for comprehensive assessment and management of common pediatric illnesses. Emphasizes the role of PNP in collaboration with pediatricians. 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. P. Jackson

Course provides research, research, and knowledge for comprehensive assessment and management of common pediatric illnesses. Emphasizes the role of PNP in collaboration with pediatricians. 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. P. Jackson

Course provides research, research, and knowledge for comprehensive assessment and management of common pediatric illnesses. Emphasizes the role of PNP in collaboration with pediatricians. Integrates history taking, physical findings, diagnosis, and management. FAM HLTH

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255.03B. Common Pediatric Illness Management. (4) W. Prerequisite: Consent of instructor. Lecture 4 hours. P. Jackson

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255.03B. Common Pediatric Illness Management. (4) W. Prerequisite: Consent of instructor. Lecture 4 hours. P. Jackson

Course provides research, research, and knowledge for comprehensive assessment and management of common pediatric illnesses. Emphasizes the role of PNP in collaboration with pediatricians. Integrates history taking, physical findings, diagnosis, and management. FAM HLTH
262A. Women's Health Roles/Issues
L. (1) $ F. Prerequisite: Enrollment in Women's Health Nurse Practitioner Program or consent of instructor. Seminar 2 hours (every other week).
L. Sammons
Seminar focuses on critical analysis of issues influencing role translation, role enactment, scope and control of practice, and professional growth of the women's health care provider. FAM HLTH

262B. Women's Health Roles/Issues
II. (1) $ W. Prerequisite: N202A. Seminar 1 hour.
L. Sammons
Seminar focuses on critical analysis of issues influencing restraints and enhancements of roles in contemporary practice for women's health care providers. Impact of current legal, legislative, technological, ethical and health care delivery trends are examined. FAM HLTH

263B. Restorative Care: Geron/LTC.
(3) $ F. Prerequisite: Nursing 263A. Consent of instructor. Lecture 2 hours. Seminar 1 hour.
Staff
Examinations restorative nursing care, including supporting principles, concepts, and theories. Examines prescribed nursing care, outcomes and evaluations for various institutional and community settings. Emphasis is on goal achievement and independence of each individual. Concurrent patient teaching is required. PHYSIOL NURS

264A. 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 mathematical bases of specifying and testing causal/predictive models in nursing. Analysis of the model includes assessment of mathematical and causal model assumptions and remedial steps to correct for distributability and/or specification violations. FAM HLTH

(3) $ W. Prerequisite: N204A. Seminar 3 hours.
Staff
Advanced methods in exploratory analysis of data sets and regression analysis 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

(3) $ F. W. Prerequisite: Consent of instructor. Lecture 1 hour. Seminar 2 hours.
J. Cone
Course explores clinical management of occupational health problems. Case-oriented discussion of problems in occupational health, using medical, nursing, industrial hygiene, epidemiology, regulatory and communication principles. Emphasis is on clinical diagnostic strategies and epidemiological methodology in evaluation of occupational health problems. MENT HLTH COM ADM

267A. Principles of Medication in Adult Primary Care.
(4-1) $ F. Prerequisite: Consent of instructor. Lecture and laboratory 4 hours. S. Fugaro
Introduces primary health care concepts essential to management of common physical illness in adults. Emphasis is on promotion of optimum client adaptation, selection of clinical interventions congruent with client's adaptive potential, and incorporation of the nursing process into clinical decision making. MENT HLTH COM ADM

268B. Psychiatric Liaison Nursing.
(2) $ W. Prerequisite: NURSING 211A and enrollment in the child or adult psychiatric nursing specialty tracks, Department of Mental Health, Community, and Administrative Nursing, or consent of instructor. Lecture 2 hours. Staff
Introduces psychiatric nursing as a specialty area of practice in mental health care settings, role of the psychiatric nurse, and effects of psychiatric nursing on the client. Emphasis is on promotion of optimum client adaptation, selection of clinical interventions congruent with client's adaptive potential, and incorporation of the nursing process into clinical decision making. MENT HLTH COM ADM

269A. Physical Assessment.
(3) $ W. Prerequisite: Consent of instructor. Lecture 2 hours. Independent projects optional for 3-4 units.
Staff
Introduction to basic physical assessment skills and techniques as used by nurses in clinical settings. Emphasis is on promoting optimum client adaptation, selection of clinical interventions congruent with client's adaptive potential, and incorporation of the nursing process into clinical decision making. MENT HLTH COM ADM

(3) $ F. Prerequisite: Nursing 228A. Seminar 2 hours. M. Styles
This course is designed to explore major trends in contemporary nursing and health care delivery as they relate to nursing practice. MENT HLTH COM ADM

270. Health Assessment of the Adult.
(4) $ SS2. Prerequisite: Consent of instructor. Lecture 6 hours.
D. DeAmicis
Course introduces assessment techniques for determining health status of adults. Focuses upon collection and interpretation of clinical data derived from the history and physical examination, including laboratory and special diagnostic tests. MENT HLTH COM ADM

271A. Clinical Management in Adult Primary Care.
(1) $ F. Prerequisite: Consent of instructor. Lecture 1 hour. L. Sammons
Focuses on critical analysis of issues influencing restraints and enhancements of roles in contemporary practice for women's health care providers. Impact of current legal, legislative, technological, ethical and health care delivery trends are examined. FAM HLTH

272B. Chronic Illness: Child & Family.
(3) $ F. Prerequisite: Nursing 228A. Seminar 2 hours. M. Styles
This course is designed to explore major trends in contemporary nursing and health care delivery as they relate to nursing practice. MENT HLTH COM ADM

(3) $ F. Prerequisite: Consent of instructor. Lecture 2 hours. Seminar 1 hour. M. Ross
Course explores the structure and organization of the occupational health system, regulatory controls, mechanisms for worker protection, labor management relations, and issues. Major issues and trends in occupational health as they relate to the occupational health nursing role are explored. MENT HLTH COM ADM

(2) $ W. Pr. Prerequisite: Consent of instructor. Seminar 1 hour. C. Brown
Course explores the structure and organization of the occupational health system, regulatory controls, mechanisms for worker protection, labor management relations, and issues. Major issues and trends in occupational health as they relate to the occupational health nursing role are explored. MENT HLTH COM ADM

274. Health and Safety Hazards/Workplace.
(4) $ F. W. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 0-3 hours.
S. Mendelson
Introduces primary health care concepts essential to management of common physical illness in adults. Emphasis is on promotion of optimum client adaptation, selection of clinical interventions congruent with client's adaptive potential, and incorporation of the nursing process into clinical decision making. MENT HLTH COM ADM

275A. Physical Assessment.
Lecture 1-3 hours. M. Muwawas
Study of physiological theories applicable to nursing. Focus is on normal cell functions and nervous and endocrine systems and functions which serve as a basis for nursing practice. PHYSIOL NURS

275B. Psychological Basis for Nursing.
(1-3) $ W. Lecture 1-3 hours. S. Janson-Bjerke
Study of physiological theories applicable to nursing. Focus is on normal cell functions and nervous and endocrine systems and functions which serve as a basis for nursing practice. PHYSIOL NURS

277. Critical Care Pathophysiology.
(4) $ F. Lecture 4 hours. R. Sisson
Course offers study of the multi-system effects of frequently occurring pathologic states in the critically ill. Emphasis is on major mechanisms and consequencess of the disorders which provide the basis for nursing assessment. PHYSIOL NURS

278. Nursing Science History & Philosophy.
(3) $ W. Prerequisite: Doctoral standing and consent of instructor. Lecture 2 hours. Seminar 2 hours.
R. H. Conner
Provides an analysis of the history and development of nursing science and research in the United States, emphasizing the origins of scientific questions and methods in nursing, and the debates currently ongoing regarding the accuracy, reliability, design, conduct, and outcomes of research. FAM HLTH

279A. Family Nursing Theory.
(3) $ F. W. Prerequisite: Seminar 2 hours every other week. J. Ventura

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 interpreting techniques to assess family health. FAM HLTH

279B. Family Nursing Interventions. (3) (5) W. Prerequisite: N279A (Family Nursing Theory). Seminar. 2 hours. C. Gilliss
Course integrates family theoretical and therapeutic concepts. The focus is on nursing assessment and intervention strategies for identified family problems. This is the foundation for the Practice track. FAM HLTH

279C. Cultural Issues in Family Health. (5) W. Prerequisites: Concurrent enrollment in N 279B 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) S & W. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours (clinical). B. McLain
Course examines self care activities of families and their members from a biopsychosocial perspective. Emphasis includes renewing current theories, research, and practices related to family self care in health and illness. FAM HLTH

281A. Res Sem: Eth & Its Correlates. (2) W. Prerequisite: Enrollment in Ph.D. program, program consent or consent of instructor. Seminar 2 hours. A. Badger
Course critically examines nursing research involving personal and environmental factors as they influence health and illness. MENT HLTH COM ADM

281B. Res Sem: Eth & Its Correlates. (4) S & W. Prerequisite: N281A and enrollment in Ph.D. program in Nursing or consent of instructor. Lab 3 hours. Seminar 3 hours. M. Dodd
Course critically examines family research involving personal and environmental factors as they influence health and illness. PHYS HLTH

282. Pregnancy & Early Motherhood. (3-4) S & W. Prerequisite: Enrollment in doctoral program. Lecture 2 hours. Field work 3-4 hours. R. Mercer
Course analyses pregnancy and early motherhood including the relation of research physiology and development to psychological and social phenomena. Students will develop a model to explain a phenomenon occurring during pregnancy or early motherhood. FAM HLTH

283. Institutional Care of the Aged. (3) S & W. Sp. Prerequisites: Nursing 211 or equivalent and graduate standing. Lecture 3 hours. V. Kayser-Jones
Using a theoretical, historical, and an intercultural approach, the seminar focuses on issues, problems, and trends in institutional care of the elderly. Research studies will be discussed and analyzed, and the health professional's role in providing care will be explored. PHYS HLTH

284. Adolescent Health Care. (2) S & W. Prerequisite: Consent of instructor. Seminar 2 hours. M. Saweda, J. Broering
Examination and analysis of theory and research related to health care of adolescents and their families in a variety of settings. Emphasis will be on adaptation to selected stressors including trauma, chronicity, hospitalization, terminal illness and disability. FAM HLTH

285. Physiological Nursing: ECG. (3) S & W. Prerequisite: Graduate standing or consent of instructor. Lecture 3 hours. B. Wald
Course will focus on electrophysiological events present in normal and pathological states. A theoretical and research based on 12-lead ECG will provide the foundation for bedside arrhythmia interpretation, intervention, and evaluation. PHYS HLTH

286A. Research in Stress & Coping. (3-4) S & W. Prerequisite: Consent of instructor or doctoral-level theory development. Lecture 3 hours. P. Benner
Course critically analyzes the relationship of stress and coping to health and illness. Examines theoretical and empirical links between coping strategies and therapeutic interventions. Lecture 3 hours. C. Gilliss
Course examines the current nursing research, behavioral, medical, and epidemiological research relating stress and coping to the etiology and treatment of health-related phenomena. Theoretical and empirical links between coping resources, strategies, and coping intervention are also included. PHYS HLTH

286B. Stress & Coping in Cancer. (3-4) S & W. Prerequisite: Consent of instructor. Lecture 3 hours. P. Benner
Course examines the current nursing research, behavioral, medical, and epidemiological research relating stress and coping to cancer. Theoretical and empirical links between coping resources, strategies, and coping intervention are also included. PHYS HLTH

287A. Organizational Theory & Research. (3) S & W. 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 and social interactions, and the interrelationships of health service organization and the role of management. SEM HLTH

287B. Behavior in Organizations. (3) S & W. Prerequisite: Nursing 287A and consent of instructor. Lecture 3 hours. V. Cleland
Examination of the characteristics, causes, and consequences of behavior and experiences of individuals as they function in organizations. Emphasis is on personnel management and other functional managers. MENT HLTH COM ADM

287C. Processes in Administration. (3) S & W. Prerequisite: Nursing 287A or 287B or consent of instructor. Lecture 3 hours. S. Neidinger
Course provides a synthesis and application of management theories and administrative processes. Emphasis is on planning, organizing, controlling, decision-making, managing change, and evaluating. MENT HLTH COM ADM

288A. Executive Nursing Administration. (3) S & W. Prerequisite: Consent of instructor. Seminar 3 hours. Staff
Course offered to doctoral students, analyzing theories and research related to executive nursing roles in academic and service settings. Course examines administration of conceptual models pertaining to governance, use of power, corporate designs, and executive scholarship. MENT HLTH COM ADM

288B. Decision Theory Seminar. (3-4) S & W. Prerequisite: Consent of instructor. Seminar 2 hours. Conference 1-2 hours.
Seminar offered to doctoral students in nursing administration, which synthesizes and evaluates major decision theories and approaches to decision analysis relevant to roles of the nurse administrator. MENT HLTH COM ADM

289C. Academic Administration Seminar. (3) S & W. Prerequisite: Consent of instructor. Seminar 3 hours. Staff
Seminar designed for doctoral students in nursing administration interested in the field of academic administration. Course analyzes and evaluates theories, models, principles, and practices related to administrative roles in diverse academic settings. MENT HLTH COM ADM

289D. Labor Relations. (3) S & 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. MENT HLTH COM ADM

290.1 Family Health Nursing Theory. (3-4) S & W. Prerequisite: Enrollment in doctoral program. Lab 0-3 hours. Seminar 3 hours. M. Saweda
Comparative analysis of classical theories and methodologies for deriving a theory base for family health nursing. Emphasis is on interrelationships, role, structural-functional, and systems theories. FAM HLTH

290.2. Family Health Nursing Theory. (3-4) S & W. Prerequisite: Nursing 290.01. Seminar 3 hours. Other 0-3 hours. M. Saweda
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

290.3. Family Health Theory. (3) S & W. Prerequisite: Nursing 290.01 and 290.02 or consent of instructor. Enrollment in doctoral program. Seminar 3 hours. Other 3 hours. C. Gilliss
Individual development of a framework or model for study of a specific problem in family nursing. Emphasis is on critique of models generated by students and their application to current health problems. FAM HLTH

291A. Pediatric Pathophysiology. (3-2) S. Lecture 1-2 hours. Staff
A study of pathophysiological applicability to pediatric nursing. Emphasis is on blood and electrolyte imbalances, and hematopoietic, nervous, and endocrine system dysfunctions and their implications for nursing care. PHYS HLTH

291B. Pediatric Pathophysiology. (3) S. Lecture 3 hours. K. Moore
A study of pathophysiological theories applying to pediatric nursing. The focus is on body systems dysfunction and the implications for nursing care. PHYS HLTH

291B-Pediatric Pathophysiology Seminar. (2) S & W. Prerequisite: Concurrent enrollment in N 291B. Seminar 2 hours. M. Lynch
Seminar explores the pathophysiological alterations in organ system function as influenced by developmental needs and system immaturity. Nursing course content presented in N 291B, can be applied to the nursing of pediatric critical care populations. FAM HLTH

292A. Physiology of Pregnancy. (2) S & W. Prerequisite: Consent of instructor. Lecture 2 hours. L. Mayberry
Course reviews and analyzes advanced physiology and pathophysiology of pregnancy and their impact on the maternal-fetal unit as well 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) S & W. Prerequisite: Consent of instructor. Lecture 2 hours. L. Mayberry
Course reviews and analyzes advanced physiology and pathophysiology of pregnancy as a basis for practice and research. Emphasis is on cardiovascular, hematologic, endocrine, and renal systems affecting adaptation and development during pregnancy. FAM HLTH

293. Nursing Serv & Educ Evaluation. (3) S & W. Prerequisite: Consent of instructor. Seminar 3 hours. W. Holzheimer
Case studies are utilized to demonstrate program evaluation in nursing service and education. JCAH and NCQA criteria are reviewed. Evaluation designs, instrumentation, data utilization, and political considerations of evaluation for policy and decision-making are critically analyzed. PHYS HLTH

294. Computer Management & Clinical Data Systems. (3) S & SS. Prerequisite: Preference given to students in critical care specialty. Others admitted with consent of instructor. Lecture 2 hours. Lab 3 hours. H. Miller, N. Stotts
Course is an analysis of critical care patient data using the computer. Emphasis is on conceptualizing the set of data needed for decision making and using the computer to aid in clinical decision making. PHYS HLTH

295. Quasi-Experimentation in Nsg Res. (3) S & W. Prerequisite: Consent of instructor. Seminar 3 hours. W. Holzheimer
Seminar addresses validity issues of quasi-experimentation in nursing research. Designs examined in nursing literature include non-equivalent control group designs, interrupted time-series, and pretest post-test observations. Randomized experiments. PHYS HLTH

296. Teaching-Learning Processes. (4) SS1 or SS2. W. Prerequisite: Consent of instructor. Lecture 2 hours. Seminar 2 hours. N. Okamoto
Analysis of principles, theories, and research in the field of teaching with emphasis on teaching strategies and evaluation methods applicable to clinical and educational settings. A microteaching skills is required for application and evaluation of selected teaching interactions. PHYS HLTH

297. Financial Management. (3) S & W. Lecture 2 hours. Lab 3 hours. B. Cleland
Course offers introduction to financial accounting principles as they relate to financial management in health care. Emphasis is on the manager's role and responsibilities in budgeting, monitoring, controlling, and auditing nursing care. Laboratory permits skill development. MENT HLTH COM ADM

298. Thesis or Comprehensive Exam. (0) S & W. Prerequisite: Advancement to candidacy and
100 Obstetrics, Gynecology, and Reproductive Sciences/Ophthalmology

140.02. Off-Campus Clerkship, 20% of week per week; Su, F, W, Sp. Prerequisite: Consent of instructor.

140.03. Comprehensive Clerkship in Ophthalmology–SFGH, 20% per week; Su, F, W, Sp. Prerequisite: Consent of instructor. One student per block.


140.05. Adv. Ophthalmology Clerkship–VME, 20% per week; Su, F, W, Sp. Prerequisite: Consent of instructor.

150.02. Ophthalmology Research, 20% per week; Su, F, W, Sp. Prerequisite: Consent of instructor and chairperson of the department.

101 Ophthalmology/Oral Biology

111. First Year Clerkship (2) F. Prequisite: Passing placement examination and consent of instructor. Lecture 2 hours.

112. Intraocular Pressure and Periocular Structures. (1) F. Prerequisite: Anatomy 118. Lecture 2 hours.

126. Introduction to Oral Biology. (2) F. Prerequisite: Consent of instructor. Demonstration: 9 hours for 3 weeks.

128A. Intro to Caries & Perio. (1) F. Prerequisite: Biochemistry 110A or Microbiology 126A. Lecture 1 hour.

128B. Microbiology of Caries & Perio. (1) W. Prerequisite: Oral Biology 128A. Lecture 1 hour.

128C. Caries & Periodontal Disease. (3) S. Prerequisite: Oral Biology 128A-B. Microbiology 128B. Lecture 2 hours. Seminar 2 hours.

130A-B. Oral Immunology and Immunopathology. (2-2-2) F, W, Sp. Prerequisite: Consent of instructor. Lecture 2 hours.

140.01A. Advanced Ophthalmology Research, 20% per week; Su, F, W, Sp. Prerequisite: Medicine 110 and Surgery 110 or consent of instructor.

140.01B. Advanced Ophthalmology Research, 20% per week; Su, F, W, Sp. Prerequisite: Consent of instructor.

140.03. Comprehensive Clerkship in Ophthalmology–SFGH, 20% per week; Su, F, W, Sp. Prerequisite: Consent of instructor. One student per block.


140.05. Adv. Ophthalmology Clerkship–VME, 20% per week; Su, F, W, Sp. Prerequisite: Consent of instructor.

150.02. Ophthalmology Research, 20% per week; Su, F, W, Sp. Prerequisite: Consent of instructor and chairperson of the department.

S. Kramer

A project research conducted under the direction of a member of the faculty carried out in the Department of Ophthalmology. OPHTHALMOL

453. Clinical Ophthalmology (1 per week; Su, F, W, Sp. Prerequisite: Consent of instructor.

454. Clinical Ophthalmology (1 per week; Su, F, W, Sp. Prerequisite: Consent of instructor.

455. Fourth-year Residency. (1/2 per week; Su, F, W, Sp. Prerequisite: Consent of instructor.

456. Clinical Ophthalmology (1 per week; Su, F, W, Sp. Prerequisite: Consent of instructor.

457. Clinical Ophthalmology (1 per week; Su, F, W, Sp. Prerequisite: Consent of instructor.

458. Gooder

Clinical observations of patients in clinic, wards, and surgery at San Francisco General Hospital. OPHTHALMOL

401. Staff Conference. (1) F, W, Sp. Prerequisite: First and third-year residents.

402. Special Topics Seminar. (1) F, W, Sp. Prerequisite: Consent of instructor.


407. Clinical observations of patients in clinic, wards, and surgery at L. OPHTHALMOL

408. Lecture series in practical work covering pathology, histology, and cytology. OPHTHALMOL


410. Seminar includes didactic lectures in practical work covering pathology, histology, and cytology. OPHTHALMOL

411. First-year students are offered for the comprehensive examination. OPHTHALMOL

412. Didactic lectures and demonstrations cover the basic sciences as applied to ophthalmology. OPHTHALMOL

413. Discussion of biological problems of interest in dentistry including saliva, mucosal physiology, growth, and development. OPHTHALMOL

414. Discussion of biological problems of interest in dentistry including saliva, mucosal physiology, growth, and development. OPHTHALMOL

415. Oral Biology. (2) F. Prerequisite: Anatomy 118. Lecture 2 hours. Lab hours.

416. Introduction to Oral Biology. (2) F. Prerequisite: Consent of instructor. Demonstration: 9 hours for 3 weeks.

417. Scientific Writing. (1) F. Enroll limited to 8. Lecture 1 hour.


225. Oral Microbiology I. (2) F, W. Pre-requisite: Consent of graduate advisor and instructor. Seminar 2 hours.

Felson, Newburg, and Staff
Current information on pathogenic mechanisms involved in oral diseases, with emphasis on the structural, metabolic, genetic and ecological relationships of oral microorganisms.
STOMATOLOGY

226. Oral Microbiology II. (2) F, W. Pre-requisite: Oral Biology 225, Consent of graduate advisor and instructor. Seminar 2 hours.

Felson, Newburg, and Staff
Continuation of Oral Microbiology studies begun in Oral Biology 225.
STOMATOLOGY

STOMATOLOGY

297. Special Study. (1-3) F, W, Sp. Staff
STOMATOLOGY

Staff
STOMATOLOGY


Newburg
This course will present recent information on the composition, regulation and function of the secretions from major and minor salivary glands. Special consideration will be given to salivary gland dysfunction and associated consequences.
STOMATOLOGY

224. Host Response. (2) F. Pre-requisite: Consent of graduate advisor and instructor. Seminar 2 hours.

Dahms, Khoury, Pappo
Components of the immune system, survey of the various immunological mechanisms in host responses, and current working concepts of the immune system. Overview of consequences that failure, exaggeration, or inability to distinguish self from non-self may have for the host.
STOMATOLOGY

Fundamentals of oral pathology. Introduction to oral histopathology, classification, and clinical manifestations of oral diseases.
STOMATOLOGY


Rossenquist
Perioperative management of the dental patient.
STOMATOLOGY

Staff
STOMATOLOGY

Advanced considerations in the field of histopathology. Applications of newer techniques and concepts are presented to assist in understanding the oral cavity in health and disease. Etiology, diagnosis, and therapy by study of oral diseases.
STOMATOLOGY

400. Maxillofacial Prosthetics. (0-4) F, W. Lecture 1 hour.

Rossenquist
STOMATOLOGY


Daniels
Lectures and seminars on diseases of the jaws, oral mucosa and salivary glands. Disease entities are studied through review of current literature or presentation of their clinical and histopathological features, with emphasis on pathogenesis, diagnosis, and management.
STOMATOLOGY


T. L. Green
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 marks in medicolegal autopsy.
STOMATOLOGY


Daniels
Lectures and seminars on diseases of the jaws, oral mucosa and salivary glands. Disease entities are studied through review of current literature and presentation of their clinical and histopathological features.
STOMATOLOGY

ORAL PATHOLOGY


Rosenquist
Clinical experience in high-magnification radiography, emergency radiography, roentgenography, panoramic radiography, and quality control. Application of roentgenography and lateral projections in examination of oral cavity. Radiographic interpretation of cellular, tissue, and chemical alterations. Laboratory sessions concentrate on clinical problems in oral diseases.
STOMATOLOGY

127a-B. Introduction to Oral Radiology. (0-54) F, W. Pre-requisite: Oral Radiology 126. Lecture 4½ hours. Lab 3 hours.

J. Greenberg, S. Green
Course correlates clinical oral pathology with histologic changes. Emphasis is placed on histopathologic examination of the oral cavity. Course is designed for dental students enrolled in the oral radiology program.
STOMATOLOGY


Silverman
STOMATOLOGY

102. Oral Biology/Oral Medicine and Hospital Dentistry

103. Oral Medicine and Hospital Dentistry
175. Advanced Diagnostic Oral Radiology. (1) W. Lecture 1 hour.

Kircos

Advanced diagnostic oral radiology emphasizing new concepts in the principles of image formation. In-troduction to C.T., SPECT, MR, and digital imaging and their applications to maxillofacial imaging. STOMATOLOGY


Parks

Continuation of Oral Radiology 121 and 123 in a seminar teaching format. STOMATOLOGY

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

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

ORAL SURGERY

176. Clinical Oral Surgery. (0-7/5) SS, F, W, Sp. Prerequisite: Third-year standing. For senior rotation, student must have passed Oral Surgery 130A, 130B, 130C, 131 and 132 or have consent from the division chairperson. Clinical variable.

R. Smith

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 room setting; utilize common principles of pain and pressure control; assist with admission, work-up and discharge of hospital patients. STOMATOLOGY

120. Local Anesthesia. (1-5) Sp. R. Smith, Gordon

Course covers local anesthetics and techniques as they pertain to the dentists and oral surgeons. STOMATOLOGY

130A. Dental Anesthesia. (1) SS. Prerequisite: Anatompy 117A-B and Microbiology 120A-B. Lecture and seminar.

Gordon, R. Smith

An introduction to the basic principles of exodontia, dental/surgical care, postoperative care, hemostasis control, and management of common comorbid conditions. STOMATOLOGY

130B. Pain & Anxiety Control. (1) F, Prerequisite: Anatompy 117A-B and Microbiology 120A-B. Lecture 1 hour.

Gordon, R. Smith


R. Smith

Seminar includes presentation of case studies, literature review, clinical pathology presentations, and occasional guest lectures. STOMATOLOGY

175. Advanced Clinical Oral Surgery. (1/2-1 per week) F, W, Sp. Prerequisite: Limited to oral surgery interns in Hospital and clinic 40 hours. Kaban

Interns and residents, under supervision, are responsible for preparation of case reports, laboratory work, patient preparation, assistance at surgery, per- operative care, and attendance at follow-up clinics. In addition, senior residents have certain administrative, teaching and clinical responsibilities. STOMATOLOGY


R. Smith, Gordon

Clerks/ship may be at UC, SFGH, MG, VA, or at another affiliated ins- titution. Students participate in all phases of oral surgery care of hospital inpa- tients and outpatients, attend semi- nars and lectures. STOMATOLOGY

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

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


R. A. Smith

Course is designed to teach the den- tal student oral surgery procedures under close supervision in the oral surgery clinic. The student takes re- sponsibility for the care of the oral surgery patients including preoperative evaluation, surgery planning, and postoperative care. STOMATOLOGY

ORTHODONTICS


Kaban

Residents will participate in evalua- tion and treatment options for patients with facial and dental deformities. STOMATOLOGY

105. Oral Surgery/Orthodontics
ORTHOPEARIC SURGERY
First-Year Coordinated Instruction—Medicine 131A-B-C. Lec-
ture—demonstrations and section work devoted to the supervised examination of patients.

Core Clerkship—Surgery 110 and 111 with instruction given in postdoctoral ortho-
pedic dentistry program or con-
sent of instructor. Lab variable. Clinic 4-21 hours.

Lee Diagnoses, treatment, and evalu-
ation of clinical postdoctoral ortho-
dontic problems as experienced in modern orthodontic practice. Stu-
dents will work with other specialists in the management of complex orthodontic problems. GR DEVEL

170.03A-C-B-D-E. Clinical Orthodontics II. (0.75) SS1, SS2, F, W, Sp. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lecture 1 hour.

170.03A-C-B-D-E. Clinical Orthodontics III. (0.75) SS1, SS2, F, W, Sp. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lab variable. Clinic 0.25-2 hours.

Boyd Diagnosis, treatment, and evalua-
tion of case presentations in general orthodontic practice. Students will work with other specialists in the management of complex orthodontic problems. GR DEVEL

170.05A-C-B-D-E. Ortho General Int rotations. (1.11-1.1) F, W, Sp. SS1, SS2. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Clinic 3 hours.

175A-C-T. TMJ Pain & Dysfunction Seminar. (0.3) F, W, Sp. Prerequi-
site: Resident standing in Ortho-
dontics. Seminar 1 hour.

McNeill, Nielsen This course will provide the resi-
dent with the basic cognitive 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, physiologist, ENT, medical, etc.). GR DEVEL

176A-B-E. TMJ Pain & Dysfunction Clinic. (0.3) F, W, Sp. Prerequisite: Enrollment in postdoctoral orthodontics. Clinic 3 hours.

West, Nielsen, McNeill This course will provide the resi-
dent with the basic cognitive 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, physiologist, ENT, medical, etc.). GR DEVEL

170.01A-B-C-D-E. Clinical Orthodontics I. (0.75) SS1, SS2, F, W. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lecture 2 hours.

Yoshikawa Fundamental concepts of force sys-
tems in orthodontics are used to illustrate balance and forces in malocclusion in patients. Equilibrium, force couples, and free-body diagrams. Analysis of orientation and force direction. Theories will be related to orthodontic bone movement, appliance design, and biological forces to force applica-
tions. GR DEVEL
Orthopaedic Surgery/Parasitology

A practical course in general ortho-
apathy including diagnosis and
treatment of common ear,
nose, and throat problems; both in-
patient and outpatient experiences
will be offered. OTOLARYN

Jackler, Kaplan, Sooy
A review of fundamental principles of
total laryngectomy and neck
surgery, encompassing both the
basic and clinical sciences. This
course is intended as a comprehen-
sive review for the "on-service"
in-service training examination as well as preparation for board certifica-
tion. OTOLARYN

450. Clinical Otologyngology.
F. Boles, SFPG Visiteau,
S. J. van Oosterom, K. J. Borter,
J. Van Dam. Residents, under
supervision, are responsible for care
on the ward and outpatient clinics
including history-taking, physical ex-
amination, laboratory tests, prepare-
ning and postoperative care of
minor surgery, audiology, vestibular
testing, and consultations. Sen-
or resident has certain administrat-
ive, teaching, and clinical responsibili-
ties. OTOLARYN

490. Clinical Otologyngology.
(4½ per week) Su, F, W, Sp.
F. Boles, SFPG Visiteau
Widens, Ingers, under supervision of
the attending staff, are responsible
for patient care on wards and in
the follow-up clinic, including history-
taking, examination, and consulta-
tion. This rotation is combined with
patients seen at the Otolaryngology
Service. OTOLARYN

PARASITOLOGY

135. Medical Parasitology. (3) W.
Lecture 2 hours. Lab demonstra-
tion 2 hours.
H. Heyneman and Staff
An introduction to the protozoa,
helminth and arthropods that par-
tasite man. Parasite ecology
and disease epidemiology, clinical
and experimental, and diseases and their treatment
are considered in lecture and labora-
tory. Examination is on demonstration. EPI D IN T 3

142. Audiology Conference. (1) Su,
VA Kaplan
Combined Audiology and Oto-
apathy. Conference where all
patients evaluated for hearing
problems are presented, and
diagnosis and treatment recommenda-
tions are made. OTOLARYN

415. Otologyngology Fundamentals
Course. (1) W. Seminar 2 hours.
plasia. Recent advances and classi-
cal concepts of diseases as they af-
fect the heart and blood vessels,
lungs, gastrointestinal tract are
presented. PATHOLOGY

102. Systemic Pathology. (3) W.
Prerequisite: Pathology 101.
Lecture 3 hours. Lab 2 hours.
Bottles
Recent advances and classical con-
ccepts of diseases as they affect
the following organ systems are pre-
sented: pancreas, liver, central nervous system, kidney, circulatory
system, skin. Emphasis will be on
correlation of functional and mor-
phologic characteristics of
organ systems. PATHOLOGY

Prerequisite: Pathology 102.
Lecture 3 hours. Lab 2 hours.
Bottles
Recent advances and classical con-
ccepts of diseases as they affect
the following organ systems are pre-
sented: reproductive systems, skele-
tal 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. (5) F.
Prerequisite: Substantive courses in
biochemistry, physiology, histology,
pathology. Microbiology (first.
quarter, concurrent) or an introduction
to immunology. In doubt as to ade-
quacy of preparation, consult the
instructor. Lecture 3 hours. Lab 6
hours.
Bivana and Staff
Mechanisms and language of
disease are discussed, with emphasis
on the dynamic nature of funda-
mental disease processes: cell
injury, immunopathology, inflammation,
response to infectious agents, repair,
regeneration, hemodynamic derangements, genetic disorders,
disturbances of cell growth, and
carcinogenesis. PATHOLOGY

127. General Pathology. (2) F.
Prerequisite: Courses in biochemistry,
physiology, histology, microbiology,
and an introduction to immuno-
ology. Lecture 4 hours for five
weeks.
Bivana and Staff
Mechanisms of disease are dis-
cussed, with emphasis on the
dynamic nature of fundamental
disease processes: cell injury,
immunopathology, inflammation,
response to infectious agents, repair,
regeneration, hemodynamic
derangements, 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 ade-
quacy of preparation, consult the
instructor. Lecture 3 hours.
Bottles
This course is identical to the
lecture portion of Pathology 126.
PATHOLOGY

101. Autopsy Dissection Princi-
Prerequisite: Pathology 101.
Consent of instructor. Enrollment
limited.
Warnock
Performance of one to two autopsies.
Emphasis will be on review of
anatomy and histology and systemat-
is observation and description of
pathologic material. Objective of the
course is to provide a better understanding of clinical pathology.
PATHOLOGY

150. Off-Campus Pathology
Clerkship. (1½ per week) Su, F, W,
Sp. Prerequisite: Pathology 101 and 102.
Bainston
Clinical clerkships in off-campus
hospitals approved by the chair-
person of the department and the
dean. PATHOLOGY

150.03. Pathology Clerkship.
SFPGH. (1½ per week) Su, F, W,
Sp. Prerequisite: Pathology 102 and
an introduction to immunology.
Margaretten, Howes, Bottles
Students prepare surgical speci-
cmens, perform autopsies under
supervision, and participate in teach-
ing conferences. PATHOLOGY

150.04. Pathology Clerkship.
UC & IU. (1½ per week) Su, F, W,
Sp. Prerequisite: Medicine 110 and
Surgery 110. Consent of instruc-
tor.
Staff
Students work closely with the fac-
ulty and house staff in the perform-
ance of autopsies and in the diag-
nostic work-up of surgical specimens.
They actively participate in depart-
mental conferences. Opportunity
provided for development of
specific areas of investigation.
PATHOLOGY

150.05. Research. (1½ per week)
Su, F, W, Sp. Prerequisite: Con-
sent of instructor and chairperson
of the department.
Staff
A research project under the direc-
tion of a member of the faculty.
PATHOLOGY

106. Surgical Pathology—VMC.
(1½ per week) F, W, Sp. Prerequi-
tive: Pathology 102 and consent of
instructor.
110 Pathology

Library research and directed reading under supervision of 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.

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

209. Applied Pathology. (3) F, W. Prerequisite: Microbiology 120A-B and Pathology 126 or equivalents.

J. Greenspan

Weekly seminars are designed to provide students with an understanding of the basic principles of pathology. Emphasis is placed on research; students will critically review current literature in the field, under faculty supervision. PATHOLOGY

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

Parlow

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


R. Stern

Students and faculty review literature and discuss current concepts and experiments in connective tissue research. Included are roles of structural proteins, such as collagen and elastin in pathology, cell matrix interactions, development of biological and morphogenesis. PATHOLOGY

230. Experimental Pathology Seminar. (2) F, W. Sp. Prerequisite: Permission of the graduate advisor of the department. Lecture 1 hour. Seminar 1 hour.

Parlow

Presentation of current research by graduate students. Topics in pathology and disease mechanisms. Faculty from basic and clinical sciences will discuss current research in a disease process. Advanced reading in that disease will be assigned before class. There will be a forum with evaluation of test-hypothesis and discussion of an experimental design lead by a student leader at each session.


507. Oral examination, treatment planning, treatment of children including behavioral management. Time will be spent at UCSF Pediatric Dental Clinics and Children's Hospital Medical Center. Oral examination. Course will involve clinic, seminar, and treatment in hospital operating room with general anesthesia. GR DEVEL.

130C-B. Pedodontic Procedures. (1, 2) W. Prerequisite: Satisfactory completion of Operative Dentistry 125 A-B-C. Lecture 1 hour. Sp: 2 hours.

Leggett

Lecture course presenting dental procedures unique to, or modified to, meet the needs of the child. Examination, diagnosis, treatment planning, pain control and management, restorative procedures, preventive orthodontic, diet analysis, and caries control are stressed. GR DEVEL.

179O-E. Intro to Ped Dent. (2) SS1, SS2. Prerequisite: Enrollment in postdoctoral pediatric dentistry program or consent of instructor. Lecture 2 hours.

Leggett and Staff

Course is offered to the incoming postdoctoral pediatric dentistry students acquainting them with the philosophies and techniques of rendering clinical treatment to patients in pediatric dentistry. GR DEVEL.

171A-B-C-D-E. Advanced Ped Dent. Sem. (5-5-5-5-5) F, W, SS1, SS2. Prerequisite: Enrollment in postdoctoral pediatric dentistry program or consent of instructor. Seminar 5 hours.

Leggett and Staff

Will discuss the state of the art of all aspects of contemporary pediatric diagnostic and treatment modalities. The instruction embraces not only a review of historical perspectives but also research and clinical programs in current diagnostic activities and treatment modalities. GR DEVEL.

172O-D. Pediatric Physical Diagnosis. (1-1) SS1, SS2. Prerequisite: Enrollment in postdoctoral pediatric dentistry program or consent of instructor. Lecture 1 hour.

Rothman

Course is designed to provide knowledge of clinical pediatrics. It will include didactic and clinical experiences in history-taking and physical diagnosis. GR DEVEL.

172AI-A-BC-C. Pediatric Medicine. (1-1) F, W. Prerequisite: Enrollment in postdoctoral pediatric dentistry program or consent of instructor. Seminar 1 hour. Clinic 6 hours.

Rothman and Staff

Course is specifically designed to provide the student with a working knowledge of dental rehabilitation procedures in a hospital operating...
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 medicine service.

140.01B. Ambulatory Pediatrics-SFGH. (1/1 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Brown, Courtois, 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 conferences with inpatient consultation provided by senior residents, chief resident, and faculty. PEDIATRICS.

140.01D. Outpatient Pediatric Clerkship-UC. (1/1 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Consent of instructor.

Gerdien 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.

140.01E. Adv. Inpt Pediatric Clerkship-SFGH-CHMC. (1/1 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Gerdien Students are assigned patients. They are supervised by attending and resident staff. They present patients on wards, assist with procedures, and attend specialty conferences when their patients are being discussed, as well as all daily formal teaching conferences.

140.01F. Outpatient Pediatric Clerkship-KP. (1/1 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Consent of instructor.

Burnip 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.

140.01G. Inpatient Pediatric Clerkship-KP. (1/1 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Sheehanfield

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.

140.01H. Outpatient Pediatric Clerkship-NRCM. (1/1 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Van Meter 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.

140.01I. Inpatient Pediatric Clerkship-NRCM. (1/1 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Van Meter 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.

140.01J. Intensive Care Nursery-UC. (1/1 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Phillo Students gain experience in evaluation and management of sick preterm and term infants. Supervision is provided, and it is expected that students will assume the role of primary physician in matters of clinical care, as well as diagnostic and therapeutic procedures.

140.01K. Neonatology-SFGH. (1/1 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Partridge, Kip Wong Students develop skills in assessment of newborns in the setting of a high-risk infant population. The experience involves care of patients, ranging from the healthy term newborn to the infant requiring intensive supportive care.

140.02. Off-Campus Clerkship-KP. (1/1 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Rudolph Clinical clerkship in off-campus hospital approved by the chairperson of the department and the dean. PEDIATRICS.

140.03. Outpatient Pediatrics-UC. (1/1 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 per 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, and case discussions.

140.04. Pediatric Cardiology. (1/1 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Open to UCSF students only. Silverman

Experience in clinical evaluation of children with cardiac abnormalities is emphasized. Daily ward rounds on pediatric cardiology service. Association of tendance at designated cardiac surgical procedures, catheterization, weekly catheterization conference, extensive reading assignments, and daily attendance in browse office setting are included. PEDIATRICS.

140.05. Pediatric Private Practice. (1/1 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Consol of instructor.

L. P. Smith Working experience with a pediatrician on the clinical faculty as the pediatrician sees patients in the office and in the hospital. Students may select time in small group, large group, or subspecialty practice, or a combination of these.

140.06. Adolescent Medicine. (1/1 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Gareis Clinical clerkship in adolescent medicine with emphasis on outpatient patient clinical experience in a wide range of health problems of the adolescent. PEDIATRICS.


Students learn to identify children with developmental disabilities and direct their referrals to agencies for achievement of their greatest potential. Various settings are used in acquiring skills in developmental assessment.

140.08. Ambulatory Pediatrics. (1/1 per week) F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. J. E. Anderson

Clinical experience in teaching hospital's busy pediatric clinic, working as member of health care team. Supervision from attending physicians with emphasis on developmental-behavioral approach to pediatric practice.

140.10. Pediatric Hematology—UC—SFGH. (1/1 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Consol of instructor. Open to UCSF students only.

Koerper, Lubin, Mentzer The student will participate in ward rounds, laboratory service, and laboratory evaluation of blood and bone marrow specimens. The pursuit of special interests in the clinic or laboratory is encouraged.

140.11. Cardiology—CHMC. (1/1 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 conferences. Emphasis is on the physiological principles of diagnosis and management.


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.


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 a group of children with diabetes, in the management of children, adolescents, and young adults. PEDIATRICS.

140.15. Oncology—UC. (1/1 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Consol of instructor.

Ablin, K. Matthew, Zeger Participation in management of patients with solid tumors and leukemia; attendance at pediatric tumor board, ward rounds and outpatient clinic. Special emphasis on psycho-social problems; supervised reading
and discussion with preceptor. PEDIATRICS

140.16. Pediatric Nephrology—UC (1% per week) Su, F. W. Sp. Pre- requisite: Medicine 110 and Pediatriucs 110. Consent of instructor. D. B. E. 4.0.0.0

Introduction to general nephrology with children having nutritional problems, EMSR, and the clinical evaluation of kidney dysfunction and dialysis treatments. New cases from both inpatients and outpatients will be considered. Preceptors: papers and conferences conducted by senior staff. PEDIATRICS

140.24. Neonatal Care—MZ (1% per week) Su, F. W. Sp. Pre- requisite: Medicine 110 and Pediatriucs 110. Consent of instructor. F. Ballard Experience in normal newborn and intensive care nursery nursing, according to student's interests and skill levels. Selected students to participate in the care of the transport service, and on nights as available. PEDIATRICS

140.25. Devel & Behavioral Pedi- MZ (1% per week) Su, F. W. Sp. Pre- requisite: Medicine 110 and Pediatriucs 110. Gorski and Staff Practical orientation and training for assessment and intervention in motor, cognitive, and social development of normal and high-risk children. Course includes didactic sessions in medical ethics, child psychiatric, developmental, and behavioral pediatric problems. PEDIATRICS

140.26. Comprehensive Pediatric Care—KP (1% per week) Su, F. W. Sp. Pre- requisite: Medicine 110 and Pediatriucs 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 residents, nurses, and other health professionals. PEDIATRICS

140.27. Inpatient Pediatrics—KM (1% per week) Su, F. W. Sp. Pre- requisite: Medicine 110 and Pediatriucs 110. Schoen Students will participate in the care of children admitted to the inpatient service, under the supervision of pediatric residents. They will work in the general inpatient nursery, a newborn nursery, or a specialty nursery. They will be involved in the care of newborns, infants, and children. They will participate in the care of critically ill children. PEDIATRICS

Curry, Winter Experience will be gained in medical genetics, including dysmorphology, biochemical genetics and prenatal diagnosis. Rotation will be designed for students interested in developing special skills in genetic counseling. PEDIATRICS

140.30. Gastroenterology & Nutri- tion (1% per week) Su, F. W. Sp. Pre- requisite: Medicine 110 and Pediatriucs 110. Heyman, Thaler Students participate with staff on selected patients with 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 present cases at specialty conferences. PEDIATRICS

140.31. Inpatient Pediatric (Kapsh- VMC). (1% per week) Su, F. W. Sp. Pre- requisite: Medicine 110 and Pediatriucs 110. Nison Opportunity to develop and perfect physical skills in health-maintenance, physical examination, case notes, patient interviews, and procedures. Supervised by attending physicians in the hospital environment. PEDIATRICS

150.04. Research in Pediatrics—UC (1% per week) Su, F. W. Sp. Pre- requisite: Medicine 110 and Pediatriucs 110. Grumbach and Staff Students participate in the care of children admitted to the inpatient service, under the supervision of pediatric residents. They will be involved in the care of newborns, infants, and children. PEDIATRICS

160.01. Clinical Correlation in Peds—UC. (1% per week) Su, F. W. Sp. Pre- requisite: Consent of instructor. Seminar 2 hours. Irwin A four-hour course covering the pediatrics, physiology, psychological, and social development of adolescence. Also included is material on sexual activity, nutrition, family interactions, cultural differences, legal issues, substance abuse, and psychiatric problems, and common medical problems. PEDIATRICS

160.22. Pediatric Pharmaceutics FRESNO. (1% per week) Su, F. W. Sp. Pre- requisite: Medicine 110 and Pediatriucs 110. McCoy Experience with common and unusual infections such as meningitis, sepsis, pneumonia, personal infections, and infections in immuno- compromised hosts. Emphasis on discussion of cases and participation in the ward rounds. PEDIATRICS

170.01. Pediatric Disease Patterns Su, F. W. Sp. Pre- requisite: Consent of instructor. Curley and Staff Library research and directed reading under supervision of a member of the faculty. Applied for approval of the chairperson of the department. PEDIATRICS

170.02. Primary School Health Educ. (1-2) F. W. Sp. Pre- requisite: Consent of instructor. Curley and Staff A laboratory research project to determine the effectiveness of an educational program on the prevention of childhood injuries. PEDIATRICS

170.03. Health Professional and Nu- clear War. (3) F. W. Sp. Pre- requisite: Consent of instructor. Curley, Winter A seminar on the physical and psychological effects of nuclear warfare. PEDIATRICS

190.31. The Medical Student as a Researcher. (1% per week) Su, F. W. Sp. Pre- requisite: Consent of instructor. Shadish and Staff A seminar on the process of conduct research. PEDIATRICS
463. Clinical Primary Care. (1 1/2 per week) Su, F, W, Sp.

Rudolph

Resident in the Primary Care Track of Pediatrics are responsible for patient care in a multispecialty primary care clinic. Other responsibilities include those common to the regular Pediatrics Residency Program as well as related clinical services such as Dermatology, Otolaryngology, PEDIATRICS


M. Grossman

Intensive unit within the neonatal nursery and clinic, child behavior, communicable diseases ward, and emergency room. They are responsible for the care of patients, including history-taking, physical examination, laboratory tests, diagnosis, and consultation. PEDIATRICS


UC. Grambach

Residents, under supervision, are responsible for patient care in the wards and outpatient clinic including history-taking, physical examination, laboratory tests, diagnosis, and treatment. Additional, the chief resident has certain administrative and clinical responsibilities. PEDIATRICS

PERIODONTISTRY


Taggart, S. R. Miller

Treatment of a variety of periodontal disease under the direction of faculty. STOMATOLOGY

121A. Perioental Therapy. (1) F. Prerequisite: Periodontology 121. Lecture 1 hour.

Taggart

Introduction to the surgical management of periodontal lesions. STOMATOLOGY

121B. Perioental Therapy. (2) W. Prerequisite: Periodontology 131A. Lecture 2 hours.

Taggart

Introduction to the surgical management of periodontal lesions. Emphasis will be placed on the rationale for various treatment modalities. STOMATOLOGY

131C. Peridoental Therapy. (1) Sp. Prerequisite: Periodontology 131B. Lecture 1 hour.

Taggart

Introduction to the surgical management of periodontal lesions. STOMATOLOGY

160B. Periodontal Diseases. (1 1/2 per week) F, W, Sp. Prerequisite: Periodontology 150, Lecture 1 hour.

Whitten, Taggart

Classification of periodontal diseases and methods of their prevention. Principles of pathology are correlated with therapeutic procedures. A faculty panel discusses the role of periodontal disease in dental practice. STOMATOLOGY

160C. Periodontal Diseases. (2) Sp. Prerequisite: Periodontology 150. Lecture 2 hours.

Armitage, Taggart

Classification of periodontal disease and methods of their prevention. Principles of pathology are correlated with therapeutic procedures. A faculty panel discusses the role of periodontal disease in dental practice. STOMATOLOGY

161. Advanced Periodontal Therapy. (1) F. Prerequisite: Periodontology 160. Lecture 1 hour.

Taggart

Demonstration and rationale of surgical treatment of periodontal lesions. The role of the periodontal disease in dental practice, especially related to prevention, recognition, and aid in treatment of periodontal disease. STOMATOLOGY


Diestein (F. W.), Ryder (Sp)

Dynamics of inflammation and its role in the periodontal tissues. STOMATOLOGY


Shibata

Clinical procedures in periodontal therapy. STOMATOLOGY

172. Examination and Treatment Planning. (1) F. Prerequisite: Enrollment in postgraduate specialty program or consent of instructor. Seminar 1 hour.

Shibata

Lectures on examination and treatment planning. STOMATOLOGY

172A. Hospital Anesthesia. (0-3) F, W, Sp. Prerequisite: Consent of instructor. Seminar 10 hours. Clinic 24 hours.

Shibata

Practical course in operating room anesthesia. Instruction in hospital administration, physical and preanesthetic evaluation of the patient, monitoring of vital signs, administration of intravenous mediations, general anesthesia, and handling of resuscitative medical emergencies. Clinical instruction is supplemented by seminars. STOMATOLOGY

172B. Hospital Periodontics. (2) F, W, Sp. Prerequisite: Periodontology 171A-B-C. Lecture 4 hours given in alternate weeks.

Shibata

Clinical periodontics integrated into the medical and rehabilitative activities of ML. Course provides patient oriented periodontal care, appreciation for preventive dentistry, and concept of total health care. Students are exposed to medical conditions. STOMATOLOGY

173. Periodontal Therapy. (2) SS. Prerequisite: Periodontology 171A-B-C. Clinic 60 hours.

Shibata

Clinical procedures in periodontal therapy. This course is an enlargement on earlier clinical experience. STOMATOLOGY

173A. Periodontal Therapy. (4) F, W, Sp, SS. Prerequisite: Enrollment in postgraduate periodontology program. Clinic 12 hours.

Shibata

Advanced clinical procedures in periodontal therapy. STOMATOLOGY

180. Periodontics in General Practice. (1) W. Lecture 1 hour.

Nathan

Implementation of the skills and knowledge of periodontics in the private practice environment. STOMATOLOGY

180A. Periodontal Therapy. (2) F, W, Sp. Prerequisite: Periodontology 131 and consent of instructor. Lecture 1 hour.

Shibata, Green and Staff

Advanced surgical techniques in management of periodontal diseases. STOMATOLOGY

180B. Orthodontic and Periodontic Prob. (1) SS. Prerequisite: D.D.S. degree. Seminar 1 hour.

Parr

A seminar to discuss and evaluate the problems common to the specialties of orthodontics and periodontics. STOMATOLOGY


Taggart

Continuation of clinical experience beyond the level of Periodontology 100. STOMATOLOGY

180B. Laboratory Project. (0-10) F, W, Sp.

Taggart

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

Pharmaceutical Chemistry

190. Laboratory Project. (1-3) F, W, Sp. Staff
A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. PHARM CHEM

200. Phys chem Prop & Biological Activity. (1) W, F, W. Prerequisite: Consent of instructor. Lecture 1 hour.
Yeon
Oie, 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 interaction. Conference/workshop emphasizes problem-solving in pharmacokinetinics.

Kuntz, Staff
Topics of current research interest in physical and biophysical chemistry. PHARM CHEM

250A-B. Graduate Research Opportunities. (1-4) F, W, W. Prerequisite: Consent of instructor. Lecture 2 hours. Conference 2-3 hours.
Benet, Tozer
A series of weekly presentations of research in the graduate student's area of interest.

250A. Spectroscopy. (3) Sp. Prerequisite: Chemistry 162 or equivalent. Lecture 3 hours.
Sadee
Study of the in vivo and in vitro vibrational transformation of biological coagulant compounds with particular emphasis on drugs. When possible, detailed chemical and biochemical mechanisms are considered. PHARM CHEM

200. Molecular Biochemistry. (3) F, W. Prerequisite: Consent of instructor. Lecture 3 hours.
Craik
The emphasis of the course will be on modern principles governing structural and functional aspects of nucleic acid and proteins; molecular biological methodologies with an emphasis on topics of current research interest; basic theories of molecular biology, protein synthesis, nucleic acid and protein characterizations, site-directed mutagenesis, hybridomas and automated chemical methods for protein and nucleic acid sequence determination. PHARM CHEM

212A-B. Pharm SF Computer Prog. (1, 2) F, W. Prerequisite: PC 212A or equivalent. Lecture 212B. Lecture A, 1 hour; B, 2 hours. Lab A, 1 hour; B, 1 hour.
Reception
A course in computer programming using examples from the pharmacological sciences.

221. Research Conf in Pharm Chem. (1) F, W, Sp. Prerequisite: Graduate standing in the Department of Pharmaceutical Chemistry. Lecture 1 hour.

Gall, Siegel, Boynt
Basic principles applicable to transport and reaction processes in model membrane and biological systems. PHARM CHEM

Zoska, Guy
Biophysical consideration of membrane structure; passive and active transport mechanisms and implications for targeted and controlled drug delivery. PHARM CHEM

Siegel, Dill, Nelle
Chemistry and physics of polymers relevant to the design and function of programmable drug delivery systems.

240. Radiochemical Synthesis. (1-2) F, W, Sp. Prerequisite: Consent of instructor. Lab 3-4 hours.
Peng
Theory and techniques related to the synthesis of radioactivity labeled organic compounds. Course may be repeated for credit.

242. Radiotracer Methodology. (1) W. Prerequisite: Pharmaceutical Chemistry 182 or 160, or consent of instructor. Lecture 1 hour.
Peng
Discussions on the theory and principles of use of radiotracers as tracers in biological systems. Emphasis is on the design of experiments and data evaluation.

250. Research. (1-3) F, W, Sp. Staff


Staff
Discussion and practice in research project formulation and design selection. Core classes and small group sessions are organized around students' interests by faculty within the area of specialization.

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

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

Research 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 & 100B or equivalent; Physiology 120 and 125 or equivalent. Lecture: 3 hours. Conference: 2 hours.
Katzung
Systematic presentation of pharmacological agents based on drug group classification. Major emphasis is on mechanism of action of clinically important drugs. PHARMACOL

121. Pharmacology. (1) W. Prerequisite: Concurrent enrollment in Pharmaceutical Chemistry 121. Lecture 3 hours.
Burkhalter
Systematic survey of action and uses of drugs with emphasis on their mechanism of action, their classification, and their effectiveness on metabolic disorders. PHARMACOL

Pharmacology
Systematic survey of action and uses of drugs acting on autonomic nervous and cardiovascular systems and the kidneys. PHARMACOL.

126C. Dental Pharmacology. (2, 4) § W, Sp. Prerequisite: Physiolog y 110. Lecture 2 hours; W 3 hours. Lab 3 hours. Sp. Prereq:

Trevor Objective of the course is to acquaint dental students with the fundamentals of pharmacology. Various classes of drugs are examined with regard to actions, absorption, fate, excretion, and toxicity. Agents useful in den tistry are emphasized. PHARMACOL.

130. Clinical Toxicology. (2) Sp. Prerequisite: Pharmacology 125 and 136. Lecture 2 hours.

Burkhalter The occurrence, mode of action, recognition, and treatment of poisoning by environmental chemicals and therapeutic agents.

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-neo-plastic 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. (1½ per week) Su, W, F. Sp. Prerequisite: Consent of instructor. Lecture and lab to be arranged.

Staf 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 Dental Faculty Research. (1-3) F. Enrollment restricted to pharmacology graduate students. Seminar 1-3 hours.

120 Pharmacology/Pharmacy

298. Thesis. (0) § F, W, Sp. Prerequisite: Advanced standing to candidacy of the graduate advisor.

Staff For graduate students enrolled in the masters degree program. PHARMACOL.

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

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


Staff Opportunity is provided to participate in a formalized way in the teaching of pharmacology under the direction of the faculty. PHARMACOL.

PHARMACOL 111. Non-Prescription Products. (1) W. Conference 2 hours.

Ye Evaluation and comparison of non-prescription medications and appliances. Discussion on their patterns of use in the community is included. Emphasis is on verbal communications. PHARMACOL.

112. Non-Prescription Products. (1) Sp. Prerequisite: Pharmacy 111. Conference 2 hours.

Yeou Continuation of Pharmacy 111. PHARMACOL.

114. Biopharmaceutics & Phys Therapy. (4) F. Prerequisite: Concurrent enrollment in Chemistry 115. Lecture 3 hours. Yeou, Guy, Siegel A study of the physical, chemical, and biological factors which interact and affect the design of dose forms as drug delivery systems, including an introduction to the anatomy of the oral cavity. PHARMACOL.

115. Biopharmaceutics & Phys Therapy. (4) W. Prerequisite: Pharmacy 114 and concurrent enrollment in Chemistry 116. Lecture 3 hours. Lab 3 hours. C. Hunt, Dill, R. Day, Bentz, Siegel, Blake Continuation of Pharmacy 114 with the addition of laboratory preparation of basic drug delivery systems. PHARMACOL.


123. Non-Prescription Drugs. (1) F. Prerequisite: Pharmacy 112. Conference 2 hours. C. Ye Sohka Continuation of Pharmacy 112. PHARMACOL.

127. Biopharmaceutics & Dispensing. (3) F. Prerequisite: Pharmacy 116 and Pharmacy Administration 112. Lecture 2 hours. Lab 6 hours. R. Day, Benet, Siegel Continuation of Pharmacy 116 with the addition of training in the preparation and dispensing aspects of pharmacy. PHARMACOL.

128. Pharmacokinetics. (3½) W. Prerequisite: Pharmacy 116. Lecture 3 hours. Conference 1½ hours. Hoener, Giacomini Course covers the pharmacokinetic basis of variability in the therapeutic, pharmacologic, and toxicologic effects of drugs. PHARMACOL.

129. Pharmacokinetics. (3½) F. Prerequisite: Pharmacy 127. Lecture 2 hours. Conference 2 hours. Giacomini, Bie Continuation of Pharmacy 128. PHARMACOL.

151. Community Health Education. (2) Sp. Lecture and discussion 2 hours. Participation in at least one community health education program. R. Gibson 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 interrelationships of pharmacist, veterinarian and consumer and legal limitations of veterinary product dispensing. PHARMACOL.

163. Pharmaceutical Technology. (3) W. Prerequisite: Pharmacy 116. Lecture 1 hour. Lab 6 hours. Blake, Gibson An introduction to the technology of liquid and semisolid 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 mediation. PHARMACOL.

167. Pharmaceutical Technology. (3) Sp. Prerequisite: Pharmacy 166. Lecture 1 hour. Lab 6 hours. Hunt, Goyan Preparation, presentation and evaluation of research seminars. PHARMACOL.

154. Percutaneous Absorption. (2) W. Prerequisite: First-year standing. Lecture 2 hours. Weller, Guy Course presents material dealing with the penetration of drugs and other chemicals across the skin. PHARMACOL.

155. External Drug Products. (4-3) W, Sp. Prerequisite: Pharmacy 112. Lecture 2-3 hours. Lab 3-6 hours. Blake, Hoener Discussion and laboratory exercises on the formulation of products for external use, including drugs and cosmetics. The course deals with the properties and ingredients of such products. 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.

164. Veterinary Products. (3) Sp. Prerequisite: Microbiology 120, 127, Pathology 135, Pharmacology 136 and Pharmacy 116. Lecture 3 hours.

Enos 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 interrelationships of pharmacist, veterinarian and consumer 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 semisolid 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. Hunt, Goyan Preparation, presentation and evaluation of research seminars. PHARMACOL.

154. Percutaneous Absorption. (2) W. Prerequisite: First-year standing. Lecture 2 hours. Weller, Guy Course presents material dealing with the penetration of drugs and other chemicals across the skin. PHARMACOL.

155. External Drug Products. (4-3) W, Sp. Prerequisite: Pharmacy 112. Lecture 2-3 hours. Lab 3-6 hours. Blake, Hoener Discussion and laboratory exercises on the formulation of products for external use, including drugs and cosmetics. The course deals with the properties and ingredients of such products. 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.


Staff Group studies of selected topics in pharmacology. PHARMACOL.

170.05. Clinical Drug Investigations. (2) F. Sp. Prerequisite: Introductory statistics recommended. Lecture 2 hours. Williams, Westhe, Schott A ten-week course which will discuss methods for generating data about drug risk and efficacy in clinical investigations, with emphasis on the randomized clinical trial. Statistical methods used in modern clinical trials will be discussed. PHARMACOL.

170.06. Molec & Cell Biology in Drug Devel. (2) Sp. Prerequisite: Consent of instructor. Lecture 2 hours.

Sokol Introduction to the role of cellular and molecular biology in developing new drugs, hormones or therapeutic agents. PHARMACOL.

170.07. Communication Skills. (1½) Sp. Prerequisite: First-year standing. Lab 2 hours. Seminar 1 hour. Enrollment limited. Lem Aspects of communication which focus on skills pertinent to contemporary pharmacy settings. Discussion of techniques of pharmacy communication and practice of specific techniques in simulated practice situations. PHARMACOL.

170.08. CPR Education. (½) F, W. Sp. Seminar 6 hours. Lem
111. Pharmacy Laws. (2) W. Lecture 2 hours.
J. R. Nielsen
Introduction to court systems and administration boards and their relationship to the health professions. Discussion of basic principles of criminal law, negligence, and business law with particular emphasis on the legal relationship and responsibility of the pharmacist to the patient. PHARMACY
112. Pharmacy Laws. (2) L. 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. Staff
Involves some administrative work. PHARMACY
150. Marketing. (4) W. Lecture 4 hours.
Lacaccini
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 professionals. No prerequisite 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. Lacaccini
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.
Lucacceini
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 dissolution, property division, support payments, probate and decedent's estates, with particular emphasis on how pharmacists may expect their practice to be affected by these laws, and some practical present legal techniques. PHARMACY
170. Group Studies. (1-4) F. W. Sp. Prerequisite: Consent of instructor. Staff
Group studies of selected topics in pharmacy administration. PHARMACY
180-B-C. Legal Problems in Health Care. (2-2-2) F. W. Sp. Prerequisite: Third-year standing and consent of instructor.
J. R. Nielsen
Selected problems with directed readings and library research on current legal (statutory and case law) issues affecting the delivery of pharmacy services. Discussion and paper. PHARMACY
Staff
Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. PHARMACY

PHYSICAL THERAPY
100. Gross Anatomy. (6) Ss. Prerequisite: Completion of course prerequisites for admission to the University and the Curriculum in Physical Therapy. Open only to students enrolled in the Curriculum or consent of program director. Lecture 3 hours. Lab 9 hours. Radtka, Meehan
A fundamental building block of physical therapy; this course presents the gross structure of the human body studied through regional and systemic correlation by means of lectures, laboratory work, dissection, surface and cross-sectional anatomy. PHYS THER
101. Pathology. (3) F. Prerequisite: Completion of course work in summer term. Open only to students enrolled in the Curriculum or consent of program director. Lecture 3 hours. Biava
Mechanisms and language of diseases are discussed with emphasis on the pharmacotherapy of fundamental disease processes such as injury, immunomodulation, inflammation, response to tissue injury, repair and regeneration, human developmental, genetic disorders, disturbances of cell growth and neoplasia. This course is identical to Pathology 155. PHYS THER
104A. Physical Therapy Procedures. (3) Ss. Prerequisite: Completion of course work in summer term. Open only to students enrolled in the Curriculum or consent of program director. Lecture 2 hours. Lab 4 hours. Asturias, Byl, Richards
This course begins a four-quarter series presenting theory, skills and application of physical therapy procedures in patient care assessment, treatment, evaluation and education. Course addresses surface anatomy, kinesiology, physical therapy tests and measurement with emphasis on normal neuromusculoskeletal function. Introduction to specific evaluation, treatment and physical therapy. PHYS THER
104B. Physical Therapy Procedures. (5) F. Prerequisite: Completion of course work in summer term. Open only to students enrolled in the Curriculum or consent of program director. Lecture 3 hours. Berrel
Course presents the philosophy of rehabilitation and medical management of programs for patients with multiple handicapped person. Special emphasis is on brain damage, spinal cord involvement, and cerebrovascular accidents. PHYS THER
106A. Speciality Management of Disease: Psychiatry. (2) Sp. Prerequisite: Completion of course work in fall quarter. Open only to students enrolled in the Curriculum or consent of program director. Lecture 2 hours. Byl
Course presents the psycho-social diagnostic and management of patients with major psychopathological, psychological and social problems, those challenged with adjustment to physical therapy environments, and those who present various therapeutic needs. PHYS THER
106B. Speciality Management of Disease: Pediatrics. (1) Sp. Prerequisite: Completion of course work in summer term. Open only to students enrolled in the Curriculum or consent of program director. Lecture 1 hour. Kaufman
Course presents the diagnostic, developmental and medical concerns of the normal youngster, as well as the child with acral disease. Establishing guidelines for normal children, provides a foundation for the physical therapist to understand neurodevelopment and the impact of impairment on normal function. PHYS THER

106C. Specialty Medical Management of Disease: Neurology. (2) W. Prerequisite: Completion of course work in fall quarter. Open only to students enrolled in the Curriculum or consent of program director. Lecture 2 hours. Lab 4 hours. Asturias, Byl, Richards
Continuation of Physical Therapy Procedures series. Physical therapy approach to assessment and treatment of pediatric conditions. Course topics include, assessment, treatment, physiology and functional ramifications of ambulation, posture, orthotics, and prosthetics. Patient evaluation and treatment of dysfunction of the musculoskeletal and integumentary 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 fall term. Open only to students enrolled in the Curriculum or consent of program director. Lecture 3 hours. Byl
106. Physical Rehabilitation. (2) W. Prerequisite: Completion of course work in fall term. Open only to students enrolled in the Curriculum or consent of program director. Lecture 2 hours. Lab 4 hours. McAuliffe
Course presents the diagnostic and medical concerns that guide the interest in decision making. Outlining the considerations, predictions, and prognosis helps guide the physical therapist in designing programs for patients with primary or secondary internal medical problems. The health care team and team relationships are also presented. PHYS THER
106D. Specialty Medical Management of Disease: Internal Medicine. (2) W. Prerequisite: Completion of course work in fall quarter. Open only to students enrolled in the Curriculum or consent of program director. Lecture 2 hours. Lab 4 hours. Scott
Course presents the diagnostic and medical concerns that guide the interest in decision making. Outlining the considerations, predictions, and prognosis helps guide the physical therapist in designing 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: Oncology. (2) Sp. Prerequisite: Completion of course work in fall quarter. Open only to students enrolled in the Curriculum or consent of program director. Lecture 2 hours. Lab 4 hours. Scott
Course presents the diagnostic and medical concerns that guide the interest in decision making. Outlining the considerations, predictions, and prognosis helps guide the physical therapist in designing programs for patients with primary or secondary internal medical problems. The health care team and team relationships are also presented. PHYS THER
106F. Specialty Medical Management of Disease: Orthopedics. (2) Sp. Prerequisite: Completion of course work in fall quarter. Open only to students enrolled in the Curriculum or consent of program director. Lecture 2 hours. Lab 4 hours. Scott
Course presents the diagnostic and medical concerns that guide the interest in decision making. Outlining the considerations, predictions, and prognosis helps guide the physical therapist in designing programs for patients with primary or secondary internal medical problems. The health care team and team relationships are also presented. PHYS THER
106G. Specialty Medical Management of Disease: Pain Medicine. (2) Sp. Prerequisite: Completion of course work in fall quarter. Open only to students enrolled in the Curriculum or consent of program director. Lecture 2 hours. Lab 4 hours. Scott
Course presents the diagnostic and medical concerns that guide the interest in decision making. Outlining the considerations, predictions, and prognosis helps guide the physical therapist in designing programs for patients with primary or secondary internal medical problems. The health care team and team relationships are also presented. PHYS THER
106H. Specialty Medical Management of Disease: Sports Medicine. (2) Sp. Prerequisite: Completion of course work in fall quarter. Open only to students enrolled in the Curriculum or consent of program director. Lecture 2 hours. Lab 4 hours. Scott
Course presents the diagnostic and medical concerns that guide the interest in decision making. Outlining the considerations, predictions, and prognosis helps guide the physical therapist in designing programs for patients with primary or secondary internal medical problems. The health care team and team relationships are also presented. PHYS THER

107. Physical Therapeutic Modalities. (1) SsS. Prerequisite: Completion of course work in summer term. Open only to students enrolled in the Curriculum or consent of program director. Lecture 1 hour. Kaufman
Course presents the diagnostic, developmental and medical concerns of the normal youngster, as well as the child with acral disease. Establishing guidelines for normal children, provides a foundation for the physical therapist to understand neurodevelopment and the impact of impairment on normal function. PHYS THER
This series of seminars builds a foundation of knowledge in health care administration including personnel management, budgeting, financial planning, third-party payors, Medicare, Medicaid and trends in physical therapy education and practice. PHYS THER

189. Independent Study. (1-5) Pr. F. W. Prerequisite: Enrollment in the Curriculum of PT and approval by instructor. Open only to students enrolled in the Curriculum in Physical Therapy. By arrangement.

140A. Clinical Clerkship. (7) Prerequisite: Completion of course work in summer term, fall and winter quarters. Open only to students enrolled in the Curriculum, or consent of program director. By arrangement.

140B. Clinical Clerkship. (15) Prerequisite: Completion of course work in preceding summer term, fall, winter and spring quarters. Open only to students enrolled in the Curriculum or consent of program director. By arrangement.

141A. Course is required for and permitted to graduate students only. Students provide patient care under the supervision of a certified physical therapist. Under close supervision, appropriate physical therapy assessment, treatment planning, treatment and evaluation services are provided to patients. PHYS THER

140C. Clinical Research. (15) Prerequisite: Completion of course work in preceding summer term, fall and winter quarters. Open only to students enrolled in the Curriculum or consent of program director. By arrangement.

142A. Normal function of the cardiovascular, respiratory and renal systems and the metabolic functions of the body as a whole are studied in lectures, conferences, laboratory exercises, demonstrations, and clinical illustrations. PHYSIOLOGY

101. Endocrinology & Gastroenterology. (5) Pr. F. W. Prerequisite: Anatomy 100, Biochemistry 100A-B, Physiology 100, or consent of instructor. Lecture 5 hours. Lab 1 hour.

102. Gastrointestinal System. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

103. Pulmonary System. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

104. Renal System. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

105. Reproductive System. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

110. Neuroendocrine System. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

111. Neurotransmission. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

112. Biochemistry. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

113. Molecular Biology. (5) Pr. F. W. Prerequisite: Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

114. Neuroimaging. (5) Pr. F. W. Prerequisite: Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

115. Pharmacology. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

116. Neuroscience of Learning. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

117. Behavioral Neuroscience. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

118. Molecular and Cellular Biology. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

119. Cell Biology and Development. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

120. Mammalian Physiology. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

121. Mammalian Physiology. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

122. Cardiovascular Physiology. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

123. Respiratory Physiology. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

124. Gastrointestinal Physiology. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

125. Renal Physiology. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

126. Reproductive Physiology. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

127. Endocrine Physiology. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

128. Neuroendocrine Physiology. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

129. Molecular Neuroendocrine Physiology. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

130. Comparative Physiology. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

131. Animal Behavior. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

132. Evolutionary Biology. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

133. Ecology. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

134. Animal Physiology. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

135. Comparative Physiology. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

136. Evolutionary Biology. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

137. Ecology. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

138. Animal Physiology. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

139. Comparative Physiology. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

140. Evolutionary Biology. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

141. Ecology. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.

142. Animal Physiology. (5) Pr. F. W. Prerequisite: Anatomy 100, Physiology 100A-B, or consent of instructor. Lecture 5 hours. Lab 1 hour.
140.02. Off-Campus Clerkship. (1½ per week) Su, F, W, Sp. Prerequisite: Consent of Department of Psychiatry.
Kalfreider Clinical clerkship in off-campus hospitals, approved by the chairman of the department and the dean. PSYCHIATRY
140.04. Adv Psychiatry Ckshp. UCSPF & VMC. (1½ per week) Su, W, F, Sp. Prerequisite: Psychiatry 110 and consent of Department of Psychiatry.
DeSoto Clinical clerkships based in a variety of community settings in Central California. Course includes working with patients and families and emphasizes preventive, rehabilitative, and consultative services, especially to underserved rural and minority populations. PSYCHIATRY
140.05. Clinical Psychiatry. (1½ per week) Su, W, F, Sp. Prerequisite: Consent of Department of Psychiatry.
Kalfreider Participation, under close supervision, in treatment of patients in the clinic. PSYCHIATRY
140.06. Consultation Clerkship. VMC. (1½ per week) Su, F, W, Sp. Prerequisite: Psychiatry 110 and consent of Department of Psychiatry.
Ables A 12-week evaluation and treatment of patients on the Psychiatric Consultation Service, Inpatient Units, Psychosomatic Clinic, and Emergency Room. Learning opportunities include teaching rounds, consultation seminars, historical rounds, and consultation syllabus. PSYCHIATRY
150.01. Psychiatric Research. (1½ per week) Su, W, F, Sp. Prerequisite: Consent of Department of Psychiatry.
Callaway and Staff Participation according to students’ level of experience in experimental work in areas such as neurophysiology, operant conditioning, psychotherapy, immunology, and nonverbal communication. All work is under the close supervision of members of the faculty. PSYCHIATRY
150.03. Sex Therapy & Medical Practice. (1½ per week) F, W, Sp. Prerequisite: Consent of instructor and Department of Psychiatry.
Gendel Effect of sex roles, self-esteem, attitudes, and values of clinician on treatment of sexual problems. Case studies, role playing, group discussion, film used to develop skills in introductory sex counseling. Reading, research project or special interest paper may also be done. PSYCHIATRY
Faber Psychotherapy at the Center for the Study of Neuroses. Lectures, laboratory, individual guidance to readings, and psychoanalytic observation are included. PSYCHIATRY
170.18. Psychotherapy Research. (3½ per week) Sp. Prerequisite: Consent of Department of Psychiatry. PSYCHIATRY
170.01. Intro to Study of Suicide. (2½ per week) F, W, Sp. Prerequisite: Consent of Department of Psychiatry. Listed for 2 hours.
Moto Suicide is surveyed from a multidisciplinary approach in seminars led by physicians working in the field. PSYCHIATRY
170.02. Alcoholism. (1) F. Lecture hour.
F. Sp. Hart General issues in substance abuse as well as the pharmacologic, medical, and psychosocial aspects of alcoholism. Treatment issues will be considered with emphasis on Alcoholics Anonymous. Some issues arising from alcohol abuse and special concerns for the health professional. PSYCHIATRY
170.12. Medical Scholars Program Workshops. (1½ per week) F, W, Sp. Prerequisite: Consent of Department of Psychiatry.
Fullove Workshops in anatomy, neuroanatomy, cell biology and physiology, offered concurrently to the first-year course. Course will present challenging material in the form of problem sets which students will solve in groups. Material, geared toward high-achieving students, will augment basic coursework with clinical and basic science information. PSYCHIATRY
Fullove This conference provides an opportunity for students to present work in the form of research papers, with emphasis on research findings. PSYCHIATRY
Zegans and Staff Course is a seminar for exploring and surveying current issues in psychiatry. Each week an assigned paper will be discussed by students, seminar leaders and an occasional guest discussant. Topics will include current research in psychoanalytic, psychotherapeutic, social, and legal issues. PSYCHIATRY
170.04. Clinical Interviewing Techniques. (3½ per week) Su, W, Sp. Prerequisite: Consent of Department of Psychiatry.
Faber Technical principles and new theories, skills, techniques, and problems. PSYCHIATRY
170.10. Intro to Psychopharmacology. (3½ per week) Su, W, Sp. Prerequisite: Consent of Department of Psychiatry.
L. J. Epstein and Staff Course provides a ground in the pharmacology and descriptive diagnosis of psychiatric disorders. Course materials will be used. PSYCHIATRY
180. Sexual Issues in Medical Practice. (2) W. Seminar 2 hours.
Ables, Bonner Behavior, sexual, and clinical aspects of human sexuality are covered in a series of lectures and seminars. Lectures present didactic material and seminars focus on clinical and ethical problems related to sex and medical practice. PSYCHIATRY
180.06. Supervised Study. (1-5) F, W, Sp. Prerequisite: Consent of Department of Psychiatry.
Ables, Bonner Library research and directed reading under the supervision of a member of the faculty with the approval of the chairman of the department. PSYCHIATRY
190.10. Laboratory Project. (1½ per week) F, W, Sp. Prerequisite: Consent of Department of Psychiatry.
Kalfreider A laboratory research project under direction of a member of the faculty with the approval of the chairman of the department. PSYCHIATRY
214. Practice of Clinical Social Work. (1½ per week) F, W, Sp. Prerequisite: 1 year of clinical social work. Restriction: Open only to second-year residents. PSYCHIATRY
H. Roth This course aims at integrating developmental and clinical theories with clinical social work practice to enhance clinical, conceptual, and critical thinking and understanding of self and skills. PSYCHIATRY
400. Com Mental Health System. (1½ per week) Su, W. Prerequisite: Required for first-year residents in Psychiatry. Seminar 1 hour.
Bursher Focus is on special treatment issues involved in the care of the chronically disabled patient and of patients of various ethnic and minority backgrounds. PSYCHIATRY
410. Intro to Clinical Interviewing. (2½ per week) F, W, Sp. Prerequisite: Consent of Department of Psychiatry.
Faber Technical principles and new theories, skills, techniques, and problems. PSYCHIATRY
Faber Technical principles and new theories, skills, techniques, and problems. PSYCHIATRY
413. Psychosocial Aspects of Psych. (1½ per week) F, W, Sp. Prerequisite: Consent of Department of Psychiatry.
Faber Technical principles and new theories, skills, techniques, and problems. PSYCHIATRY
Faber Technical principles and new theories, skills, techniques, and problems. PSYCHIATRY
415. Intro to Clinical Research. (1½ per week) Su, W, Sp. Prerequisite: Consent of Department of Psychiatry.
Faber Technical principles and new theories, skills, techniques, and problems. PSYCHIATRY
Faber Technical principles and new theories, skills, techniques, and problems. PSYCHIATRY
Binger, I. Philies Seminar covers the theory and implementation of the modes of psychotherapy with children. Emphasis is placed on play therapy. The seminar will also cover psychotherapy as manifested in children, including descriptions and possible ideologies. PSYCHIATRY
421. Psychoanalytic Psychotherapy. (1½ per week) F, W, Sp. Prerequisite: Consent of Department of Psychiatry.
Faber Technical principles and new theories, skills, techniques, and problems. PSYCHIATRY
422. Social Psychology. (1½ per week) F, W, Sp. Prerequisite: Consent of Department of Psychiatry. Seminar 1½ hours.
F. W. Sp. Prerequisite: Consent of Department of Psychiatry. Seminar 1½ hours.
F. W. Sp. Prerequisite: Consent of Department of Psychiatry. Seminar 1½ hours.
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F. W. Sp. Prerequisite: Consent of Department of Psychiatry. Seminar 1½ hours.
Psychiatry

46. Occupational Mental Health. (1) W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

461. Psychopathology. (1) F. W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.


468. Developmental Psychopathology. (1) F. W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.


475. Psychiatric Literature. (1) W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

477. Clinical Assessment. (1) W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

478. Neurophysiology. (1) F. W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

480. Social Psychology. (1) W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

482. Epidemiology. (1) F. W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.


487. Neuropsychology. (1) W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

488. Clinical Psychology. (1) F. W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.


492. Psychotherapy. (1) F. W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

495. Psychoanalysis. (1) W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

497. Psychodiagnosis. (1) F. W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.


500. Advanced Psychology. (1) F. W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

502. Personality Assessment. (1) W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

505. Psychological Testing. (1) F. W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

508. Psychiatric Epidemiology. (1) W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

510. Community Psychology. (1) F. W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

512. Psychological Research. (1) W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

515. Advanced Statistics. (1) F. W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

518. Advanced Clinical Psychology. (1) F. W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

520. Advanced Clinical Psychology. (1) W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

522. Advanced Clinical Psychology. (1) W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

525. Advanced Clinical Psychology. (1) W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

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580. Advanced Clinical Psychology. (1) W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

582. Advanced Clinical Psychology. (1) W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

584. Advanced Clinical Psychology. (1) W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

586. Advanced Clinical Psychology. (1) W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

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608. Advanced Clinical Psychology. (1) W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

610. Advanced Clinical Psychology. (1) W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

612. Advanced Clinical Psychology. (1) W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

500. Learning & Cognition. (4) F. W. Sp. Prerequisite: Graduate standing and consent of instructor. Psychology 211A is prerequisite to 211B & 211C, but may be taken independently. Seminar 2 hours. Enrollment limited. J. Fisher

500A-B. Research Seminar. (2) F & W. Blackwell, Lewis, Gerbert

500C. Clinical Research. (2) W. Blackwell, Lewis, Gerbert

501. Theories of Personality. (4) F. W. Sp. Prerequisite: Graduate standing and consent of instructor. Psychology 211A is prerequisite to 211B & 211C, but may be taken independently. Seminar 2 hours. Enrollment limited. J. Fisher

502. Personality. (4) F & W. Blackwell, Lewis, Gerbert

502A. Compr Simulion of Hum. Interact. (3-5) S. W. Prerequisite: Psychology 257 or equivalent. Lecture 1 hour. Lab. 6 hours. Starkweather


503A. Child Devel. (3) F. W. Sp. Prerequisite: Consent of instructor. Lecture 3 hours.


504. Personality Assessment. (3) F & W. Prerequisite: Consent of instructor. Seminar 2 hours.

505. Child Devel. (3) F. W. Sp. Prerequisite: Consent of instructor. Seminar 3 hours.


507. Personality Assessment. (3) F & W. Prerequisite: Consent of instructor. Seminar 2 hours.

508. Practicum in Program Evaluation. (2) W. Prerequisite: Graduate standing and consent of instructor. Lecture 4 hours. Lab 1 hour. Kamiya


511. A-B. Theories of Personality. (2-4) F, W. Sp. Prerequisite: Graduate standing and consent of instructor. Psychology 211A is prerequisite to 211B & 211C, but may be taken independently. Seminar 2 hours. Enrollment limited. J. Fisher

512. Psychological Stress & Coping. (4) F. W. Prerequisite: Consent of instructor. Seminar 4 hours. Offered in alternate semesters. Offered 1988-89.

513. Emotion Seminar. (1-4) F & W. Prerequisite: Knowledge in at least one or two substantive areas such as social psychology, cognition, psychopathology, cultural anthropol. Seminar 2 hours. Not offered 1988-89.

514. A critical review of social psychological theory and research. Topics in clude theories of attribution, group dynamics, interperesional relations, social influence, decision-making, attitudes, and social change, and the application of social psychology to problems of health and illness.

248. Independent Study. (1-4) F, W. Sp. Prerequisite: Consent of instructor. Staff

250. Research. (1-4) F, W. Sp. Staff


267A-B. Human Neurophysiology. (1-1.5) F, W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.

267B. A journal club format seminar course which will examine the current literature in human EEG and evoked potentials, with emphasis on identification of cerebral sources. Students will make oral class presentations.

272. Neuropsychological battery. (4) F. W. Prerequisite: Consent of in. Course will include one course in physiological psychology or neurology, or cognate courses. Lecture 1 hour. Seminar 2 hours.

273. Teaching Methods. (3) W. Prerequisite: Consent of instructor. Seminar 3 hours.

275. A critical review of social psychological theory and research. Topics in clude theories of attribution, group dynamics, interperesional relations, social influence, decision-making, attitudes, and social change, and the application of social psychology to problems of health and illness.


1. Clinical Psychology. (3) F & W. Prerequisite: Consent of instructor. Seminar 1 hour.

2. Introduction to Biopsychology. (4) F. W. Prerequisite: Consent of instructor. Lecture 4 hours.

3. An overview of the following four areas and their relationship to health behavior: brain sciences, psychoneuroendocrinology, and psychopharmacology.

235. Psychophysiology. (2) W. Lecture 2 hours. Lab 1 hour. Kamiya

236. Human Neurophysiology. (1-1.5) F, W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour.


238. Independent Study. (1-4) F, W. Sp. Prerequisite: Consent of instructor. Staff

239. A critical review of social psychological theory and research. Topics in clude theories of attribution, group dynamics, interperesional relations, social influence, decision-making, attitudes, and social change, and the application of social psychology to problems of health and illness.

248. Independent Study. (1-4) F, W. Sp. Prerequisite: Consent of instructor. Staff

250. Research. (1-4) F, W. Sp. Staff


A critical review of social psychological theory and research. Topics in clude theories of attribution, group dynamics, interperesional relations, social influence, decision-making, attitudes, and social change, and the application of social psychology to problems of health and illness.
254B. Research Methods. (4) S. Prerequisite: Consent of instructor. Lecture 4 hours. Offered in alternate years. Offered 1988-89. N. Adler

An in-depth study of the research process, emphasizing experimental design, ethics of research, and grant writing. PSYCHIATRY

257. Intro to Computer for Beh Sci. (3) F. Prerequisite: Elementary statistics and consent of instructor. Lecture 1 hour. Lab 6 hours. Starkweather

The computer is studied as a useful tool for data analysis and controlled experiments. Students will learn to make use of existing program systems. PSYCHIATRY

260. The Health System. (4) W. Prerequisite: Graduate standing in Health Psychology Program, or consent of instructor. Lecture 2 hours. Seminar 2 hours. Offered in alternate years. Offered 1988-89. Atkinson

Function and tasks of the health system with emphasis on the study of health service organizations and health services delivery from the perspective of existing systems theory and organizational psychology. PSYCHIATRY

281A-B-C. Intro to Health Psychology. (1) F, W, Sp. Prerequisite: Consent of instructor. Seminar 1 hour. Lectures 1 hour. Lab 1 hour. Not offered 1988-89. Staff

Provides an overview of the entire field of health psychology and places it in relationship to other areas of psychology and allied disciplines. Scientific, professional, ethical, and educational issues will be considered by means of lectures, discussion, and guest speakers. PSYCHIATRY


Examination of empirical research and theoretical perspectives in certain problem areas within the health psychology field. Theoretical knowledge is of direct relevance, such as information-processing in health decision-making, psychosomatic coping with the stress of illness. PSYCHIATRY

283A-B-C. Research Placement & Seminar. (4-4-4) F, W, Sp. Prerequisite: Consent of instructor. Seminar 1 hour. Lab 9 hours. Offered in alternate years. Offered 1988-89. N. Adler

Students will be placed in an ongoing research project in which they will carry out an individual project. They will participate in a concurrent seminar, where research methods and strategies, ethics, and problems of research will be discussed. PSYCHIATRY

265. Stress & Bodily Disease. (4) W. Prerequisite: Consent of instructor. Seminar 4 hours. 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) FSp. Prerequisite: Consent of instructor. Lecture 3 hours. Offered in alternate years. Offered 1988-89. N. Adler

Examination of the role that psychological and social factors can play in a variety of reproductive behaviors: pregnancy, miscarriage, complications, postpartum reactions, infertility, contraceptive use and nonuse, spontaneous and induced abortion. PSYCHIATRY

270A-B. Common Skills in Health Trans. (2-2) W, Sp. Prerequisite: Graduate standing in Health Psychology Program, or consent of instructor. Lecture 1 hour. Lab 3 hours. Offered in alternate years. Offered 1988-89. Stone, Gerber

A two-part course that teaches a number of skills involved in face-to-face interactions and prepares the student to do research on communication, and to teach the skills to others. PSYCHIATRY


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. (1½-3-3-3) F, W, Sp. Prerequisite: Consent of instructor. Seminar 3 hours. Lab 3 hours. Four-quarter course. Hatchter

Stages in family development, communication analysis, role definitions, family myths, 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: Advanced candidacy and permission of the graduate advisor. Staff

For graduate students engaged in an ongoing dissertation for the Ph.D. degree. PSYCHIATRY

300. Teaching Practicum. (0) F, W, or Sp. Prerequisite: Consent of instructor. Lecture and lab variable. Staff

Taught in supervised classroom or tutorial teaching experience. PSYCHIATRY

RADIATION ONCOLOGY

140.10. Radiation Oncology Clerkship-U.C. (1½ per week) Su, F, W, Sp. Prerequisite: Medicine 131A-B-C.

Larson
Participation in examination of patients under treatment in radiation oncology. Students participate in rounds, conferences and clinical instruction, and see demonstrations on the use of newer radiotherapeutic techniques. RADIOLOGY

140.03. Radiation Oncology Clerkship—UCR. (1½ per week) Su, F, W, Sp. Prerequisite: Medicine 131A-B-C.

J. Castro
Participation in examination of cancer patients under treatment in radiation oncology. Students participate in rounds, conferences, and clinics, and see demonstrations on the use of newer radiotherapeutic techniques. RADIOLOGY

140.06. Radiation Oncology Clerkship-MZ. (1½ per week) Su, F, W, Sp. Prerequisite: Medicine 131A-B-C.

L. Ling
A lecture-seminar course with practical rotations to provide the resident with a basic knowledge of radiological physics with special reference to the principles of therapeutic radiation. RADIOLOGY

423. Therapeutic Treatment Planning. (10) Su, F, W, Sp. Prerequisite: Residents assigned to therapeutic radiology. One-month work-shop course. V. Smith

A workshop course to provide residents in therapeutic radiology with the elements of treatment planning and dose verifications. RADIOLOGY


Participation in examination of cancer patients under treatment in radiation oncology. Students participate in rounds, conferences, and clinics, and see demonstrations on the use of newer radiotherapeutic techniques. RADIOLOGY

150.01. Research Selective. (1½ 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


T. Phillips
Rounds include presentation of problem cases with discussions of diagnostic and treatment as well as biologic, clinical, and sociological situations. Frequent guest lectures are used to cover important aspects of oncology. PSYCHIATRY


Seminars include discussions of the diagnosis, treatment, and results of specialty oncology problems, including dermatologic, endocrine, hemato- logic, oncologic, pediatric, dermatologic, lymphomatous, and gynecologic malignancies. RADIOLOGY


Dewey
Study of principles of radiobiology and their application to radiotherapy. Seminars deal in depth with textbooks, recent readings and prepared seminars leading to understanding of mechanisms of action of radiation and radiation therapy. Oriented to radiobiology fellows and residents. RADIOLOGY

140.02. Off-Campus Clerkship. (1½ per week) Su, F, W, Sp. Prerequisite: Medicine 131A-B-C.

Carlsson
Clinical clerkship in approved hospital by special arrangement and approval of the chairperson of the department and the dean. RADIOLOGY

140.03. Diagnostic Radiology. (1½ per week) Su, F, W, Sp. Prerequisite: Third-year Medicine 131A-B-C. For fourth-year Medicine 110 and Surgery 110.

Carlsson, S. Ross
Clerkship in radiology for third- and fourth-year students. Observation of procedures, review of pathologic, pathophysiology, diagnosis, and natural history of selected diseases through study of reprinted journals with case histories. Potentials and limitations of radiologic method included. RADIOLOGY

140.04. Nuclear Medicine. (1½ per week) Su, F, W, Sp. Prerequisite: Medicine 131A-B-C.

Hattner
Observation of basic nuclear medicine procedures and participation in diagnostic tests employing radionuclides. RADIOLOGY

140.09. Diagnostic Radiography—SFGR. (1½ 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 preparation and interpretation of films, attend conferences, and learn basic principles of diagnostic radiology examinations and the basic rules of interpretation. RADIOLOGY


Acquaints students with available instruments in diagnostic radiology, including nuclear medicine, ultrasound, computed tomographic scanning, angiography, and other special procedures, conventional x-ray examination, fluoroscopy, and provides an introduction to "routine" film interpretation. Students have assignments at VAF, VMC, community hospitals. RADIOLOGY

140.16. Basic Nuclear Medicine—STA. (1½ per week) Su, F, W, Sp. Prerequisite: Fourth-year standing, or consent of instructor. Corbas, Toyua

Imaging techniques including nuclear medicine, single photon emission computed imaging, and other nuclear imaging techniques. Courses are offered at St. Agnes Medical Center, Fresno. RADIOLOGY

140.17. Clinical Radiology. (1½ per week) Su, F, W, Sp. Prerequisite: Consent of instructor. Wall

Students may be involved in clinical radiology, including cerebral and thoracic angiography. They may be involved in fluoroscopy, 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. (1-1-1) Su, F, W, Sp. Prerequisite: Medicine 110 and approval of instructor. For students seriously interested in a career in academic medicine. Carlsson, S. Ross

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

170.01. Clinical Application of Anatomy & Pathology. (1-2) F, W. Prerequisite: Fourth-year standing. Lecture 1-2 hours. S. Ross, Colonello
Course demonstrates anatomy in the living through the use of radiography, nuclear medicine, and gross and gynaec imaging techniques.

**RADIOLGY**

A lecture course limited to small groups, with active participation on the part of the student. Elements of pathological anatomy and its usefulness in understanding disease, its origins, development and manifestation.

170.08. Nuclear Medicine Physics & Imaging (2-2, F, P. W. Prerequisite: B.A. or M.D. degree. Given concurrently with Radiology 170.09. Lecture 2 hours a week 6 weeks. Independent study 10 hours. Perez-Mendez
Introduction to the physics of radioactivity, nuclear medicine, and gamma-ray imaging techniques.

170.09. Introduction to Nuclear Medicine (3-3) F, W, Sp. Prerequisite: Given concurrently with Radiology 170.08. Lecture 5 hours a week for 6 weeks. Independent study 10 hours. D. Price
Introduction to basic nuclear medicine diagnostic procedures both in vivo and in vitro, and therapy with radionuclides and medical radiology.

Weekly seminar covering the radiologic and surgical aspects of surgical cases emphasizing indications, risks, and information derived from procedures. Action participation in X-ray interpretation is included.

170.11. Emergency Radiology. (1) Su. Lecture 1 hour. Minagi
An elective course for fourth-year medical students. Comprehensive presentation of the role of the radiologist as a consultant in the emergency room.

170.13. Radiologic course designed to acquaint students with the usefulness of knowing anatomy, to begin acquiring a medical vocabulary, the elements of clinical thinking, and useful habits in learning.

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

220. Radiology Physics for Physicists. (2) F, W, Sp. Prerequisite: Bachelor's or higher degree in the physical sciences.
Seminarprovides physicists with an in-depth knowledge of radiological physics.

Faculty of radiology and other departments lecture and discuss various diseases of all systems of the body. Residents prepare case histories stressing roentgen findings and correlation with surgical and laboratory work, special studies, library and film research.

Films of interesting cases from the daily work are presented and reviewed. Roentgenograms of surgically or pathologically proved cases are correlated with the gross and microscopic pathologic findings.

Margulis
Seminars require preparation and presentation of roentgen findings on patients under discussion at medical, surgical, pediatric, obstetric and gynecologic departmental conferences and seminars on congenital heart disease, disease of the gastrointestinal tract, and orthopedics.

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, chest, abdominal and genito-urinary trauma, and management of contrast reactions.

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

Margulis
Numerous research projects are conducted in the department and facilities are available for new ones. Residents are encouraged to participate in these opportunities.

Coulson
Interdepartmental seminars in which the radiological picture of problem cases either of diagnostic or therapeutic nature is presented. This course includes surgical and medical radiological rounds, consultation, tumor board, clinicopathological conferences, and other department grand rounds.

Akin
Interdepartmental seminars in which the radiological picture of problem cases either of diagnostic or therapeutic nature is presented. These include medical-surgical, clinical-radiological, orthopedic and genitourinary, obstetric and gynecologic, and endocrine and metabolic.

410. Radiologic Effects on Genes & Mammalian Organisms. (2) W. Prerequisite: Consent of instructor. Lecture 2 hours.
S. Wolf
Concepts and mathematics of target theory related to damage of genetic apparatus. Biochemical and biological chemical student of intragenic and intergenic mutations that give insight into the structure of chromosomes and radiation with biological material.

412. Pathology. (1) Su, F, W, Sp. 100.00
Karcher
Course includes review of surgical pathology material and attendance at autopsy rounds.

R. Gould
Course is designed to acquaint residents with the physical principles of diagnostic radiology. Topics include generation and extraction of radiation energy, fundamentals of X-ray imaging, image conversion, recording methods, and special-purpose equipment. CT and ultrasonic technology are discussed.

415. Growth Kinetics—Cells & Tumors. (2) Sp. Prerequisite: Consent of instructor. Lecture 2 hours.
Clearer, Pat

Hassert and Staff
Assigning rotations 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.

Hassert and Staff
Clinical experience in diagnostic and therapeutic nuclear medicine to satisfy requirements of American Board of Radiology for certification in diagnostic radiology and radiation therapy.

Margulis
Residents, under supervision, carry out radiological examination and interpretation of X-rays of patients referred from wards and outpatients clinics. The chief resident has certain administrative duties relative to the residents training program.

Akin
Residents, under supervision, are responsible for the diagnostic activities of the residents under the direction of staff radiologists including nuclear medicine consultants and reports, history-taking, and physical examinations.

**REMOVABLE PROSTHODONTICS**

Zlotower
Course is designed to acquaint residents with multifacile aspects of maxillofacial prosthetics. Lectures will be given on maxillofacial prosthetic techniques, oncology, head and neck surgery, plastic surgery, oral surgery, therapeutic radiology, pediatrics and related oral pathology.

Zlotower
Residents and advanced prosthodontic students will observe and perform maxillofacial prosthetic 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.

**RESTORATIVE DENTISTRY**

110A. Intro to Restorative Dentistry. (3) F, P. Prerequisite: Concurrent enrollment in Restorative Dentistry 110A. Lecture 2 hours.
Jendresen, Tueller, D. Graham
An introductory lecture course including tooth morphology, development and form of primary and permanent dentition, and theory of cavity design and preparation.

110B. Intro to Restorative Dentistry. (3) W, P. Prerequisite: Restorative Dentistry 110A. Concurrent enrollment in Restorative Dentistry 110B. Lecture 1 hour.
Jendresen, Green, Hamaguchi, Graham
Continuation of Restorative Dentistry 110B. Topics include basic techniques to fixed prostodontics, operative cavity design and preparation, and basic technical and clinical procedures in complete denture prostodontics.

116-C. Primary Clinical Care. (0-5) W. Sp. Lecture 1 hour. Clinic 3 hours.
Jendresen, Braly, Eakle
Introduction to clinical dentistry: students perform a comprehensive examination of the oral cavity and evaluation of the patient's health status. Students are introduced to consultation, oral medical anesthetics, rubber dam application, making and mounting diagnostic casts, and assisting.

120A. Restorative Dent Tech. Theory. (4) F. Prerequisite: Restorative Dentistry 110B and 115AB. Concurrent enrollment in Restorative Dentistry 1125A. Lecture 4 hours.
Jendresen, Holmes, Graham, Lacy, Mendoza
Continuation of Restorative Dentistry 110B, including physical and chemical responses to dental materials, principles involved in preparation, design, articulation, mounting, waxing, casting techniques for fixed prostodontics, and biological background and clinical applications of the use of materials used in complete denture prosthodontics.
Continued instruction in theory and principles of dental restorations, including fundamentals of bridge construction, ceramic-metal restoration, techniques in operative dentistry, fundamentals of partial denture design, and construction of the partial denture. RESTOR DENT

125C. Restorative Dental Techniques. (4) Sr. Prerequisite: Restorative Dentistry 120B and 125B. Concurrent enrollment in Restorative Dentistry 125C. Lab 15 hours. Cendresen, Muncharyn, D. Graham
Continuing laboratory instruction in the disciplines of operative dentistry and removable prosthodontics. Topics include building of teeth, bases, liners, and carries: removal; composite/sealants/cores/fillers and the replacement of missing teeth. RESTOR DENT

125B, C. Comprehensive Clinical Care. (0-0) F, W. Clinic 3 hours. Cendresen, Braly, E. Maxwell
Thirty hours per quarter of clinical comprehensive case work of dental patients. Includes case history, clinical examination, diagnosis, and treatment planning to meet the patient's total dental needs. RESTOR DENT

130.01. Clinical Application of Techniques. (1) SS. Prerequisite: Restorative Dentistry 120C and 125C. Lecture 2 hours. Cendresen, Braly, Pfizer
Introduction to work in the clinic. Emphasis is on application of techniques taught in the laboratories. Topics include diagnosis, occlusion, tooth preparation, and temporization. RESTOR DENT

130.02. Clinical Application of Techniques. (5) F. Prerequisite: Restorative Dentistry 130.01. Concurrent enrollment in Restorative Dentistry 130. Lab 5 hours. Cendresen, Rosenbom, Braly, A. Green, Lacy
Continuation of Restorative Dentistry 130.01, with emphasis on clinical application of operative dentistry techniques. Topics include diagnosis and treatment of pulp disease, tooth preparation and impression materials, diagnosis and treatment of dental emergencies, and treatment planning for the edentulous patient. RESTOR DENT

130.03. Clinical Application of Techniques. (4) W. Prerequisite: Restorative Dentistry 130.02. Concurrent enrollment in Restorative Dentistry 130. Lecture 3 hours. Cendresen, Rosenbom, Braly,FFFFFF Cendresen, Muncharyn, D. Graham
Continuation of Restorative Dentistry 130.02, with emphasis on clinical application of operative dentistry techniques. Topics include temporary restorations and occlusal therapy, rationale of cutting technique and pulp response to restorative treatment, and treatment planning for removable partial dentures. RESTOR DENT

130.04. Clinical Application of Techniques. (4) Sr. Prerequisite: Restorative Dentistry 130.03. Concurrent enrollment in Restorative Dentistry 139. Lecture 4 hours. Cendresen, Rosenbom, Braly, Pfizer
Clinical instruction and practice in the disciplines of Endodontics, Fixed Prosthodontics, Operative Dentistry, and Removable Prosthetics for fourth-year students at the UCSF Community Dental Clinic of SF General Hospital and Buchanan Street. Students will prepare written documentation of their model and treatment design for their Community Dental Clinic service. RESTOR DENT

Clinical instruction in the disciplines of endodontics, fixed prosthodontics, operative and primary care, and removable prosthetics. Course is graded on student's passing qualifying examinations. RESTOR DENT

146. Clinic in Operative Dentistry. (0-50) F, W. Sr. Prerequisite: Successful completion of Restorative Dentistry 135. Clinical and second-year qualifying examinations. Cendresen, Rosenbom, Braly, Pfizer
Clinical instruction in the disciplines of endodontics, fixed prosthodontics, operative and primary care, and removable prosthetics. Course is graded on student's passing qualifying examinations at the end of Spring quarter, fourth year. RESTOR DENT


T. Curtis, Radke
Course on basic and best prosthodontic literature. This course is taught during the second year. Two-year course. RESTOR DENT


T. Curtis, Radke
Clinical instruction and practice in the disciplines of endodontics, fixed prosthodontics, operative and primary care, and removable prosthetics. Course is graded on student's passing qualifying examinations at the end of Spring quarter, third year. RESTOR DENT

146. Clinical Observation. (0-6) F, W. Sr. Prerequisite: Completion of all third-year requirements in Operative Dentistry. Must be taken concurrently with Restorative 149. Clinic variable.

149. Clinic in Operative Dentistry. (0-6) Su, F, W. Sr. Prerequisite: Completion of all third-year requirements in Operative Dentistry. Must be taken concurrently with Restorative 149. Clinic variable.


T. Curtis, Radke
A treatment plan will be discussed and developed for each student after all diagnostic aids have been gathered. Students will be responsible for attending all treatment plans prior to the seminar and for justifying it before the group. RESTOR DENT


T. Curtis, Radke
Staff and programs consultants will present various aspects of fixed and removable prosthodontics subjects on a graduate level. RESTOR DENT


M. Wilkins
Course will emphasize the dietary requirements for the geriatric prosthodontic patient. A dietary analysis of the student's case and the patient currently under treatment will be required. RESTOR DENT

175B-C. Biomaterials Science. (2-2) G. Sr. Prerequisite: D.D.S. degree. Open to dental residents, postdoctoral and postgraduate students. Seminar 2 hours. Cendresen

Course covers biomaterials science as it applies to clinical restorative dentistry with emphasis on restorative material selection and use, based on acceptable physical and biologic properties. Current research and new restorative materials will be discussed. RESTOR DENT


Allows students to finish their training with a basic ability to recognize, diagnose, and treat craniofacial pain and 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

180. Advanced Operative Theory. (1) F. Prerequisite: Completion of Restorative Dentistry 120A. Clinical hours. Cendresen

Lectures and televised demonstrations covering quadrant dentistry, noninvasive and invasive complete restorations, analysis of related research and preclinical applications of the various restorative procedures. RESTOR DENT

180A. Fixed Prosthodontic Procedures. (1) W. Sr. Prerequisite: Completion of Restorative Dentistry 120A. Clinical 3 hours. Cendresen

A course offering elective instruction in procedures and materials.
other than those normally used in the clinic. RESTOR DENT

181. Temporomandibular Joint Disease. (1) F. W. Prerequisite: Successful completion of Restorative Dentistry 159 and 130.04. Seminar 1 hour.

McNeill Seminar series covering differential diagnostic techniques and treatment approach to temporomandibular joint disease. RESTOR DENT

181.01. Cosmetic Dentistry. (1) F. W. Prerequisite: Consent of instructor. Lecture 1 hour.

Lacy Review of a variety of materials and techniques that can be used for cosmetic or aesthetic dentistry. New materials and procedures in both operative and fixed prosthodontics are emphasized. RESTOR DENT

182.01. Advanced Endodontics Concept. (1) W. Lecture 1 hour.

Rosenberg Diagnosis, case selection, and management of pain and infection in endodontically involved teeth; advanced techniques for treating difficult root canal systems; instrumentation: refinements in obturation of the root canal system. RESTOR DENT

183.01. Fixed Pros Selected Topics. (3) Sp. Enrollment limited. Seminar 1 hour.

Lum Individual staff members will offer seminar-type instruction on selected topics related to fixed prosthodontics. RESTOR DENT

184.01. Advanced Operative Theory. (1) W. Prerequisite: Restorative Dentistry 180.04 (formerly Operative Dentistry 180). Lecture 1 hour.

Birticol Continuation of Restorative Dentistry 180.04. RESTOR DENT

185.03. Senior Restorative Elective. (1) F. Lecture 1 hour.

Mell Advanced clinical restorative elective. Lectures will describe the restorative general practice. Topics to be covered include office layout, laboratory techniques, financial arrangements, scheduling, treatment failures, RHE, etc.


Birticol Continuation of Restorative Dentistry 181.04. Organization of the material is planned in relationship to progress of students enrolling in the 186 series. RESTOR DENT

187.05. Advanced Partial Denture Design. (1) Sp. Prerequisite: Completion of three removable partial dentures. Lecture 1 hour. Seminar 1 hour.

J. Holmes Seminar to discuss and determine the reasons clinical cases failed and to recommend new treatment or design for remaking the dentures. Emphasis will be on understanding design principles of restorative dentures, but unusual cases may be used to depict specific problems. RESTOR DENT

188.03. Special Occlusion Problems. (1) W. Prerequisite: Consent of instructor. Lecture 1 hour.

Pavone Course covers the diagnosis and treatment of occlusal disorders of the adult dentition. The etiology of functional disturbances, analyses of occlusal relationships of the opposing arches, and a rationale for therapy will be presented and discussed. RESTOR DENT

189.03. Advanced Complete Prostodontics. (1) F. Prerequisite: Fourth-year standing. Seminar 1 hour.

Fizan Seminar to discuss concepts of complete denture fabrication and maintenance reviewing the rationale for procedures normally used in the clinic, and the selection of the appropriate alternate procedures where indicated. RESTOR DENT

190.04. Restorative Materials Procedures. (2) F. W. Prerequisite: Open to fourth-year students with the approval of the chairman of the division. Enrollment limited. Clinic 3 hours.

Birticol Techniques and procedures for Class II restorations. Students will be expected to work on Class V direct gold restorations. Students will learn to use various materials such as fibrous cements, condensable, and electrolyte. RESTOR DENT

197.05. Adv Clinical Operative Dentistry. (0-4) Sp. Clinic 0-12 hours. Braly Advanced instruction in the field of clinical operative dentistry, utilizing procedures such as quadrants and full mouth. RESTOR DENT

198.02. Advanced Clinical Endodontics. (0-4) Sp. Prerequisite: Fourth-year standing. Clinic variable. Barkholder Advanced instruction in the field of clinical endodontics. RESTOR DENT

199.07. Clinical Restorative Dentistry. (0-50) F. W. Prerequisite: All previous courses in Restorative Dentistry curriculum sequence. Clinic variable.

Indrksen, Rosenberg, Tueller, Braly, Holmes Continuation of clinical experience at the level of Restorative Dentistry 169. RHE, professional and educational activities. Clinical Review Committee. Clinic 30 hours. Minimum 1 week, maximum 4 weeks. Braly Students participate in the delivery of restorative dental care in various extramural settings under the direct supervision of members of the faculty. RESTOR DENT

199.01. Biomaterials Laboratory Project. (1-5) Sp. Prerequisite: Consent of instructor and approval of the chairman of the department. Lab 3-15 hours.

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

199.02. Endodontics Laboratory Project. (1-5) Sp. Prerequisite: Consent of instructor and approval of the chairman of the department. Lab 3-15 hours. Braly A laboratory research project under direction of a member of the faculty with the approval of the chairman of the department. RESTOR DENT

199.03. Fixed Pros Laboratory Project. (1-5) F. W. Prerequisite: Consent of instructor and approval of the chairman of the department. Lab 3-15 hours.

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

199.04. Oper Dent Laboratory Project. (1-5) F. W. Prerequisite: Consent of instructor and approval of the chairman of the department. Lab 3-15 hours. Braly A laboratory research project under direction of a member of the faculty with the approval of the chairman of the department. RESTOR DENT

199.05. Removable Prosthetics Laboratory Project. (1-5) F. W. Prerequisite: Consent of instructor and approval of the chairman of the department. Lab 3-15 hours. Holmes A laboratory research project under direction of a member of the faculty with the approval of the chairman of the department. RESTOR DENT

130. Sociocultural Variations in Health. (3) F. W. Lecture 3 hours. R. Stapes Course addresses socio-cultural variations in health with an emphasis on nursing practice. SOC BEH SC

134.03. Nervous, Health, and Healing. (3) F. W. or Sp. Lecture 2 hours, Lab 3 hours.

V. Olesen Course explores the roles in health and illness of family, culture, and community. Some special emphasis on research problems and health professions, images of women in therapeutic situations. SOC BEH SC


C. Harrington Course addresses the organization of health care and policy issues, with emphasis on nutrition and health issues in the United States and international health issues. SOC BEH SC

198. Supervised Study. (1-5) F. W. Sp. Seminar 2 hours.

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

200. Social and Psychological Aspects of Chronic Illness. (3) F. W. Prerequisite: Consent of instructor and approval of the chairman of the department. Lecture 2 hours. Lab 3 hours.

C. Estes Course surveys the classical and contemporary sociological issues in theoretical and empirical work on power; exploring of underlying assumptions and paradigms emergent and reflecting a sociopolitical milieu; students become familiar with literature and debates on power in social research and theory. SOC BEH SC

212A. Sociological Theory. (3) F. W. Lecture 2 hours. Field work 3 hours.

C. Estes Course examines and evaluates classical and recent contributions to sociological theory. To main objective is the generation of a critical capacity with respect to research theory in both its formal and substantive varities. SOC BEH SC

212B. Sociological Theory. (3) F. W. Lecture 2 hours. Field work 3 hours.

L. Schatzman Course explores reading and discussions on interactional theory in sociology, with emphasis on the origins and development of the Childcare School of Sociology, as well as on the examination of the link between philosophy of pragmatism and social theory. SOC BEH SC

214A. Field Research. (3) F. W. Prerequisite: Doctoral level. Lecture 3 hours. L. Schatzman, V. Olesen Course offers sociological perspectives on the dimensions and properties of work in natural and social settings. Focus upon developing skills in negotiating ethics, in working effectively and in recording of data; emphasis upon developing conceptual schemata in preparation for independent study. SOC BEH SC

214B. Quantitative Analysis. (3) W. Prerequisite: Doctoral level. Sociology 214A. Lecture 2 hours. Lab 3 hours.

V. Olesen, L. Schatzman Course examines modes of analysis applicable to quantitative data; emphasis on dimensions and properties exhibited in student-presented data. SOC BEH SC

214C. Qualitative Analysis. (3) F. W. Prerequisite: Doctoral level. Sociology 214A. Lecture 2 hours. Lab 3 hours.

Course provides qualitative analysis and the development of substantive and formal sociological theory. Emphasis is on student-presented data and student presentation. SOC BEH SC

215. Organizational Research. (2-4) F. W. Prerequisite: Advanced standing and consent of instructor. Lecture 2-4 hours. C. Estes Course surveys the classical and contemporary sociological issues in theoretical and empirical work on power; exploring of underlying assumptions and paradigms emergent and reflecting a sociopolitical milieu; students become familiar with literature and debates on power in social research and theory. SOC BEH SC

216. Comp Orgs: National & Int'l Persp. (3) F. W. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours.

Course is a comparative review of contributions to the sociology of formal organizations of health care. A variety of organizational forms will be considered with special emphasis on national and international health care comparisons. SOC BEH SC

217. Future of the Family Seminar. (3) F. W. Lecture 2 hours. Lab 3 hours.
R. Staples
Course explores changing dating, sexual, sex-role, marital, and familial roles; special emphasis given to changing sex-role behavior as affecting male-female relationships. SOC BEH SCI

218. Adv Topics in the Socio Analy-
sis of Aging. (2-4) F. W. Prerequisite:
Consent of instructor. Lecture 2 hours.
Lab 0-4 hours. C. Estes

219. Social Policy & Aging. (2-4) F.
W. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 0-6 hours.
C. Estes

220. Sociology Seminar. (2-4) F. W.
Prerequisite: Consent of instructor. Required for graduate students. Sociology Seminar 2 hours. Lab 0-4 hours. C. Estes

Doctoral students discuss methods and problems in current research. Course may be repeated for credit. SOC BEH SCI

221A-B-C. Qualifying Examinations. (4-6) F. W. Prerequisite: Consent of C. F. W. Prerequisite: Preparation for qualifying examinations. Open to graduate students in Sociology only. Staff

Qualifying examinations for graduate students in sociology are given in three areas: sociological theory, medical sociology, and urban interest. The course will prepare for preparation in each area. SOC BEH SCI

223. Perspectives on Public Policy. (3) F. W. Prerequisite: Consent of instructor. Lecture 2 hours, Lab 3 hours. A. Benjamin

Course offers systematic overview of health policy in American government. Its scope, dynamics, and conceptual and practical dilemmas. Students will become acquainted with major issues involved in formulating, financing, implementing, and assessing patterns of decision (i.e., policy) established by government. SOC BEH SCI

225. Policy & Hlth Care Institu-
tions. (3) F. W. Prerequisite: Nursing 278A or consent of instructor. Lecture 2 hours. Lab 3 hours. R. Newcomer

Course describes and analyses approaches to understanding the development of health policy and institutions. Special emphasis given to changing sex-role behavior affecting male-female relationships. SOC BEH SCI

226. Families of the Third World. (3) F. W. Lecture 2 hours, Lab 3 hours.
R. Staples

Course examines family structures and dynamics among Third World peoples. Families to be discussed include African and Afro-American, Asian, Native Americans, and Latinos. Emphasis on an understanding of the family life of these groups in their native land and in the United States. SOC BEH SCI

230. Socio-Cultural Issues in AIDS. (3) F. W. Lecture 2 hours, Lab 3 hours.
V. Olesen

Course examines the history and social psychology of AIDS in relation to health, illness, disease, and death. Includes demographics, trends, the cost burden, and special problems of minorities, women, and caregivers, along with policy issues. SOC BEH SCI

232. Adv Problems in Soc Psychol-
ogy. (2-4) F. W. Prerequisite: Consent of instructor. Seminar 2 hours. Field work 0-6 hours.
V. Olesen

An advanced seminar dealing with theoretical and conceptual problems in various areas of social psychology. Recent developments in theory and concept will be reviewed. SOC BEH SCI

234. Health & Aging. (2-4) F. W.
Prerequisite: Consent of instructor. Lecture 2 hours, Lab 0-6 hours.
H. Lipton, C. Estes

Course examines the health status of the aged in the United States relative to biological, behavioral, socio-cultural, environmental factors. Social, cultural, 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. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours.
R. Staples

Course explores marriage and family behavior generating mental and physical health problems. Topics are family violence, child abuse, sexually transmitted diseases, suicide, psychological problems, and the relationship of marital status to morbidity and mortality. SOC BEH SCI

236. Race/Class Factors in Hlth Care
Inequality. (3) W. Prerequisite: Consent of instructor. Graduate standing. Lecture 2 hours. Lab 0-3 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 governmental and sub-professional roles in the health care system are organized along racial and class lines. SOC BEH SCI

237. History of Sociological
Thought. (3) F. Lecture 2 hours.
Field work 3 hours.
L. Schatzman

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 broaden understanding of sociological work. SOC BEH SCI

238. Studies in Women's Health. (2-
4) F. W. Seminar 2 hours, Lab 0-4 hours.
V. Olesen

Course offers students an opportunity to work with both theoretical and research questions on the subject of women's participation in health and health systems. Critical questions on the relationship between theory, articularization of questions will be considered. SOC BEH SCI

239. Field Research Eval. (3) F. W.
Prerequisite: Sociology 214A and 214B. Non-doctoral students may enroll upon approval of instructor. Lecture 3 hours.
R. Newcomer, L. Schatzman

Course analyzes field work as a means of obtaining data. It includes study of health care settings and programs, contrasting this approach with quantitative and qualitative approaches. Focus is on impact of gender on public policy and includes case studies. SOC BEH SCI

240. Older Women and Their
Health. (2-4) F. W. Panel 2 hours. Lab 2 hours.
C. Estes

Course analyzes elderly women's changing social roles and the interaction of actual and perceived roles with health. Topics include demographic issues, economic trends, individual and social health status, policy implications for individuals and society. SOC BEH SCI

241. Women, Work & Health. (2-4) F. W. Prerequisite: Consent of instructor. Seminar 2 hours. Optional project for additional units.
V. Olesen

How do social systems allocate people in the workplace, the implications for their health, their part in illness prevention and surveillance? These analyses include “hidden careers,” work and health in developing societies, relationships between work and morbidity-mortality patterns. SOC BEH SCI

242. Women's Health: Res. (2-4) F.
W. 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. Olesen, Z. 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 preparation and reporting of results. SOC BEH SCI

243. Quantitative Research in Wom-
en's Health. (2-4) F. W. Prerequisite:
One or more women's health courses and one course in qualitative methods for social research only. Seminar 2 hours. Optional project for additional units.
V. Olesen

An advanced survey of quantitative research methods in analysis of women's participation in health and health systems. Critical questions on the relationship between theory, articulation of questions will be considered. SOC BEH SCI

245. Gender, Science, and Ethic.
(3) F. S. Seminar 3 hours
A. Clarke

Course is a study of the history and contemporary status of science and technology. Emphasizes on the role of gender in science and technology. SOC BEH SCI

246. Women's Health: Life Cycle. (2-
4) F. W. Prerequisite: Consent of instructor. Lab 0-6 hours. Seminar 2 hours.
V. Olesen, S. Bueck

Sociological analysis of women's health status, roles as providers and patients, and the development of medical ideas about women from a historical perspective. Emphasizes on 19th and 20th century developments in institutions and societies. SOC BEH SCI

253. Women's Health: Life Cycle. (2-
4) F. W. Prerequisite: Consent of instructor. Lab 0-6 hours. Seminar 2 hours.
V. Olesen

Issues in the construction of knowledge and normalcy, occupational health, and mental health in the modern life cycle examined from epidemiological, developmental, intellectual and political ecology perspectives. Emphasizes on the role of gender in science and technology. SOC BEH SCI

254. Women's Health: Policy Issues
and Prevenf. (2-4) F. W. Prerequisite: Consent of instructor. Lab 0-6 hours. Seminar 2 hours.
V. Olesen

Seminar focuses on issues and trends in legislation and policies of aging and long-term care. Discussions will cover professional roles and development of strategies to influence legislation and political processes that affect the planning and delivery of health care. SOC BEH SCI

255. Environmental Sociology. (2-4) F.
W. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 0-6 hours.
V. Olesen

Sociological analysis of health-related issues emerging from consideration of this course. Staff

256. Introduction to Survey Re-
search. (3) F. W. Prerequisite: Biostatistics 181 or equivalent. Restrictions: Doctoral level; non-doctoral students may enroll upon consent of instructor. Lecture 2 hours. Lab 3 hours.
R. Newcomer

Course introduces sample theory, simple development, and methods of survey research. Course will include analysis of appropriateness, costs, and limitations of methods: sampling, mail questionnaires, telephone interviews. Course will provide rudimentary skills for conducting their own research and large field surveys. SOC BEH SCI

262. Health Care Economics. (3) F.
W. Lecture 2 hours. Lab 3 hours. C. Harrington

Course is a critical analysis of economic theories and their application and public policy implications for health care. Focuses on the role of financing and reimbursement on health care delivery. Emphasis on the role of economics, models, and individuals and families. SOC BEH SCI

266. Leadership in Long-Term Care.
(3) F. W. Prerequisite: Consent of instructor. Seminar 2 hours. Lab 3 hours.
C. Harrington

Seminar examines leadership and administration in long-term care settings. Focuses on organization, management, personnel management, and service delivery with emphasis on creative approaches and testing new models and theories. SOC BEH SCI

270A-Q. Quantitative Methods 1.
(3) F. W. Consent of instructor. Consent of instructor. Lecture 2 hours. Lab 3 hours.
R. Newcomer, J. Swan

Sociology
Course examines quantitative research methods used in sociological inquiry. The focus is on scientific models, problem formulation, use of theoretical frameworks, levels of analysis, settings and strategies, specification of constructs and selection of indices. SOC BEH SC

270B. Quantitative Methods II. (3) F, W, Prerequisite: S 270A and S 270B (Quantitative Methods in Sociological Inquiry I & II). Restriction: Doctoral students in Sociology or consent of instructor. Lecture 2 hours, Lab 3 hours.

R. Newcomer, J. Swan

Course examines quantitative research methods used in the social sciences, including sampling, reliability and validity data, data collection, data analysis, and inferential statistics. The course examines topics such as probability, experimental, quasi-experimental, ex post-facto, and correlational research, as well as survey and evaluation methods. SOC BEH SC

270C. Research Methods Seminar. (3) F & Spring, Prerequisite: S 270A and S 270B (Quantitative Methods in Sociological Inquiry I & II). Restriction: Doctoral students in Sociology or consent of instructor. Seminar 3 hours.

Staff

Advanced seminar in research methods. Students will be able to appreciate the complexity of issues and the role of quantitative and qualitative research traditions through discussion and exercises which formulate alternate research approaches. SOC BEH SC

271. Professional Issues Seminar. (3) F & W, Prerequisite: Doctoral students in Sociology or consent of instructor. Seminar 2 hours.

Staff

Seminar addresses professional and career issues for sociologists, including teaching, research, writing for publication, and presentation of papers at professional conferences. Focuses on career and educational planning, resume development, interview preparation, and job interviews. SOC BEH SC


Staff

Lecture on research design and execution for students. Clarification of research question, delineation of work to be accomplished, and examination of relevant theoretical literature or empirical data available. SOC BEH SC

273. Demography of Health and Aging. (3) F, W, Prerequisite: Consent of instructor. Lecture 2 hours. Lab 2 hours.

M. LaPlant

Course provides an overview of demographic studies of morbidity, disability, and mortality. Socio demographic variations and changes over time in health and mortality profiles of populations and the relationship of morbidity, disability, and mortality trends will be covered. SOC BEH SC

274. Sociology of Human Sexual Behavior. (3) F, W, Prerequisite: Doctoral students in Sociology or consent of instructor. Seminar 2 hours, Lab 3 hours.

R. Staples

Sociology of human sexual behavior from a sociological perspective focusing on issues and their relationship to social structure. Topics will include sexually transmitted diseases, teenage pregnancy, sexual violence, sexual harassment, and incest. SOC BEH SC

275. Mental Illness and the Elderly. (3-3) F, W, Prerequisite: Consent of instructor. Lab 3 hours. Seminar 2 hours.

J. Swan, L. Hurie

Course considers current research, policy, and funding issues with regard to the mentally ill aged, within the context of the epidemiology, treatment options, utilization patterns, formal and informal treatment systems, and special issues of the mentally ill elderly. SOC BEH SC

260. Dissertation. (0-0) F, W, Prerequisite: Advancement to candidacy and permission of the graduate advisor. Staff

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

SPEECH AND HEARING SCIENCE


Merzenich and Staff

Lectures and laboratory demonstrations covering such topics as physiology and psychophysics of sound and speech coding: cochlear prostheses; central auditory system; acoustic feedback; psychoacoustics; and hearing in animals and man. OTOLARYN


Gardi and Staff

Review of the development of electrophysiological approaches to studying and understanding the neural basis of hearing. Special attention is placed on auditory-evoked response measurement. Lectures and laboratory exercises will stress equipment design and calibration, data collection, analysis, and interpretation. OTOLARYN

222. Auditory Psychophysica and Physiology. (3) F, W, Prerequisite: Lecture 3 hours. Staff

A coordinated approach to basic auditory function. The physiology of the peripheral auditory system and basic perceptual correlates. Physics of sound, neural coding, psychophysics, and the human ear. Neural and frequency analysis, binocular perception processes and processing are included. OTOLARYN

224. Animal Psychophysics. (3) F, W, Prerequisite: Lecture 3 hours. Maler

Lectures on animal psychophysics. (3) F, W, Prerequisite: Consent of instructor. Lecture 3 hours. Jenkins

Reading and discussion of selected papers on animal behavior. Methods for obtaining information on the sensory capacities of animals. Students will have access to equipment and a microcomputer so that one or more experiments can be implemented. OTOLARYN

225. Inner Ear Form and Function. (3-3) F, W, Prerequisite: Consent of instructor. Lecture 3 hours. Lab 2 hours. Hunter and Keating

This course will cover the gross morphology, histology, ultrastructure and function of the mammalian cochlea and vestibular sensory organs. Instruction will include lectures, demonstrations, dissections and student presentations. OTOLARYN

247. Special Studies. (1-3) F, W, Prerequisite: Consent of instructor. Lecture 1-2 hours. Lab 0-3 hours.

Owens

Directed reading and laboratory work in the hearing and its disorders. OTOLARYN

249. Independent Study. (1-5) F, W, Prerequisite: Consent of instructor. Staff

Students and instructor develop individual projects on special topics related to the normal and pathological auditory and vestibular systems. OTOLARYN

200. Reading list. (1-3) F, W, Prerequisite: Consent of instructor. Lecture 3 hours. Lab 1 hour. Offered in alternate years. Not offered 1986-88.

Merzenich and Staff

Students participate in ongoing research or evaluate independent research projects under guidance of supervising instructor. Assignments include literature review, design of experiments, data collection and analysis, and presentation of results. OTOLARYN

290. Dissertation. (0-0) F, W, Prerequisite: Admission to candidacy and permission of the graduate advisor. Staff

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

SURGERY

110. Surgery Core Clerkship. (1-1) per week. F, W, Prerequisite: Medicine 110 and Surgery 110.

Pellegrini

Core general clerkship in surgery. Students assigned to wards and clinics at UC, SFGH, VA and others. The application of basic sciences, pathology, radiology, and psychiatry to surgery is emphasized in ward rounds and seminars. SURGERY

111. Advanced Surgery Core Clerkship. (1-1) per week. F, W, Prerequisite: Medicine 110 and Surgery 110.

Ryner

Students are senior clerks on wards, clinics, and operating rooms at UC, SFGH and VA. Rounds, seminars and conferences focus on physiological approach to surgical problems. Clinical clerkship in surgical specialties may be taken with prior approval of specialty department and Department of Surgery. SURGERY

140.01. Advanced Surgery Clerkship. (1-1) per week. F, W, Prerequisite: Surgery 110 and 111.

Chen

Senior medical students participate in surgery, ward and operating room with direct involvement in postoperative care at UC, SFGH, VA, C. RDMC, VMC and K SURGERY

140.02. Off-Campus Clerkship. (1-1) per week. F, W, Prerequisite: Consent of instructor. Staff

Students and instructor develop individual projects on special topics related to the normal and pathological auditory and vestibular systems. OTOLARYN

140.03. General Surgery-PMC. (1-1) per week. F, W, Prerequisite: Surgery 110 and Surgery 110.

Russell

Students serve as acting interns on general surgical services; participate in operative management and postoperative care of patients; participate in out-patient clinics as well as attending physicians' offices; participate in daily ward rounds and teaching conferences. SURGERY

140.04. Vascular Surgery Clerkship. (1-1) per week. F, W, Prerequisite: Medicine 110 and Surgery 110 and 111.

Kurpiski

Students serve as acting interns on the vascular surgery team, participate in preoperative, intraparative, and postoperative management of patients, as well as in conferences. SURGERY

140.05. Operable Heart Disease. (1-1) per week. F, W, Prerequisite: Participation in basic sciences and Medicine 110 or Surgery 110 and 111.

Turkey

Read and conferences on patients with operable, congenital or acquired heart disease. Details of selection, differential diagnosis, and results of surgery are discussed. SURGERY

140.06. Emergency Medicine. (1-1) per week. F, W, Prerequisite: Consent of instructor. Staff

Students take part in the Emergency Department at SFGH as active doctors, and care for medical and surgical problems. The rotation focuses on wound-care techniques (including suturing), dactyloscopy, and bedside one-to-one instruction by senior residents and faculty. SURGERY

140.07. Shock & Trauma Research. (1-1) per week. F, W, Prerequisite: Core curriculum in basic sciences and Medicine 110 or Surgery 110 and 111.

F. Lewis

Students work in clinical and laboratory research on patients with injuries to the head, neck, and torso, and shock. SURGERY

140.08. General Surgery-C. (1-1) per week. F, W, Prerequisites: Core curriculum in basic sciences and Medicine 110 & Surgery 110 and 111.

V. Richards

Students work on intern posts on surgical services; they evaluate general surgical patients cooperatively; work with patients in operating room; assume graduated, increasing responsibility in postoperative management. Rounds and conferences enhance clinical experience;
interaction with staff in patient care emphasized. SURGERY

140.09. Trauma Surgery—SFGH. (1½ per week) Su, F, W, Sp. Prerequisite: Surgery 110 and 111 and consent of instructor. F. Lewis

Clinical clerkship in the Trauma Service of the Department of Surgery at SFGH. The student will work at intern-clerk level as an integral part of the service. SURGERY


As an integral member of the cardiothoracic team, the student directly and actively shares in preoperative evaluations, operative procedures, and postoperative care. Cardiac and thoracic conferences and daily ward rounds provide the didactic teaching. SURGERY

140.11. Burn Care—SFGH. (1½ per week) Su, F, W, Sp. Prerequisite: Surgery 110. J. Born

Clinical rotation on a large Burn Care Service. Pathophysiology of thermal injury including pulmonary aspects will be stressed. Students act as members of the burn care team and participate directly in patient care. SURGERY


Participation in clinical activities of plastic surgery. Students work on patients in hospital and outpatient procedures, as well as manage the outpatient postoperative patient. Exposure to patients with general reconstructive problems, trauma to head and neck, hand surgery, and congenital anomalies. SURGERY


Students receive broad clinical experience in general surgery at VAF and with practicing surgeons in selected community settings in the central Sonoma Valley. Balance between VAF and community assignments is individually arranged according to students’ interests. SURGERY


Clerkship offers an “organ systems” approach to critical surgical illness with experience in intensive and noninvasive monitoring and appropriate therapeutic interventions. Course is aimed at providing patient management experience and familiarity with basic science concepts and literature upon which surgical intensive care is based. SURGERY

140.15. Burn Center Clerkship—FMC. (1½ per week) Su, F, W, Sp. Prerequisite: Surgery 110 and 111. Fourth-year students only. Parks

Presents a clinical spectrum in critical-care medicine: burn wound infection control, resuscitation management, hemodynamic monitoring, with emphasis on appropriate nutritional and metabolic support. Also stressed are psychological and emotional needs of patients. Students participate as full members of the Burn Team. SURGERY


Students will be instructed in the formulation and administration of parenteral and enteral feedings, the insertion of subcutaneous catheters, the management of metabolic/nutritional problems. Students will perform nutritional assignments and act as patient educators in parenteral and enteral feedings. SURGERY

140.17. Pediatric Surgery. (1½ per week) Su, F, W, Sp. Prerequisite: Surgery 110 and 111. Clinic 40. deLorimier, Harrison

The student works as acting intern on a busy pediatric surgical service assisting in pre- and postoperative management and in the operation. An interesting, wide variety of problems is encountered. SURGERY

150.01. Research in Surgery. (1½ per week) Su, F, W, Sp. Prerequisite: Consent of instructor. Way

Opportunities for research in one of the departmental laboratories by arrangement with the instructor. SURGERY

160.05. Advanced Surgery Reading. (3 per week) Su, F, W. F. Lewis

A weekly seminar where previously assigned papers are discussed and critiqued. Papers representing the classical and current concepts in general surgery are covered. SURGERY

160.06. Total Parenteral Nutrition. (5) Su, F, W, Sp. Prerequisite: Surgery 110 and consent of instructor. Lecture 3 hours. Lab 6 hours.

Course emphasizes nutritional and metabolic requirements of total parenteral nutrition and the use of TPN in surgical patients. Clinical rotation includes problems in parenteral nutrition, administration, assessment of TPN therapy and its support as part of specific therapy. SURGERY

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

Debas and Staff

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

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

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

200. General Surgery Staff Conf. (1½ per week) Su, F, W, Sp. FSGH Lewis

UC Debas, SFGH Lewis

V. L. Way

Conferences include presentation of case studies, with reference to the literature, case records, laboratory tests, and special studies. Faculty and graduate students will discuss surgical problems. Death and complications are reviewed weekly. SURGERY

402. General Surgery Pathology Sem. (1½ per week) Su, F, W, Sp. Prerequisite: Surgery 110 and 111. Clinic 40. deLorimier, Harrison

Seminars include case reports and demonstrations of the currently available gross and microscopic surgical pathological material from the operating rooms and pathology laboratories. SURGERY


Seminars include case reports, laboratory, and small group problems. Conference topics will be selected from the following areas: surgery, medicine, and pediatrics. SURGERY

404. Operative Patient Preparation, Operations and Postoperative Care. (2 per week) Su, F, W, Sp. Prerequisite: Consent of instructor. C. V. Richards, FMC Russell

Residents, under supervision, are responsible for the preparation of patients for operations, laboratory work, preoperative patient preparation, and postoperative care, and attendance at follow-up clinic. SURGERY

Practical teaching experience in selected courses under the supervision of members of the staff. GEN DENT

452. Experimental Surgery Laboratory. (1½ per week) Su, F, W, Sp. Prerequisite: Surgery 110 and 111. May not be taken concurrently.

Debas and Staff

Course includes experimental investigation of general surgical problems and the development of technical and laboratory methods to be applied in general surgery. SURGERY

453. Clinical Experimental Surgery. (1½ per week) Su, F, W, Sp. Prerequisite: Surgery 110 and 111. Tanagho

Assistant residents in off-campus hospitals approved by the chairman of the department. Course includes clinical and experimental investigations of general surgical problems and the development of technical and laboratory methods to be applied in surgery. SURGERY

490. Clinical Surgery—SFGH. (1½ per week) Su, F, W, Sp. FSGH Lewis

UC Debas

V. L. Way

Conferences include presentation of case studies, with reference to the literature, case records, laboratory tests, and special studies. Faculty and graduate students will discuss surgical problems. Death and complications are reviewed weekly. SURGERY

495. Clinical Surgery. (1½ per week) Su, F, W, Sp. FSGH Lewis

UC Debas

V. L. Way

Seminars include case reports and demonstrations of the currently available gross and microscopic surgical pathological material from the operating rooms and pathology laboratories. SURGERY

170.01. Fundamentals of Urology. (2) F, W, Sp. Prerequisite: Consent of instructor.

Staff

Course provides resource information in the form of a systematic overview of urologic diseases. This course is introduced in conjunction with the didactic student seminar of an actual urologic case or the microsurgery. Teaching a single skill. GEN DENT


Surgeons.

Practical teaching experience in selected courses under the supervision of the senior members of the staff. GEN DENT

UROLOGY

Core Clerkship—Urology 110 includes clinical clerkships in the outpatient clinics and hospitals, assistance at operations, and participation in residents’ seminars. SURGERY

140.01. Advanced Urology Clerkship—UC. (1½ per week) Su, F, W, Sp. Prerequisite: Surgery 110. Tanagho

Students work as interns on the Urology Service at UC. They also attend rounds and scheduled seminars with residents and visiting staff. UROLOGY

140.02. Off-Campus Clerkship. (1½ per week) Su, F, W, Sp. Prerequisite: Surgery 110. Tanagho

Students work as interns on the Urology Service at VAF. They also attend rounds and scheduled seminars with residents and visiting staff. UROLOGY

140.03. Advanced Urology Clerkship—VAF. (1½ per week) Su, F, W, Sp. Prerequisite: Surgery 110. R. D. Williams

Students work as interns on the Urology Service at VAF. They also attend rounds and scheduled seminars with residents and visiting staff. UROLOGY

140.04. Advanced Urology Clerkship—SFGH. (1½ per week) Su, F, W, Sp. Prerequisite: Surgery 110. McNinch

Students work as interns on the Urology Service at SFGH. They also attend rounds and scheduled seminars with residents and visiting staff. UROLOGY

TEACHING METHODOLOGY

170.01. Fundamentals of Urology. (2) F, W, Sp. Prerequisite: Consent of instructor.

Tanagho and Staff

Seminar and library research. UROLOGY

179. Laboratory Project. (1-5) F, W, Sp. Prerequisite: Consent of instructor. Tanagho and Staff

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

145 Surgery/Teaching Methodology/Urology


Seminar includes study of basic sciences and urologic urogenetics with members of the attending staff. UROLOGY

401. Experimental Laboratory. (2) Su, F, W, Sp. Tanagho

Course includes experimental investigation in urologic problems. UROLOGY


Seminars include discussion of diagnostic and treatment of patients in the urologic wards with the attending staff. UROLOGY

403. General Urologic Staff Conf. (½) Su, F, W, Sp. Tanagho

Conference presentations and discussion of urologic problems by the house staff and faculty. UROLOGY


First-year residents care for patients in the urologic and urogenetic 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. UROLOGY

490. Clinical Urology—SFGH. (1½ per week) Su, F, W, Sp. FSGH McNinch

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, radiologic tests, and consultation. UROLOGY

144 Surgery