

Contents

Courses

Courses 1
Departments and Other
Instructional Units 1
Hospitals 1
Anatomy
Anesthesia
Anthropology
Bioengineering
Biomathematics
Biophysics
Biostatistics
Çell Biology
Clinical Pharmacy 4
Comprehensive Dental Care
Dental Health Education7
Dental Hygiene
Dermatology
Endocrinology9
Epidemiology
Genetics 10
Growth and Development
History of Health Sciences
Human Development & Aging 11
Human Sexuality 11 Interdepartmental Studies 11
Laboratory Medicine
Medicine
Neurological Surgery
Neurology 14
Neuroscience
Nutrition
Obstetrics, Gynecology and
Reproductive Sciences
Oral Biology 20
Oral Diagnosis
Oral Medicine
Oral Pathology
Oral Radiology
Orthopaedic Surgery 21
Otolaryngology
Pathology
Pediatric Dentistry
Periodontology
Pharmaceutical Chemistry
Pharmacology
Pharmacy Administration
Physical Therapy
Physiology
Psychology
Radiation Oncology
Removable Prosthodontics
Restorative Dentistry
Sociology
Stomatology
Surgery
Toxicology
Urology
Nondiscrimination/Affirmative Action 33 Accreditation

Addresses 34

Map 35

This chapter is a compendium of the courses of instruction offered by the University of California San Francisco. Additional courses are offered by the schools (see Addresses section) under their programs of Continuing Education. Courses are arranged in numerical order under alphabetically listed subject headings. As these headings do not in every case correspond to a department, the responsible department or other instructional unit is indicated at the end of the course description. Abbreviations used for these departments or instructional units are spelled out in the list below. Inquiries about individual courses should be addressed to the indicated department or instructional unit for information that is not included here, nor in the separately published bulletins of the four schools or of the Graduate Division. These bulletins, available from the respective schools or the Graduate Division, indicate, for example, the place of various courses in the different established curricula. Course Description. Course information is arranged in three paragraphs. The first paragraph includes course number, title, units (in parentheses), session offered, prerequisite, format and breakdown of hours per week. The second paragraph names the instructor(s) in charge. The third describes the course content,

instructional unit. Course Numbers. All courses are numbered according to the following system: 100 series = upper division professional course, 200 and 300 series = graduateacademic course, and 400 series = postdoctoral professional course. The meaning of the second (tens) and third (units) digits varies among the schools. A detailed explanation of course numbering is available from the office of the dean of each school. The symbol § following the units designates a course approved for credit toward a graduate academic degree. Sessions: Su = summer term, SS

followed by department or other

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

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

GR DEVEL Department of Growth and Development, School of Dentistry

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

LAB MED Department of Laboratory Medicine, School of Medicine

MEDICINE Department of Medicine, School of Medicine

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

MICROBIOL Department of Microbiology and Immunology, School of Medicine

NEURO SURG Department of Neurological Surgery, School of Medicine

NEUROLOGY Department of Neurology, School of Medicine

OBGYNRS Department of Obstetrics, Gynecology and Reproductive Sciences, School of Medicine OPHTHALMOL

Department of Ophthalmology, School of Medicine

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

ORTHO SURG Department of Orthopaedic Surgery, School of Medicine

OTOLARYN Department of Otolaryngology, School of Medicine

PATHOLOGY Department of Pathology, School of Medicine

PEDIATRICS Department of Pediatrics, School of Medicine

PHARM CHEM Department of Pharmaceutical Chemistry, School of Pharmacy

PHARMACOL Department of Pharmacology, School of Medicine

PHARMACY Department of Pharmacy, School of Pharmacy

PHYSIOL NURS Department of Physiological Nursing, School of Nursing

PHYSIOLOGY Department of Physiology, School of Medicine

PSYCHIATRY Department of Psychiatry, School of Medicine

RADIOLOGY Department of Radiology, School of Medicine

RESTOR DENT Department of Restorative Dentistry, School of Medicine

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

STOMATOL Department of Stomatology, School of

DCH

Sutter Davis Hospital, Davis DMC Davies Medical Center, San Francisco

FCH Fresno Community Hospital and Medical Center, Fresno

FR Kaiser Foundation Hospital-French campus, San Francisco

GS Good Samaritan Hospital of Santa Clara Valley, San Jose

H Highland General Hospital, Oakland

Kaiser Foundation Hospital, San Francisco

KH Kaiser Foundation Hospital, Honolulu KHDV

Kaweah Delta District Hospital, Visalia

KP Kaiser Foundation Hospital, Oakland

KS Kaiser Foundation Hospital, Sacramento

KSSF Kaiser Foundation Hospital, South San Francisco

KWC Kaiser Foundation Hospital, Walnut Creek

Letterman Army Medical Center, San Francisco

LBL Lawrence Berkeley Laboratory, Berkeley

LH Laguna Honda Hospital and Rehabilitation Center, San Francisco

LPPI Langley Porter Psychiatric Hospitals and Clinics, San Francisco

MC Maricopa Medical Center, Phoenix

MG Marin General Hospital, Greenbrae

MHLB Memorial Medical Center, Long Beach

MZ Mount Zion Medical Center of UCSF, San Francisco

NAT Natividad Medical Center, Salinas

NRMC Naval Hospital, Oakland

NS Napa State Hospital, Napa

OC O'Connor Hospital, San Jose PH

Mills-Peninsula Hospitals, Burlingame PMC

California Pacific Medical Center-Pacific campus, San Francisco

Queen's Medical Center, Honolulu RLA

LAC-Rancho Los Amigos Hospital, Downey

Stanford University Hospital, Stanford SCC

Santa Clara Valley Medical Center, San Jose

SDH Selma District Hospital, Selma

SFGH San Francisco General Hospital Medical Center, San Francisco

SGH Scenic General Hospital, Modesto

SVH

Sierra Vista Hospital, Sacramento

Tripler Army Medical Center, Honolulu

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

> UCD University of California Davis Medical Center, Sacramento

> UCI University of California Irvine Medical

Center, Orange

UCLA University of California Los Angeles Medic Center, Los Angeles

UCSD University of California San Diego Medical Center, San Diego

VA Veterans Affairs Medical Center, San Francisco

VAF Veterans Affairs Medical Center, Fresno

VAL Veterans Affairs Medical Center, Livermore

VAM Veterans Affairs Medical Center, Martinez

VAP Veterans Affairs Medical Center, Phoenix

VAPA Veterans Affairs Medical Center, Palo Alto

VASD Veterans Affairs Medical Center, San Diego

VCF Valley Children's Hospital, Fresno

VMC

Valley Medical Center of Fresno, Fresno

Anatomy

100A. Systemic Regional & Devel Anat (5) § F. Lecture 3 hours. Lab 6 hours. Sutherland and Staff

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

100B. Systemic Regional and Devel Anat. (4) SW. Lecture 2 hours. Lab 6 hours Sutherland and Staff

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

100C. Systemic Regional & Devel Anat (5) § SS. Lecture 3 hours. Lab 6 hours.

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

103. Nervous System: Form & Funct. (4-6) § Sp. Prerequisite: Consent of instructor required for graduate students. Lecture 5 hours. Lab 3 hours.

H. Ralston, Stryker and Staff

The structure and function of the mammalian nervous system studied in lectures, conferences, demonstrations, and laboratories, with emphasis on the human nervous system and its organization. Intended for students in the School of Medicine and as an introductory course for graduate students. ANAT-OMY

115. Histology. (2) § W. Lecture 2 hours. Martin, Basbaum A study of the microscopic structures of the

= summer session, F = fall quarter, W = winter quarter, Sp =spring quarter.

Departments and Other Instructional Units

ANATOMY

Department of Anatomy, School of Medicine

ANESTHESIA

Department of Anesthesia, School of Medicine

BIOCHEM

Department of Biochemistry and Biophysics, School of Medicine

CI 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

FPILLA RIOSTAT

Dentistry

SURGERY

Department of Surgery, School of Medicine UROLOGY Department of Urology, School of Medicine

Hospitals

AB

Alta Bates-Herrick Hospital, Berkeley

Atascadero State Hospital, Atascadero BDC

Buchanan Dental Clinic

C

AS

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

CHMC

Children's Hospital Medical Center of Northern California, Oakland

CHS

CM

Community Hospital, Santa Rosa

ErnestV. Cowell Memorial Hospital. Berkeley

Shriners Hospital for Crippled Children, Honolulu

San Joaquin General Hospital, Stockton

SM

SH

Samuel Merritt Hospital, Oakland

SMC

Seton Medical Center, Daly City

SRM

Santa Rosa Memorial Hospital, Santa Rosa

SS

Sonoma Developmental Center, Eldridge

SSF

Shriners Hospital for Crippled Children, San Francisco

STA

St. Agnes' Medical Center, Fresno

STF

St. Francis Memorial Hospital, San Francisco

STL

St. Luke's Hospital, San Francisco

STM

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

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

116. Gross Anatomy. (3) § Sp. Lecture 2 hours. Lab 3 hours. Sutherland

A study of the macroscopic structure of the human body by means of lectures and dissections. Functional aspects of the structures are stressed. Intended for students in the School of Pharmacy. ANATOMY

117.01. Gross Anatomy & Embryology.

(4) F. Prerequisite: First-year dental standing. Lecture 5 hours. Lab 15 hours.

S. Fisher

The gross structure and developmental anatomy of the thorax and abdominal regions are studied by means of lectures, laboratory exercises, and demonstrations. The functional significance of the structures is emphasized. STOMATOL

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

S. Fisher

The gross anatomy of the head and neck is studied by lectures and dissection. Clinical

Anatomy

118. General Histology. (4.5) § F. Lecture 4 hours. Lab 2 hours. R.H. Kramer

The microscopic structure of tissues and organs of the body are studied with histophysiological considerations. STOMATOL

150.01. Gross & Regional Anatomy. (1.5/week) § Su, F, W, Sp. Prerequisite: Program must be approved by department and adviser during quarter previous to enrollment.

H. Patterson

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Oran Berrik

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

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

S. Fisher

The gross structure and developmental anatomy of the thorax and abdominal regions are studied by means of lectures, laboratory exercises, and demonstrations. The functional significance of the structures is emphasized. STOMATOL

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

S. Fisher

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

170.01. Medical Scholars Program

Workshops. (1) F, W, Sp. Prerequisite: Consent of instructor. Seminar 1 hour. Lab 1 hour.

Sutherland, Ralston

Workshops in anatomy and neuroanatomy, offered concurrent to the first-year course, will present challenging material in the form of problem sets which students will solve in groups. Material, geared toward high-achieving students, will augment basic coursework with clinical and basic science information. ANATOMY

170.02. Survey of Congenital Defects.

(2) Su or Sp. Prerequisite: Gross anatomy and consent of instructor. Restriction: Open only to students enrolled in Physical Therapy program. Lecture 2 hours. Offered in summer or spring of even-numbered years. McKenzie

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

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

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

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

Staff

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

201. Radiation Effects on Genes & Chromosomes. (2) § W, Sp. Prerequisite: Consent of instructor. Lecture 2 hours. S. Wolff

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

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

Course covers instruction in various methods

230. Developmental Biology. (3) § F. Prerequisite: Biochemistry 245 and 246 or consent of instructor. Lecture 3 hours. Calarco, Pedersen

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

233. Mammalian Chimeras & Mosaics. (2) § Sp. Prerequisite: Consent of instructor. Lecture 2 hours. Offered in alternate years. Offered 1994-95

Pedersen

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

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

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

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

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

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

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

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

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

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

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

Asling, Ross

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

Anesthesia

110. Anesthesia Core Clerkship-C, MZ. (1.5/week) Su, F, W, Sp. Prerequisite: Thirdyear standing.

Magorian

The course consists of instruction and experience in operating room anesthesia including preoperative and postoperative evaluation and care. Cardiopulmonary resuscitation and care of the unconscious patient are stressed. **ANESTHESIA**

111. Advanced Cardiac Life Support (1) Sp. Prerequisite: Basic cardiac life support (BLS or CPR) and Anesthesia 110. Restric-

tion: 4th year medical students, UCSE Lecture 8 hours. Workshop 12 hours. Carlisle, Cassorla American Heart Association certified training

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

Schlobohm, Luce, Horn, Schapera

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

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

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

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

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

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

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

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

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

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

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

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

Sp.

Eger

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

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

R.D. Miller

Course includes didactic lectures in sciences basic to the specialty of anesthesia, as well as case reviews, clinical discussions, and seminars on current medical literature in anesthesia. ANESTHESIA

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

R.D. Miller

Residents are responsible for anesthetic care and management of patients in the operating rooms and outpatient departments, under immediate supervision of the staff. Preoperative and postoperative evaluation of

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

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

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

Seminar in the history and theory of social anthropology as applied to problems of health and illness. Major concepts and problems will be illustrated through critical review of selected research literature. EPID & BIOSTAT

206A-B. Intro to Biocultural Anthropol-

ogy. (3-4, 3-4) § F,W. Prerequisite: Consent of instructor. Lecture 3 hours, plus 3 hours independent study for 4 units. Open only to first-year students in the intercampus Program in Medical Anthropology. Required for students in the UCSF Ph.D. Program in Medical Anthropology.

Beyene, Staff

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

211A-B-C. Research Training Seminar.

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

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

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

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

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

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

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

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

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

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

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

226. Stigmatized Health Conditions. (2-3) § F,W, or Sp. Lecture 2-3 hours. Ablon

Examination of social attributes of stigma to such conditions as deafness, alcoholism, obesity, dwarfism, mental and physical disabilities. Self-help groups organized around such conditions will be examined. Guest speakers who have experienced these conditions will contribute to the course. EPID & BIO-STAT

227. Community Resources for Health & Mental Health. (3-4) § Sp. Seminar 2-3 hours.Variable field observations.

Ablon

units.

Kiefer

BIOSTAT

units.

Staff

Kiefer

3 units.

Staff

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

230. Culture & Personality. (2-3) § F.

Prerequisite: Consent of instructor. Lecture 2

hours, plus 3 hours independent study for 3

Exploration of the relationship between cul-

thinking, and communicating, and individual

behavior and personality development. Ap-

plication of cultural and personality findings

231. Ethnopsychiatry. (2-3) § F,W or Sp.

Prerequisite: Consent of instructor. Lecture 2

hours, plus 3 hours independent study for 3

Course examines principles of healing sys-

including folk healing, cross-cultural com-

for community psychiatry. Students study

institutions. EPID & BIOSTAT

parisons, research methods, and implications

local examples of folk healers or folk healing

233. Anthropology of Aging. (2-3) § F,W,

Sp. Prerequisite: Consent of instructor. Lec-

ture 2 hours, plus research project for 3 units.

Cross-cultural approaches to roles, statuses,

and problems of aged populations. Cultural

tion of the aged in American society. Topics

to be covered include cultural attitudes and

values, social relationships, and health prob-

234. Culture & Symbolic Systems. (2-3)

equivalent, or consent of instructor. Lecture

2 hours, plus 3 hours independent study for

Symbolic expressive behavior is considered

from psychocultural life-cycle and psycho-

analytic perspectives. Various projective sys-

tems are analyzed: psychological tests,

procedures. EPID & BIOSTAT

hours, plus research paper.

Mitteness, Barker

dreams, folklore, myths, religious rituals,

altered states of consciousness, and healing

235. Cross-Cultural Aspects of Child-

hood. (3) § F. Prerequisite: Consent of in-

ing and graduate departments. Lecture 2

structor. Open to students in medicine, nurs-

Review of child development, child rearing

§ F. Prerequisite: Anthropology 230A or

lems. EPID & BIOSTAT

factors influencing the condition and adapta-

tems in the treatment of mental disorder

in medical and nursing settings. EPID &

turally conditioned ways of perceiving,

analysis by autoradiography. ANATOMY

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

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

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

Werb and Staff

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

225. Experimental Neuroanatomy. (4) § SS1, SS2. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 6 hours. Lecture and lab full time for 2 weeks. Offered in alternate years. Not offered 1994-95. M. LaVail, Ralston, J. LaVail, Basbaum Lectures and laboratory projects on the principles and experimental methods of analyzing the neural organization of the central and peripheral nervous systems. Topics include neurocytology, axon transport, neural degeneration, immunocytochemistry, autoradiography, electron microscopy, quantitative +hada

in advanced cardiac life support. Includes recertification in BLS if needed, airway management, invasive monitoring and therapeutic techniques, arrhythmia detection and management, cardiovascular pharmacology, acid-base balance, neonatal and pediatric resuscitation, and defibrillation. ANESTHESIA

140.01. Advanced Clinical Clerkship-UC. (1.5 per week) Su, F,W, Sp. Prerequisite: Anesthesia 110.

Magorian, Bogetz, Way

Clinical clerkship in operating room anesthesia. Two weeks in UCSF Surgery Center, focusing on basic anesthesia skills and anesthetic techniques for surgical outpatients of all ages. Two weeks in Moffitt-Long Operating Rooms, emphasizing anesthesia for subspecialty surgery. Scheduled through Anesthesia, ext. 63234. ANESTHESIA

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

Magorian

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

patients, oxygen therapy, and resuscitation are covered. ANESTHESIA

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

UC Gregory, Calahan

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

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

UC Yost, Forsaveth

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

Anthropology

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

218. Computer Methods. (3-4) § Sp. Lecture 3 hours. Lab 0-3 hours. Staff

An introduction to data processing methods most commonly used by medical anthropologists. Topics covered in lecture and laboratory demonstrations include: how a computer works, data form design, keypunching. use of SPSS and HMD program packages and interpretation of computer output. EPID & BIOSTAT

220. Departmental Seminar. (0) § F,W, Sp. Prerequisite: Consent of instructor. Lec-

ture 1 hour. Mitteness

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

221A-B. History & Theory of Anthro-

pology. (3-3) § F, W. Prerequisite: Consent of instructor. Generally limited to students in anthropology. Lecture 3 hours. Staff

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

and family dynamics in various non-Western cultures and in selected ethnic subcultures of the United States, from historical, psychological, and anthropological perspectives. EPID & BIOSTAT

239. Comparative Family Systems. (3) § F,W or Sp. Prerequisite: Consent of instructor. Lecture 2 hours, plus 3 hours independent study.

Ablon

Anthropological approaches to family study. Structure and dynamics of varying family systems examined, emphasizing changing family forms and ways family life style and values contribute to modes of coping with stress, illness, and crises. EPID & BIOSTAT

245. Development in Late Adulthood. (3) § F Lecture 2 hours. Lab 3 hours. Kayser-Jones

Course covers developmental theory and research in aging. Emphasis is on anthropological, sociological, and psychological studies. Current issues in aging with emphasis on implications for health care are discussed. EPID & BIOSTAT

246. Comparative Medical Systems. (2-3) § Sp. Prerequisite: Consent of instructor. Lecture 2-3 hours. Beyene

Popular medicine in the Third World with emphasis on how people use indigenous and biomedical health care resources. Theories of health and disease, social and symbolic dimensions of healing, and relevance of traditional medicine for health maintenance and primary health care. EPID & BIOSTAT

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

Ablon

A review of anthropologically oriented research on basic American values, social organization, and ethnicity. Emphasis is on socioeconomic diversity and changing institutions, values, and life styles. EPID & BIOSTAT

248. Group Study. (1-5) § F, W, Sp. Prerequisite: Consent of instructor. Staff

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

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

Independent study. EPID & BIOSTAT

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

EPID & BIOSTAT

251. Social Gerontology. (2-4) § W or Sp. Prerequisite: Consent of instructor. Lecture 2 hours, plus 3 or 6 hours independent study for 3 or 4 units.

Staff

An overview of the theoretical, empirical, and applied literature on the social processes of aging in this country. Special emphasis on health-related problems and the delivery of services to the elderly. EPID & BIOSTAT

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

Justice

Combining the perspectives of anthropology and health policy, the course will examine the effect of culturally linked beliefs and values on utilization of health services and the impact of health policies on medical care in the United States and other countries. EPID & BIOSTAT

253. Late Life Family. (3) § F,W, Sp. Prerequisite: Consent of instructor. Seminar 3 hours.

C. Johnson, L. Troll

A review of research on the late-life family with a critical analysis of the conceptual and methodological issues guiding research. Interpretations of the care-giving and social support literature will be associated with social, cultural, and psychological theories on the family EPID & BIOSTAT

260. Epidemiology & Med Anthro. (2-4)

§ Sp. Prerequisite: Training in epidemiology and consent of instructor. Lecture 2 hours plus 3 or 6 hours independent study for 3 or 4 units.

Lane and Staff

Individual or small group directed reading and discussion of epidemiological and medical ecological perspectives, methods, and findings relevant to the field of medical anthropology. EPID & BIOSTAT

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

Independent study. EPID & BIOSTAT

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

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

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

Research in biochemistry. BIOCHEM

170.01. Molecular Biology of Cancer. (2) W. Seminar 2 hours. Project 2 hours. Library research 1 hour. Colby

Seminar on molecular and cell biological approaches to disease processes. BIOCHEM

170.02. Medical Scholars Program Workshops. (1) F.W. Prerequisite: First-year standing. Seminar 2 hours.

Colby

Workshops in cell and tissue biology (F) and human metabolism (W) will present challenging material in the form of weekly problem sets which students will solve in groups. The material presented augments required coursework with basic science and clinical information. BIOCHEM

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

Colby

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

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

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

200A. Structure of Macromolecules. (3) § F. Prerequisite: Calculus, physical chemistry, organic chemistry, and an advanced

course in biology. Lecture 3 hours. Mitchison and Staff

Fundamental principles governing the behavior of, and modern techniques for, study of biological macromolecules. Topics covered are: thermodynamics (entropy, equilibrium, cooperative interactions); kinetics and catalysis: structure and function of macromolecules (DNA, membranes, proteins) by X-ray and electron optics; kinetics and structure of cooperative enzymes and systems of biological control. BIOCHEM

200C. Chromosome Structure & Function. (1.5) § Sp. Prerequisite: Calculus, physical chemistry, organic chemistry, and an advanced course in biology are recommended. Lecture 3 hours for one-half quarter

Sedat

Structure and function of chromosomes in eukarvotes will be discussed in depth, beginning with basic underlying experiments and leading to the most recent proposals for structure. Emphasizes both theoretical and experimental approaches to this area of cell and molecular biology. BIOCHEM

200E. Enzymology. (3) § F. Prerequisite: Calculus, physical chemistry, organic chemistry, introductory biochemistry, and an advanced course in biology, or consent of instructor. Lecture 3 hours. Offered in alternate years. Offered 1994-95.

Santi, Kenyon

Biochemically important chemical transformations from the physical organic point of view, emphasizing catalytic mechanisms pertinent to enzyme reactions, and to the development of enzyme model systems. Intermolecular forces and enzyme substrate interactions. Techniques of investigating enzyme mechanisms and kinetics. BIOCHEM

201A. Biological Regulatory Mechanisms. (4) § W. Prerequisite: Calculus, physical chemistry, organic chemistry, introductory biochemistry, an advanced course in biology, and Genetics 200A. Lecture 3 hours.

Seminar 1 hour. Yamamoto and Staff

The discovery of principles forming the foundation of molecular biology and recent advances in rapidly developing areas of the field. Topics covered are: RNA transcription, protein translation, DNA replication, control 242. Protein Crystallography. (3) § W. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours. Offered in alternate years. Offered 1994-95.

Stroud

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

246. Cell & Developmental Biology. (3) § Sp. Prerequisite: Calculus, physical chemistry, organic chemistry, and an advanced course in biology are recommended. Lecture 3 hours.

T. Kornberg, G. Martin

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

250. Research. (1-8) § F, W, Sp.

Staff BIOCHEM

297. Special Study. (1-3) § F, W, Sp.

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

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

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

Bioengineering

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

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

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

200. Off-Campus Study. (0) § F,W, Sp. Skinner

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

210. Radioactivity Applications. (3) § Sp. Lecture 3 hours. Perez-Mendez

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

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

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

221. Orthopaedic Mechanics & Materials. (2) SW. Lecture 2 hours. Skinner

This course is intended to introduce the student to the mechanics of several joints in the human body, to acquaint the student with common biomaterials (and their properties) used in orthopaedics, and to discuss these uses with respect to joint mechanics and joint displacement.

230A. Physics of Medical X-ray Imaging. (3) § F Prerequisite: Baccalaureate degree in engineering or a physical science, differential equations, Fourier analysis, or

240. Principles of Nuclear Magnetic Resonance Imaging. (3) § Sp. Prerequisite: Baccalaureate degree in engineering or a physical science; knowledge of Fourier analysis, electromagnetic waves and radiation; or permission of instructor. Lecture 3 hours. Hylton, Carlson, Crooks, Ortendahl, Kaufman

Biostatistics

201. Cellular Biophysics. (3) § W. Prereq-

uisite: Biochemistry 200A. Lecture 3 hours.

dynamics: transport and permeability: cellu-

lar motion and muscle contraction; cell ener-

Topics covered: membrane structure and

getics; DNA replication and information

203. Mending Human Genes. (2) § W.

Introduction to eukaryotic DNA repair

Prerequisite: Consent of instructor: Lecture 2

mechanisms. Emphasis is on cells damaged by

carcinogens. The genes involved in regulating

repair in various inherited diseases involving

mutagenesis, carcinogenesis, and aging will

205. Mammalian Genomic Rearrange-

This course will focus on the mechanisms of

recombination, specific DNA rearrange-

ments and how they are manifested cytoge-

rearrangements, and the consequences of

DNA rearrangements in mammalian cells

Consent of instructor. Lecture 2 hours.

Introduction to quantitative microscopy,

electronic imaging; digital image processing;

feature extraction; measurement of individual

207B. Image Cytometry: Theory, Meth-

ods & Applications. (3) § Sp. Prerequisite:

Successful completion of 207A. Lab.

biological or clinical relevance.

One-week practicum to introduce image

cytometric systems of Laboratory for Cell

Analysis (CAS 100, TAS Plus, OUIPS). Stu-

dents will complete a small project in which

they apply image cytometry to a problem of

210. Radiation Biophysics. (3) § F. Pre-

requisite: Consent of instructor. Lecture 3

Interaction of electromagnetic radiation with

sions induced by radiation; damage and repair

in mammalian cells; interaction of radiation

212. Advanced Topics in Radiation Bio-

210 or consent of instructor. Lecture 3 hours.

Current topics in radiation physics, radiation

chemistry, and radiation biology. Lecturers

will be mainly scientists from the Bay Area

with ongoing research programs. Lecturers

tion covered in Biophysics 210.

will rotate through 3-4 labs.

Lecture 1.5 hours weekly.

Mendelson

in Biophysics.

ference 1-3 hours.

Staff

Staff

of the staff.

will assume student familiarity with informa-

215. Laboratory Rotation. (3) § F,W, Sp.

A laboratory rotation course to acquaint first-

approaches to biophysical research. Students

Prerequisite: Consent of instructor. Lab 9

year Biophysics students with the various

220. Biophysics Seminar. (1) § F, W, Sp.

Guest lecturers and reports of research by

250. Research. (1-8) § F, W, Sp.

faculty and students of the Graduate Group

297. Special Study. (1-3) § F,W, Sp. Con-

Reading and conferences for properly quali-

fied students under the direction of a member

physics. (3) § W. Prerequisite: Biophysics

and other agents in mammalian cells and

matter; radiation chemistry; molecular le-

objects; statistical analysis and validation of

data; research and clinical applications of

netically, factors influencing the rate of DNA

207A. Image Cytometry: Theory, Meth-

ods & Applications. (2) § Sp. Prerequisite:

ment. (1.5) § Sp. Lecture 1.5 hours.

UV light, ionizing radiation, and chemical

Cooke, Papahadiopoulos

transfer; cell cycles.

hours.

Cleaver

be described.

Morgan, Murnane

Mayall, Chew

image cytometry.

Mayall, Chew

hours.

Deen

hours.

Deen

Fike, Morgan

Fundamentals of nuclear magnetic resonance and magnetic resonance imaging; parameterization of image acquisition, image optimization, and display. Emphasis on Fourier imaging methods and instrumentation.

249. Group Studies. (1-8) § F,W, Sp. Prerequisite: Graduate standing. Staff

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

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

280. Clin Aspects of Bioengineering. (2) § Sp. Prerequisite: Consent of instructor. Lecture 1.5 hours. Lab 1.5 hours.

Litt Important clinical issues relevant to bioengineering will be reviewed to help students appreciate the potentials and pitfalls of contemporary technologies. Students will contact scientists, physicians, nurses, technicians, and patients to identify important medical issues that require advanced bioengineering support

297. Special Study. (1-8) § F,W, Sp. Staff

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

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

Staff For graduate students engaged in writing the

thesis for the master's degree. 299. Dissertation. (0) § F, W, Sp. Prerequisite: Advancement to candidacy and permis-

sion of the graduate adviser. Staff

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

Biomathematics

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

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

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

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

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

Review of relevant parts of compartmental

and tracer analysis and control theory. Analy-

sis of dynamics of secretory process, distribu-

tion, binding and metabolism of hormones,

and hormonal control. Differential equations

and both analog and digital computers are

Biochemistry

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

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

110A-B. Cellular Structure & Function. (4-4) F,W. Lecture 4 hours. Fletterick-Colby

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

112A-B. Cellular Structure & Function: Human Metabolism. (4-4) § F,W. Lecture 4 hours

Fletterick-Colby

Lectures in biochemistry, including aspects of cell and molecular biology, cell physiology, and human metabolism. BIOCHEM

mechanisms, and genome structure and organization. **BIOCHEM**

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

Staff

Discussion of selected areas in biochemistry, biophysics, and biomathematics. BIOCHEM

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

C. Guthrie

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

220. Selected Topics. (0) § F, W, Sp. Lecture 1 hour.

Alberts

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

221. Selected Topics. (0-1) § F, W, Sp. Lecture 1 hour.

Staff

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

netor Lecture

Hasegawa, Cann, Gould

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Basic interactions of photons and particles with matter; detectors and detector electronics; radiation quantity and quality, contrast, spatial resolution, noise, and image perception; radiation protection.

230B. Physics of Medical X-ray Imag-

ing. (3) § W. Prerequisite: First quarter course in Physics of Medical X-ray Imaging or equivalent, or consent of instructor. Hasegawa, Cann, Gould

X-ray production, x-ray scatter and scatter production, video imaging, image intensifiers, linear tomography, computed tomography, xeroradiography, digital subtraction angiography, photostimulatable phosphor technology, dual-energy imaging techniques, bone-mineral densitometry, and quantitation of vascular flow.

230C. Physics of Medical Imaging. (3.5)

§ Sp. Prerequisite: Baccalaureate degree in engineering or a physical science, differential equations, Fourier analysis, or consent of instructor.

Hasegawa, Huang, Lou, Wong

Digitization and sampling requirements of medical images; display and perception of electronic images; reversible and irreversible image compression techniques; picture archiving and communication systems; image utilized throughout the course

Biomedical Sciences

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

Derynck, Ingraham, Werb

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

Biophysics

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

200. Off-Campus Study. (0) § W. Prerequisite: Approval of the graduate adviser. Restriction: Open only to students enrolled in the graduate program in Biophysics Staff

Full-time graduate study in the biophysics program through the intercampus exchange or consortium program.

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

Staff

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

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

Biostatistics

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

183. Intro Statistical Methods. (4) § Sp. Lecture 4 hours.

Glantz, Hoffman

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

Biostatistics

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185A. Intro Probability & Statistics. (4) § W Prerequisite: Working knowledge of algebra. Lecture 3 hours. Lab 3 hours. Offered in alternate years: Offered 1994-95. Chambers

Biostatistics 185A and 185B are conceptually oriented introductory courses. The first course covers basics of design, descriptive statistics, probability, random variables and distribution, samples and sampling distributions, confidence intervals and hypothesis testing for proportions and means, and correlation and regression. EPID & BIOSTAT

185B. Intro Probability & Statistics. (4) § Sp. Prerequisite: Biostatistics 185A. Lecture 3 hours. Lab 3 hours. Offered in alternate years: Offered 1994-95.

Chambers

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

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

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

191. Clinical Trials & Life Tables. (3) § Sp. Prerequisite: Biostatistics 183 or equivalent or permission of the instructor. Lecture 3 hours. Offered in alternate years: Offered 1994-95. Hilton

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

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

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

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

Hilton

This course focuses on analysis of studies in which summary statistics are rates and proportions. Topics include testing and estimation of measures of association, including methods for matched and stratified data, and sample size and power calculation. Both exact and asymptotic methods are presented. Multivariate methods (log linear and logit models) are introduced. EPID & BIOSTAT

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

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

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

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

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

213. Multivariate Methods. (4) § W. Prerequisite: Biostatistics 210A and 210B or equivalent. Lecture 3 hours. Lab 3 hours. Offered in alternate years: Not offered 1994-95.

Segal

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

216. Analysis of Repeated Measures. (4)

§ Sp. Prerequisite: Biostatistics 192 or 210A and 210B or equivalent. Lecture 3 hours. Lab 3 hours

Neuhaus, Segal

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

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

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

250. Research. (1-8) § F,W, Sp. Staff

EPID & BIOSTAT

297. Special Study. (1-3) § F,W, Sp. Conference 1-3 hours. Staff Reading and conferences for qualified students under the direction of a member of the staff. EPID & BIOSTAT

Cell Biology

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

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

212. Selected Readings in Cell Biology. (2) § Sp. Prerequisite: Previous or concurrent

enrollment in Cell Biology 245, and consent of instructor. Vale

Tutorials with a maximum of eight students per class. Each week all students will read one paper and be individually responsible for another paper or group of papers. The papers will address current issues in cell biology. CELL BIOLOGY

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

Staff

A laboratory rotation course to familiarize new departmental graduate students with various approaches to cell biology research. BIOCHEM

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

Julius, Morgan

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

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

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

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

Kuntz

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

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

Kuntz Laboratory exercises in spectroscopy. PHARM CHEM

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

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

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

Group studies in selected topics in chemistry. PHARM CHEM

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

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

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

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

202. Advanced Organic Chemistry. (4) \S

F. Prerequisite: Consent of instructor. Lecture 4 hours. Scanlan

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

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

J. Craig

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

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

Molecular thermodynamics. PHARM CHEM

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

Chemical Kinetics for graduate students. PHARM CHEM

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

Quantum mechanics and applications to molecular problems. PHARM CHEM

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

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

264. Advanced Statistical Mechanics & Molecular Mechanics. (2) S. Sp. Prerequi-

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

148B. Inpatient Clinical Clerkship. (9) F,

W, Sp. Prerequisite: Clinical Pharmacy 148A.

Clinic 40 hours per week for 6 weeks.

Continuation of Clinical Pharmacy 148A.

148.01A. Inpatient Clerkship-UCSD. (9)

F, W, Sp. Prerequisite: Successful completion

of all first-, second- and third-year courses

and Clinical Pharmacy 130 series compre-

hensive examination. Clinic 40 hours per

Supervised clinical pharmacy experience in

an inpatient setting. Students develop and

health care team, take medication histories,

monitor drug therapy, provide patient educa-

148.01B. Inpatient Clerkship-UCSD. (9)

148.01A or 148A. Clinic 40 hours per week

Continuation of Clinical Pharmacy 148.01A

or Clinical Pharmacy 148A. CL PHARM

148.02A. Inpatient Clerkship-UCI &

MHLB. (9) F, W, Sp. Prerequisite: Successful

completion of all first-, second- and third-

year courses and Clinical Pharmacy 130 se-

Supervised clinical pharmacy experience in

and explore their roles in an interdisciplinary

monitor drug therapy, provide patient educa-

health care team, take medication histories,

tion, and research patients' specific drug

148.02B. Inpatient Clerkship-UCI &

MHLB. (9) F, W, Sp. Prerequisite: Clinical

Continuation of Clinical Pharmacy 148.02A.

148.03A. Inpatient Clinical Clerkship-

UCD. (9) F, W, Sp. Prerequisite: Successful

completion of all first-, second- and third-

year course work and the comprehensive

examination. Clinic 40 hours per week for 6

Supervised clinical pharmacy experience in

and explore their roles in an interdisciplinary

monitor drug therapy, provide patient educa-

tion, and research patient-specific drug infor-

148.03B. Inpatient Clinical Clerkship-

149. Ambulatory Externship/Clerkship.

completion of all first-, second- and third-

year courses and Clinical Pharmacy 130 se-

Supervised clinical experience in an outpa-

tient setting. Students develop and explore

take medication histories, monitor drug

perience in community pharmacies. CL

ship-UCSD. (13) F,W, Sp. Prerequisite:

130 series comprehensive examination.

Successful completion of all first-, second-

their roles in an interdisciplinary health team,

therapy, and provide patient education. Ex-

149.01. Ambulatory Externship/Clerk-

and third-year courses and Clinical Pharmacy

Supervised clinical experience in an outpa-

tient setting. Students develop and explore

their roles in an interdisciplinary health team.

UCD. (9) F, W, Sp. Prerequisite: Clinical

Pharmacy 148.03A. Clinic 40 hours per

A continuation of Clinical Pharmacy

(13) F, W, Sp. Prerequisite: Successful

ries comprehensive examination.

mation questions. CL PHARM

health care team, take medication_histories,

an inpatient setting. Students will develop

information questions. CL PHARM

an inpatient setting. Students will develop

ries comprehensive examination.

Shimomura and Staff

Pharmacy 148.02A.

CL PHARM

weeks.

Sauer and Staff

week for 6 weeks

Sauer and Staff

148.03A. CL PHARM

A. Leeds and Staff

Weibert and Staff

PHARM

Shimomura and Staff

explore their roles in an interdisciplinary

tion, and research patients' specific drug

F, W, Sp. Prerequisite: Clinical Pharmacy

information questions. CL PHARM

Kayser and Staff

week for 6 weeks.

Adler and Staff

for 6 weeks.

Adler and Staff

CL PHARM

Lem, Yee, and Staff

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

120. Introduction to Therapeutics. (3)

Sp. Prerequisite: Successful completion of all required first- and fall and winter second-year courses or consent of instructor. Lecture 3 hours.

Flaherty

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

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

Introduction to the formulation and compounding of parenteral products. Laboratory includes principles of preparation and orientation to contemporary delivery systems. CL PHARM

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

Rice, McCart

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

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

Continued orientation to selected areas of medical practice, the clinical evaluation and comparison of drugs used in these areas, and the bio-pharmaceutics of drug combinations and products. CL PHARM

131. Therapeutics. (5) W. Prerequisite: Successful completion of all first- and sec-

ond-year required courses and Clinical Pharmacy 130, or consent of instructor. Lecture 4 hours. Conference 2 hours. Dong, Guglielmo

Continuation of Clinical Pharmacy 130. CL PHARM

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

Alldredge, Frye

Continuation of Clinical Pharmacy 131. CL PHARM

133. Nutrition. (3) Sp. Prerequisite: Thirdyear standing. Lecture 3 hours. Rodondi

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

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

year standing. Lecture 2 hours. Kishi, Heard

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

regression. Lecture 2 hours. Lab 3 hours. Offered in alternate years: Not offered 1994-95.

Neuhaus

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

211. Experimental Design. (3) § W. Prerequisite: Biostatistics 192 or 210A or equivalent. Lecture 2 hours. Lab 3 hours. Offered in alternate years: Offered 1994-95 Staff

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

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

Staff

BIOCHEM

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

Staff

For graduate students engaged in writing the dissertation for the Ph.D. degree. CELL BI-OLOGY

Chemistry

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

Kollman, Shafer

Elementary physical chemistry with emphasis on thermodynamics. PHARM CHEM

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

Shetlar

Elementary physical chemistry with emphasis on chemical kinetics. PHARM CHEM

site: Chemistry 260 or consent of instructor. Lecture 2 hours.

Dill

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

Clinical Pharmacy

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

R. Levin

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

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

Lem, Yee, and Staff

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

135A. Drug Information Orientation.

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

Schroeder

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

135B. Drug Information Orientation.

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

Schroeder

Continuation of Clinical Pharmacy 135A. **CL PHARM**

148A. Inpatient Clinical Clerkship. (9) F,

W, Sp. Prerequisite: Successful completion of all first-, second- and third-year courses and Clinical Pharmacy 130 series comprehensive examination. Clinic 40 hours per week for 6 weeks.

Kayser and Staff

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

therapy, and provide patient education. Experience in community pharmacies. CL PHARM

take medication histories, monitor drug

149.02A. Amb Externship/Clerkship-

UCI & MHLB. (6.5) F,W, Sp. Prerequisite: Successful completion of all first-, secondand third-year courses and Clinical Pharmacy 130 series comprehensive examination.

Shimomura and Staff

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

149.02B. Amb Externship/Clerkship-

UCI & MHLB. (6.5) F, W, Sp. Prerequisite: Clinical Pharmacy 149.02A. Shimomura and Staff

Continuation of Clinical Pharmacy 149.02A. CL PHARM

149.03A. Ambulatory Externship/

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

Sauer and Staff

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

149.03B. Ambulatory Externship/

Clerkship-UCD (6.5) F, W, Sp. Prerequisite: Clinical Pharmacy 149.03A. Clinic 39 hours per week for 6 weeks. Sauer and Staff

A continuation of Clinical Pharmacy

149.03A. CL PHARM

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

Levin

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

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

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

157.10. Pharmacy Services Admin-MHLB. (1-8) F, W, Sp. Prerequisite: Fourthyear standing and consent of instructor. Shimomura, W.E. Smith

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

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

Group studies of selected topics in clinical pharmacy. CL PHARM

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

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

170.02. Transplant Immunotherapeutics. (2) Sp. Lecture 2 hours.

Hebert, Salazar, Aweeka This course will introduce students to the specialty area of transplant immunotherapeutics. Students will be able to

understand the rejection process and graft vs. host reactions. This course will also review the pharmacological and toxicological effects of immunosuppressant agents. CL PHARM

170.04. Advanced Compounding Tech-

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

Day, Horwitz

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

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

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

170.60. Pharmacist & Critical Care. (1.5) Sp. Prerequisite: Fourth-year standing and basic life support certification. Lecture 1 hour plus project. Kayser

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

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

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

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

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

175.03. Infectious Diseases-UC. (1-8) Su, F, W, Sp. Prerequisite: grade of C or better in both Clinical Pharmacy 132 and Pharmacology 134 and consent of instructor Guglielmo

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

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

Winter

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

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

A. Wong

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

175.21. Pediatrics-SFGH. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148A or 149A and 149B. Consent of instructor. R. Levin

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

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

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

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

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

Winter, Olson, Kearney

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

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

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

175.33. Inpatient Family Practice-SFGH. (1-8) F, W, Sp. Prerequisite: Clini-

cal Pharmacy 148A or 149. Consent of instructor. Dong

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

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

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

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

Students participate on the inpatient acute care psychiatric ward. Activities include monitoring and interviewing patients, par-

ticipation in team meetings, conferences, and pharmacy medication classes, presenting inservice programs to psychiatric staff. CL PHARM

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

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

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

Winter, Lofholm

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

175.64. Haight Heroin Detox Unit Clkshp. (1-8) F,W, Sp. Prerequisite: Consent of instructor.

Winter, Inaba, Havner

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

175.65. Monteagle Pharmacy Clkshp, (1-

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

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

175.82. IV Additives Clerkship-VA. (1-8)

F, W, Sp. Prerequisite: Clinical Pharmacy 130, 131 and 132. Consent of instructor. Winter, Korman, Wong and Staff An introduction to the administrative, professional and technical aspects of establishing and maintaining IV additive service. Students will participate in workshops and conferences. CL PHARM

175.83. IV Additives & Unit Dose-VAM. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 130, 131 and 132. Consent of instructor.

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

175.84. Drug Utilization Review-VAM. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148A or 149A and 149B. Consent of instructor

Winter, Erb, J. Gee

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

175.87. Drug Utilization Review-UC. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 130, 131, 132 and consent of instructor. McCart

Students design a drug utilization review. After receiving introductory material about purpose and value of such studies, students gather, evaluate, and interpret data for a final written report suitable for publication. CL PHARM

175.90. Drug Information Clerkship-UC. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 130, 131 and 132. Consent of instructor.

Schroeder

Advanced experience in drug information retrieval and analysis. Activities include participation in conferences, seminars and selective teaching assignments in Clinical Pharmacy 135. Special projects assigned. CL PHARM

175.93. Cost Control & Qlty Assurance. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 130, 131 and 132. Consent of instructor.

Winter, Hirschman, Padelford

Students observe and participate in a business-professional environment to understand the role of such an organization in delivery of optimal, cost-effective health care. Special emphasis on delivery of pharmaceutical services. CL PHARM

175.94. Drug Information-S. (1-8) F,W, Sp. Prerequisite: Clinical Pharmacy 130, 131, 132 and consent of instructor. Winter, Tatro

Participate in activities of drug information service, including answering drug-related questions, writing a newsletter and drug review. Work under supervision of the director for drug information. CL PHARM

175.99. Clinical Pharmacy Practice. (0)

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

Supervised clinical pharmacy experience. Students develop and explore their roles in an interdisciplinary health care team, take medication histories, monitor drug therapy, provide patient drug education and research

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

Clinical Pharmacy

149.01 D. Adler and Staff

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

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

D. Adler and Staff

Weibert and Staff

macy 148.01A or 149.01.

CL PHARM

D. Adler, P. Lee

PHARM

or 149.01.

Weibert and Staff

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

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

Students participate in the services of the

anticoagulation clinic at University Hospital

under the guidance of a clinical pharmacist.

176.41. Hematology/Oncology-UCSD.

(1-8) F, W, Sp. Prerequisite: Clinical Phar-

Students participate in the activities of the

Hematology-Oncology Consultation Ser-

vice. Activities include review of patients'

charts, monitoring patients' response to drug

therapy, attendance at conferences, seminars,

rounds and clinics, participation in therapeu-

176.42. Hypertension-UCSD. (1-8) F.W,

Sp. Prerequisite: Clinical Pharmacy 148.01A

This hypertension clerkship is an outpatient,

six-week elective requiring students to be-

come actively involved in one clinic day per

UCSD. (1-8) F, W, Sp. Prerequisite: Clinical

Students participate in the activities of the

Intravenous Additive Service at University

Hospital. A special project will be required,

the subject of which shall be chosen by the

student, with the consent of the preceptor.

F, W, Sp. Prerequisite: Clinical Pharmacy

Students participate in the services provided

Diego County, including receiving calls con-

cerning ingestions and treatments, and semi-

nars for the public and various school groups.

176.82. Anticoagulation-VASD. (1-8) F,

W, Sp. Prerequisite: Clinical Pharmacy

Students participate in the services of the

a clinical pharmacist. CL PHARM

Anticoagulation Clinic under the guidance of

176.83. Drug Information-UCSD. (1-8)

Students participate in the services provided

by the Drug Information Service including

searching and writing formal responses. CL

178.69. Skilled Nurs Facility Consult-

uisite: Successful completion of all first-,

ing-Sacramento. (1-8) Su, F, W, Sp. Prereq-

second- and third-year required coursework

receiving drug information requests, re-

F, W, Sp. Prerequisite: Clinical Pharmacy

by the Poison Information Center for San

176.81. Poison Information-UCSD. (1-8)

week, as well as in one student-preceptor

176.80. IV Additives & Fluid Ther-

conference per week. CL PHARM

Pharmacy 148.01A or 149.01.

D. Adler and Staff

CL PHARM

CL PHARM

148.01A or 149.01.

D. Adler and Staff

148.01A or 149.01.

P. Anderson

PHARM

148.01A or 149.01.

Manoguerra and Staff

tic consultations and a special project. CL

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

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

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

Ignoffo

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

Winter, Bufalini

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

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

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

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

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

8) F, W, Sp. Prerequisite: Clinical Pharmacy 130, 131 and 132. Consent of instructor. Winter

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

175.68. Senior Medication Education

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

Winter, Katcher, Zola

PHARM

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

175.70. Skilled Nursing Facility Clkshp. (1-8) F, W, Sp. Prerequisite: Clinical Pharmacy 148A or 149. Consent of instructor. Winter, Nico, Feldman

Students gain experience in both the skilled nursing facility and Pharmaceutical Services Pharmacy. Activities include evaluating drug therapy and other consultant roles in skilled nursing facility service, participation in unit

patients' specific drug information questions. CL PHARM

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

D. Adler and Staff

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

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

D. Adler and Staff

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

176.03. Neonatal Care-UCSD. (1-8) F,W, Sp. Prerequisite: Clinical Pharmacy 148:01A or 149.01.

D. Adler and Staff

Students participate in the nursery's morning work rounds, attending high risk infant transportation and delivery. Students will read and evaluate current neonatal literature, and provide drug-related information to medical aroff and manente CI PHARMA

Sauer, Menet

and consent of instructor.

The student will participate in the activities of a clinical pharmacist practicing as a consultant to skilled nursing facilities. Student will learn applicable federal and state regulations in the long-term care setting. Activities include performing drug regimen reviews. CL PHARM

185.05. Oncology-UC. (1-8) SS1, SS2, F, W, Sp. Prerequisite: Clinical Pharmacy 130, 131 and 132. Consent of instructor. Ignoffo

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

185.06. Cardiothoracic Surgery-UC. (1-8) SS1, SS2, F, W, Sp. Prerequisite: Fourthyear standing and consent of instructor. Salazar

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

Clinical Pharmacy

185.08. Psychiatric Pharmacy-LPPI. (1-8) F, W, Sp. Prerequisite: Successful completion of all required first-, second-, and thirdyear coursework and consent of instructor. Clinic 20-40 hours/week. Clerkship 20-40 hours/week.

Winter, Ajari

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

185.09. Cardiology-UC. (1-8) SS1, SS2, F, W, Sp. Prerequisite: Completion of all required first-, second-, and third-year coursework and consent of instructor. Kayser

Inpatient rotation in adult cardiology. Patient activities include rounding with the cardiology team and electrophysiology team, monitoring patients on cardiovascular medications, interviewing appropriate patients, and attending conferences and seminars dealing with cardiology. Patients will be presented to the pharmacy preceptor during regularly scheduled rounds. CL PHARM

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

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

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

Students learn the basic principles of thera-

peutics related to the disease states encountered in medicine patients in an inpatient setting, Participation in ward and attending rounds with the Department of Medicine Housestaff. Preceptorship by a clinical pharmacist. CL PHARM

185.12. Critical Care Medicine-MZ. (1-8) SS1, SS2, Su, F, W, Sp. Prerequisite: Successful completion of all required first-, second-, and third-year coursework and/or consent of instructor.

Winter, Quan, Devine

Students will participate in the activities of the adult intensive care unit (ICU) and coronary care unit (CCU). Activities include participation in daily rounds, patient-specific drug monitoring, critical analysis of drug information, and informal presentations to the ICU team. CL PHARM

185.13. Surgery and Surgical ICU-MZ.

(1-8) SS1, SS2, Su, F, W, Sp. Prerequisite: Fourth-year standing and completion of all required first-, second-, and third-year coursework and/or consent of instructor.

Winter, Lee, Devine

Surgery and Surgical ICE patient care clerkship includes patient monitoring, surgical team rounds, attendance at seminars and conferences, and providing patient-specific drug information and analysis. CL PHARM

185.20. Mental Health-Santa Clara. (1-8) SS1, SS2, F, W, Sp. Prerequisite: Fourth-year standing and consent of instructor. Winter, Viale, Uyeda

Students will be involved in both inpatient and outpatient pharmacy settings. They will participate in physician-client interviews, medication monitoring, quality assurance studies, drug therapy consultation, and will also consult at a skilled nursing facility. CL PHARM

185.21. Clinical Pharmacokinetics-

VAM. (1-8) F, W, Sp. Prerequisite: Successful completion of all first-, second- and thirdyear required coursework and consent of instructor.

185.24. Oncology-Bone Marrow Transplant. (1-8) F, W, Sp. Prerequisite: Fourthyear standing (CP 130, 131, 132). Winter, Warda

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

185.25. Infectious Disease-Brookside Hospital. (1-8) SS1, SS2, F, W, Sp. Prerequisite: Fourth-year standing and consent of instructor.

Winter, Closson

The fourth-year student will participate in clinical services of the Department of Pharmacy relative to Infectious Disease. The service includes a computer program that links bacteriology reports with current antibiotic therapy. CL PHARM

185.26. Critical Care Medicine-SFGH.

(1-8) SS1, SS2, Su, F, W, Sp. Prerequisite: Successful completion of all first-, secondand third-year required coursework and consent of instructor.

Winter, Woods, Liu

Students will be active participants in Medical/Surgical (trauma) ICU patient care. Activities include patient monitoring, rounds, seminars, and conferences and provision of patient-specific drug information and analysis. CL PHARM

185.27. AIDS/Medicine Consult Ser-

vice-SFGH. (1-8) SS1, SS2, Su, F, W, Sp. Prerequisite: Completion of all first-, secondand third-year required coursework and consent of instructor.

Winter, Lor, Woods

Students will participate in the AIDS Consult Service including patient monitoring, providing consultation on drug therapy commonly used in treatment of AIDS patients. **CL PHARM**

185.28. Hospital Pharmacy-LH. (1-8) SS1, SS2, Su, F, W, Sp. Prerequisite: Successful completion of all first-, second- and thirdyear required coursework and/or consent of instructor.

Kotabe

Pharmacy practice experience in long-term care. Activities include participation in drug regimen reviews, DUE, adverse drug reaction reporting, medication distribution, and interdisciplinary care planning. Geriatric emphasis with additional involvement in rehab, AIDS, and hospice care. CL PHARM

185.30. Geriatrics-VA Yountville. (4-8) SS1, SS2, Su, F, W, Sp. Prerequisite: Successful completion of all first-, second- and thirdyear required coursework and consent of

instructor. M. Winter, Carr-Lopez

Students participate in screening of patients over 70 years of age, biweekly multidisciplinary geriatric team conferences, attending rounds, and weekly geriatric outpatient clinic. Most common problems relate to polypharmacy, poor nutrition, chronic diseases, depression, syncopy, dementia, and pneumonia. CL PHARM

185.31. Critical Care Medicine-PMC.

(1-8) F, W, Sp. Prerequisite: Successful completion of all first-, second- and thirdyear required course-work and the Comprehensive Exam, and consent of instructor. M. Winter, Lee, Louie

Students will participate in patient monitoring, teaching rounds, conferences, provision of drug information, inservice education, and the clinical management of selected critical care patients. CL PHARM

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

M. Winter, Lee, Whittle

Student participation in the activities of the nutritional support team includes daily patient monitoring, weekly nutritional support 185.35. Psychiatry-Q. (1-8) F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework and the comprehensive examination.

Winter, Garich, Kudo The student will be involved in the treatment

and care of team-care patients with acute psychiatric illness. Under the supervision of the psychiatric pharmacist, the student will be involved with drug therapy monitoring and will attend daily rounds, meetings and conferences as scheduled. CL PHARM

185.36. Nutrition Support-Q. (1-8) F,W, Sp. Prerequisite: Completion of all first-, second- and third-year required coursework and successful completion of the comprehensive examination.

Winter, Garich, Schanzenbach

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

185.37. Pain Management-Sequoia. (1-8) SS1, SS2, F, W, Sp. Prerequisite: Fourth-year standing and consent of instructor. Winter, Kudzia, Ferraresi

Students will participate in the clinical management of pain for ambulatory, hospitalized, and homecare patients. Activities include interviews and drug therapy evaluation, providing drug information to patients and health care professionals, participating in patient care conferences and homecare services. CL PHARM

185.38. Oncology/Hospice/AIDS-Sequoia. (1-8) SS1, SS2, F, W, Sp. Prerequisite: Fourth-year standing and consent of instructor.

Winter, Kudzia, Fanning

Students will participate in clinical programs in the oncology, AIDS, and Hospice services in the Acute and Homecare and Hospice settings. Activities include participation in I.V. admixture of chemotherapy, patient profile reviews, patient teaching, interventions for pain control, and drug information. **CL PHARM**

185.60. Adult Day Health Centers-STM. (1-8) SS1, SS2, F, W, Sp. Prerequisite: Fourthyear standing and consent of instructor. CP 148 &/or 149 preferred. Clinic: 20-40 hours Winter, Bookwalter

Students will learn the interdisciplinary approach to providing health care by participating in and contributing to Intake and Assessment meetings at adult day health centers. Knowledge of special pharmacy services, legal requirements, drug formulary maintenance and drug utilization will be acquired. CL PHARM

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

Students participate in functions of family planning-gynecological clinic, including management and handling of pharmaceuticals, monitoring BCP users under NP supervision, and participating in special projects. **CL PHARM**

185.70. Consultant Practice in Extended

Care. (1-8) F, W, Sp. Prerequisite: Successful completion of all first-, second- and thirdyear required coursework and the comprehensive exam. Consent of the instructor. Winter, Pratt, Henrietta

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

185.71. Convalescent Pharmaceutical

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

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

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

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

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

185.76. Home Care Mgmt of High-Risk Ob Patient. (1-8) F,W, Sp. Prerequisite:

Successful completion of all first-, secondand third-year required coursework and consent of instructor. Winter, Epstein

Students participate in the activities of Tokos Medical Corporation, including patient monitoring and attendance at medical rounds. They will work under the supervision of the clinical pharmacist in the provision of

home care to the high-risk obstetrics patient. **CL PHARM** 185.77. Drug Utilization Eval and Tar-

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

Winter, Bergstrom

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

185.78. Drug Usage Eval and Target

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

Winter, L. Davis

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

185.79. IV Admixture, Automated Unit Dose. (1-8) F, W, Sp. Prerequisite: Successful

completion of all first-, second- and thirdyear required coursework and consent of instructor.

Winter, K. Lee, Christa

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

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

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

186.07. Burn and Trauma Center-

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

D. Adler, P. Anderson

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

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

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

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

Shimomura

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

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

Participation in all aspects of clinical pharma-

cokinetics service including information,

consultations, and drug dosing regulations,

under approved protocols. Involvement in

particularly in patients with altered drug

disposition. CL PHARM

and consent of instructor.

Consent of instructor.

Shimomura

PHARM

Shimomura

of instructor.

PHARM

PHARM

Shimomura, Plon

Consent of instructor.

Shimomura, Zenk

analysis and evaluation of serum drug levels,

187.03. Anticoagulation-MHLB. (1-8) W,

Sp. Prerequisite: Clinical Pharmacy 148A

Participation in application of heparin and

warfarin guidelines, which involve dosage

adjustment, clinical assessment, data collec-

tion, medical audit. Students learn about

management of patients with thromboem-

readings and clinical participation. CL

bolic diseases through conferences, selected

187.04. Pediatrics-MHLB. (1-8) F, W, Sp.

Prerequisite: Clinical Pharmacy 148A or 149.

Participation in patient care rounds, monitor-

evaluations, literature research, and CPRs in

neonatal and pediatric patients. Major pediat-

ric disease states and appropriate drug therapy

will be reviewed daily. Six to ten hours of

medical seminars each week. CL PHARM

187.05. Psychiatry-UCI. (1-8) W, Sp. Pre-

requisite: Fourth-year standing and consent

Active involvement with patients and staff in

forms of mental disorders, treatment and role

187.06. Pediatrics-UCI. (1-8) W, Sp. Pre-

Students participate in activities of neonatal

rounds and conferences. Emphasis will be on

acute inpatient pediatric medicine and neo-

natology under supervision of pediatric clini-

187.07. Ophthalmology-UCLA. (1-8) W,

Sp. Prerequisite: Fourth-year standing and

intensive care unit and inpatient pediatric

services, monitoring patients, attending

cal pharmacist and pediatricians. CL

requisite: Clinical Pharmacy 148A or 149.

acute care mental health facility. Students

interview, interact with, and monitor pa-

tients. Thorough background of various

of pharmacist will be presented. CL

ing case presentations, pharmacokinetic

.(1.

Winter, Boro

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

185.22. Psychiatric Care-STF. (1-8) SS1, SS2, Su, F, W, Sp. Prerequisite: Successful completion of all first-, second- and thirdyear required coursework and/or consent of instructor.

Winter, Del Paggio

Teaching pharmaceutical care in the psychiatric setting, integrating multidisciplinary treatment planning, case analysis, and patient interaction to explore both etiology and treatment options. CL PHARM

185.23. Infectious Disease-VA. (1-8) SS1, SS2, F, W, Sp. Prerequisite: Fourth-year standing and consent of instructor. Winter, Maddix

Activities include monitoring the drug therapy of Infectious Diseases consult patients and serving as a drug information source for the I.D. Service. Students attend and participate in I.D. rounds and attend relevant I.D. and microbiology conferences. CL PHARM

work rounds and daily teaching conferences. Two weeks will be devoted to pediatric TPN as well as some exposure to TPN compounding. CL PHARM

185.33. Drug Information Service-

VAM. (1-8) F, W, Sp. Prerequisite: Fourthyear standing.

Winter, Lopez, Gee

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

185.34. Inpatient Clinical Pharmacy. (1-

8) F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-year required coursework and the comprehensive examination.

Winter, Garich, Inouye

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

Winter, Owahi

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

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

Winter, Leung

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

PHARM

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

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

186.06. Clinical Pharmacokinetics-

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

D. Adler, J. Lane

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

consent of instructor.

Shimomura, S. Gardner

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

187.09. Fairview State Hospital Clkshp.

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

Shimomura, Shukur

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

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

Shimomura, Tobias

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

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

Shimomura, Kitayama, Levesque

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

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

Shimomura, Luna

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

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

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

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

Shimomura, Martinez, Henry

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

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

Shimomura, Campbell

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

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

ear required coursework. Shimomura

usdents participate in providing clinical In an HMO setting. Acinclude attending inpatient service meands, providing clinical services to ambulasory patients and providing inservice educathe classes and preparing pharmacy and there committee drug reviews. CL PHARM

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

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

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

Shimomura

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

backs. CL PHARM

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

Sauer and Staff

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

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

149 and consent of instructor. Sauer and Staff

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

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

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

188.04. Neonatal Intensive Care-UCD.

(1-8) F, W, Sp. Prerequisite: Successful completion of all first-, second- and thirdyear coursework, CP 148, and consent of instructor.

Sauer and Staff

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

188.05. Medical Intensive Care-UCD. (1-8) F, W, Sp. Prerequisite: Successful completion of all first-, second- and third-

year coursework, Clinical Pharmacy 148 and consent of instructor. Sauer and Staff

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

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

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

188.07. Clinical Nutrition/Total

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

Sauer, Nishikawa, Sieplar

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

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

Sauer, Mowers, Dunlap

149.

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

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

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

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

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

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

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

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

Sauer, Mitsuoka

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

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

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

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

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

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

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

188.31. Skilled Nursing Facility Con-Prerequisite: Successful completion of all first-, second- and third-year coursework and consent of instructor.

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

Sauer, Talaga, Fritz

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

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

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

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

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

188.81. Community Pharmacy Man-

agement-UCD. (1-8) F, W, Sp. Prerequisite: CP 130, 131, 132. Fourth-year standing. Sauer, Lallo, Ingram The student will gain practical and didactic experience in all aspects of operation and management of an outpatient community prescription pharmacy. Emphasis will be placed on business and management aspects of practicing in a prescription-only pharmacy, one of three in a small independent group. CL PHARM

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

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

Comprehensive Dental Care

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

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

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

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

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

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

126 Intermediate Comprehensive Den-

156. Introduction to Comprehensive Dental Care. (0-4) F, W, Sp. Seminar 25 hours, clinic 45 hours per quarter. Perry, Bird, Hume, Otis First-year dental hygiene students will be introduced to comprehensive care through seminars, laboratory and clinical experiences in epidemiology, preventive dentistry, ergonomics, basic-level dental hygiene and assisting skills, patient counseling and behavioral science techniques, history recording, and clinical oral radiography. DENT PUB HLTH, RESTOR DENT, STOMATOL

Craniofacial Anomalies

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

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

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

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

206. Etiology, Growth Characteristics

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

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

207. Etiology, Growth Characteristics and Management of Various Craniofacial Anomalies. (1) Sp. Seminar 1 hour. Prerequisite: Enrollment in a post-professional graduate program or consent of instructor.

Vargervik

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

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

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

Dental Health Education

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

Introduces the student to basic concepts of preventive oral hygiene, learning and motivation theories, and an overview of human development, including physical/dental, cognitive, emotional, and psychosocial aspects across the lifespan. DENT PUB HLTH

161ABC. Curriculum Theory & Design.

Analysis of theories and research in education

(0-3) F, W, Sp. Lecture 3 hours.

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

Shimomura

An on-line experience in a drug information center serving a large multidisciplinary teaching hospital. Through a series of experience modules, in addition to day-to-day information requests received by the center, students will be expected to demonstrate competence in drug literature evaluation and drug information retrieval skills. CL PHARM

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

Shimomura

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

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

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

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

B. Sauer, Dager

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

Sauer, DiGiambattista

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

188.32. Home Infusion Pharmacy-

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

Sauer, Dager

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

are. (0-6) Pre-r, r, W, Sp. Clinic 3 hours. Rotation 3 hours.

Richards, Bird, Lee

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

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

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

139. Comprehensive Dental Care

Clinic. (0-8) Su, F, W, Sp. Clinic 240 hours per quarter. Giblin, Ino

Introductory clinical course in basic general dentistry. Students will learn to diagnose and treat, as well as prevent, dental diseases. Students will develop skills in communication.

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

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

Walsh

Walsh

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

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

Prerequisite: Dental Health Education 150A-B and 160A-B. Lecture 1 hour. Lab 0-12 hours.

Walsh

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

Dental Hygiene

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

M. Walsh

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· Sherry

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

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

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

109. Clinical Dental Hygiene. (1-2) SS. Prerequisite: Dental Hygiene 155A-B, 159, and approval of the chairperson of the division. Clinic 3-6 hours.

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

150.01. Theoretical Foundations for Dental Hyg. (2) F. Prerequisite: Dental hygiene standing. Lecture 20 hours. Walsh

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

150.02. Assessments in the Dental Hygiene Process. (2) F. Prerequisite: DH 150.01. Lecture 20 hours per quarter. Yamamoto

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

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

Yamamoto

The planning, implementation, and evaluation phases of the dental hygiene care process will be emphasized as a continuation of DH 150.02. The use of assessment data to plan care and set goals for the patient will be presented as well as the implementation of highly technical skills of dental hygiene practice. Evaluation of dental hygiene care is emphasized as an essential component of the dental hygiene process. DENT PUB HLTH

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

hours. Rowe

Course addresses the role of the dental hygienist in preventive dentistry and non-surgical periodontal therapy with emphasis on the objective and principles of comprehensive dental hygiene care for special needs patients. Modification of dental hygiene care for special needs patients will include the areas of communication, appointment planning, environmental considerations, home care, and safety precautions in treatment. DENT PUB HLTH

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

Concomitant with Dental Public Health and Hygiene 121, each student will prepare an otated bibliography on a research topic

155A. Introduction to Clinical Dental Hygiene Care. (1) F. Lab 3 hours.

Yamamoto Laboratory and clinical experiences to introduce the student to interpersonal skills, technical skills, and procedures used in the clinical practice of dental hygiene. They include professional conduct, medical history review, and introduction to examination, exploring, probing, and scaling techniques. DENT PUB HLTH

155B. Intro to Clin Dental Hygiene

Care. (2) W. Prerequisite: DH 155A. Lab 6 hours.

Yamamoto

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

159. Clinical Dental Hygiene Care. (2) Sp. Prerequisite: DH 155A-B. Clinic 6 hours. Yamamoto

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

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

Hannebrink Introduction to the ethical, legal, and profes-

sional responsibilities of the dental hygienist. Emphasis on the California Dental Practice Act, malpractice prevention, and professional organizations. DENT PUB HLTH

161. Orientation to Dentistry. (2) Sp. Lecture 2 hours. Rowe

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

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

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

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

D. Perry

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

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

Hannebrink (F,W), Perry (Sp) Clinical seminar to discuss clinic policies and procedures, dental hygiene treatment planning, and related topics. DENT PUB HLTH

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

Study of the anatomical, physiological, pharmacological, and periodontal aspects of the administration of local anesthetics, nitrous oxide-oxygen sedation, and performance of soft tissue curettage. Students obtain didactic and clinical experiences in these functions.

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

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

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

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

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

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

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

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

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

Walsh, Ishida

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

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

site: Dental Hygiene 202. Lab 3 hours. Walsh Practical teaching experiences in selected dental hygiene courses under the supervision

of dental hygiene faculty members. DENT PUB HLTH

Dental Public Health and Hygiene

117. Professional Issues in Dentistry. (3) F. Seminar 5 hours, lecture 5 hours per quarter.

Silverstein and Staff

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

121. Dentist-Patient Communication. (1) F. Lecture 5 hours. Seminar 5 hours. Gerbert

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

130. Dental Personnel & Patient Management. (1) Sp. Lecture 1 hour.

Bird Course is designed to further the development of the third-year student's behavioral science and dental, personnel management skills. Focus is on skills in managing office personnel and patient care. The elements of developing the OSHA-required Hazard Communication Program are included. DENT PUB HLTH

140.01. Multidisciplinary Topics in Dentistry. (1.5) SS. Fifteen hours per week for one week.

Bird and Staff

This is a multidisciplinary course designed for the beginning fourth-year dental student. It is designed to prepare students for the advanced clinical skills needed in esthetics, materials, complex case and team efficiency management. In addition, it is intended to give the student direction to achieve immediate postgraduate goals. DENT PUB HLTH

149. Family Dental Care. (0-8) Su. Fifteen hours per week for one week.

Bird and Staff

This is a multidisciplinary course designed for the beginning fourth-year dental student. It is designed to prepare students for the advanced clinical skills needed in esthetics, materials, complex case and team efficiency management. In addition, it is intended to give the student direction to achieve immediate postgraduate goals. DENT PUB HLTH

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

The development and form of deciduous and permanent dentition and occlusion. Study of individual tooth and arch form to interarch relationships as well as endodontic morphology. DENT PUB HLTH

175. Dental Public Health Practice &

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

Silverstein and Staff

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

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

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

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

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

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

students. Conference 1 hour. Greene

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

186.20. Communication Skills in Dentistry. (1) F. Seminar 1 hour. Yee, Bird, and Staff

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

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

Yee, Bird, and Staff

Practice management: career guidance and planning. Students will learn effective resume writing and interviewing skills for associateship positions, and key steps needed to purchase a new or existing dental practice. Each student will have written career and life

188.10. Dental Science and Health Edu-

cation I. (1) F. Prerequisite: DPHH'116 or consent of instructor. Restriction: Limited to 6-10 students, Seminar 1 hour, Research 0-1 hour. Field work 0-3 hours.

Pollick

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

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

Pollick

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

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

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

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

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

vanced Education in General Dentistry.

This seminar series is designed to provide the

trainee with information on hiring, training,

and evaluating personnel; purchasing or asso-

and professional advisers; and development of

429.10. Clinical Teaching Practicum. (0-

AEGD students enrolled in the second-year

Instruction and practice in providing dental

This seminar series will present the etiology,

rationale, and methods used in the oral diag-

medical or physical conditions that require a

modification in the provision of dental care.

Trainees will provide dental services for such

489.10. Advanced Dental Care for Spe-

cial Patients. (0-6.5) Su, F, W, Sp. Prerequi-

site: DPHH 489. Restriction: AEGD stu-

dents enrolled in the second-year program.

This course will emphasize the provision of

comprehensive dental services for patients

with special needs such as the frail, elderly,

compromised. Students will provide clinical

developmentally disabled, and medically

nosis and dental treatment of patients with

clinical teaching. DENT PUB HLTH

489. Advanced Care for Special Pa-

tients. (0-6.5) Su, F, W, Sp.

patients. DENT PUB HLTH

Bird, Chin, Weisman

ciating in a dental practice; role of business

a business plan. DENT PUB HLTH

4) F,W, Sp. Clinic 4 hours. Restriction:

410, Practice Management for Ad-

(1) W. Seminar 1 hour.

Bird

program.

Brody

Chin

choice. DENT PUB HLTH

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

Seminar to discuss the dental hygiene process as applied to dental hygiene care. Each seminar will provide an orientation to each of the techniques/skills taught as part of dental hygiene practice in DH 155A&B (Clinical/ Lab application). Armamentarium, sequential steps for technique performance as well as specific criteria for performance evaluation are included. DENT PUB HLTH

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

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

DENT PUB HLTH

169A-B-C. Compr Clinical Dental Hygiene Care. (4-5-5) F.W. Sp. Prerequisite: Dental Hygiene 150.01, 150.02, 150.03, 150.04, 155A, 154.01, 154.02, 154.03, 159. Concurrent enrollment in Dental Hygiene 169. Clinic 12 hours E 15 hours W. Sp.

Perry

Assessment of patient histories and signs of deviation from normal in the oral-facial complex, and planning, implementing and evaluating comprehensive dental hygiene care within a human needs framework. Includes advanced techniques of periodontal nonsurgical and maintenance therapy, pain control, gingival curettage, for the periodontitis-affected patient. DENT PUB HLTH

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

Perry

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

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

R. Miller

Clinical experience in mobile dental clinics.

131. Behavioral Sciences in Dental Practice. (1) W. Lecture 1 hour. Gerbert

This course will cover dentist-patient communication, special patients, psychosocial aspects of dental care, and issues of professionalism. DENT PUB HLTH

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

Bird and Staff

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

goals and action steps. DENT PUB HLTH

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

Yee, Bird, and Staff

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

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

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

PUB HLTH

Dermatology

First-Year Coordinated Instruction-

Medicine 131A-B-C. Lecture-demonstrations and section work devoted to the supervised examination of patients.

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

140.01. Advanced Dermatology Clerk-

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

Odom

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

Wintroub

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

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

Hamlin

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

140.04. Inpatient Clinical Dermatology.

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

Odom

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

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

Wintroub

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

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

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

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

LeBoit

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

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

Maibach and Staff

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

403. Specialty Seminar. (2) F,W, Sp. Seminar 2 hours. 24 .

Wintroub and Staff

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

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

Wintroub and Staff

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

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

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

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

In-depth discussion of the sciences basic to an understanding of the function and dysfunction of skin, including anatomy, physiology, microbiology, pharmacology, biochemistry, genetics, and pathology. Over a three-year

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

Wintroub

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

Endocrinology

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

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

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

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

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

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

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

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

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

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

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

210. Clinical Endocrinology Seminar.

(1) § F, W, Sp. Shoback Clinical and basic seminar in endocrinology

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

250. Research. (1-8) § F, W, Sp. Hall

PHYSIOLOGY

Epidemiology

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

101. Epidemiology and Biostatistics. (3) Sp. Lecture 1.5 hours. Seminar 1.5 hours. Restriction: First-year medical student or consent of instructor.

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

140.05. Clinical Clerkships Abroad. (1.5 per week) F, W, Sp. Prerequisite: Nine months of clinical work and Epidemiology 150.01, or consent of instructor. R. Goldsmith, Braveman, S. Lane Clinical clerkship elective in a developing country. Students provide patient care at a medical school, provincial hospital, or rural health clinic for eight to twelve weeks. Arrangements may also be made to participate in a public health or research program abroad. EPID & BIOSTAT

140.06. Preventive Cardiology. (1.5 per week) Sp. Prerequisite: Medicine 110. Siegel, Bersot, Cheitlin Clinical experience in hypertension, lipid, cardiology, and smoking cessation clinics stressing behavioral interventions. Students also participate in a seminar covering major topics in preventive cardiology, choose a topic for presentation, and develop ability to

evaluate literature critically. EPID & BIOSTAT 140.22C. Scientific Foundation of Clini-

cal Prevention for Women. (6) F. Prerequisite: 4th-year medical students only. Ernster

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

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

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

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

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

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

Staff Research abroad, usually in a developing

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

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

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

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

Justice and Staff

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

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

170.12. Epidemiology of Infectious Diseases. (1-2) F. Prerequisite: Previous or concurrent enrollment in an introductory epidemiology course, such as Epidemiology 101 or equivalent, and previous or concurrent enrollment in an introductory microbiology course, such as Microbiology 100B or equivalent. Lecture/seminar 1 hour. Term paper for 2 units optional with consent of instructor. Conte

Course considers the public health consequences of different communicable diseases (including AIDS, sexually transmitted dis-

eases, tuberculosis, measles, and food-borne bacterial diseases), and examines strategies for surveillance, outbreak investigation and prevention (including immunization) of infectious diseases in different settings. EPID & BIOSTAT

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

Wiencke and Guest Lecturers

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

180. Hith Intervention in Devl Areas. (1) § Sp. Prerequisite: Consent of instructor. Seminar 1 hour. Project 1 hour. Kiefer

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

180.01. Tropical Medicine Clinics. (1-2) § Su, F, W, Sp. Prerequisite: Epidemiology 100 and 6 months of clinical experience. Clinic 4-8 hours.

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

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

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

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

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

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

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

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

Introduction to the principles and methods

Family and Community Medicine

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

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

Family and Community Medicine

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

Blossom, Schafer

D-Rodnick, Mitchell

ranged. FAM CM MED

Consent of instructor.

Barbaccia and Staff

MED

Shore

MED

of instructor.

est. FAM CM MED

L. Crain, N. Byl

to be followed in clinic.

Shore, Mitchell, Brody

CM MED

site: Consent of instructor.

Barbaccia

sent of instructor.

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

140.01A-B-C-D. Advanced Family

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

A-VMC in Fresno; B-NAT in Salinas; C-

CHS in Santa Rosa; D-other sites. Compre-

hensive inpatient and outpatient experience

tern responsibility for patient care. Commu-

140.02. Community Health Programs.

Determined by student's clinical experience.

Elective clinical experience for four or more

weeks in various community health projects

in California and out of state as well. Pro-

grams include Indian Health Service, Dia-

betic Summer Camp, Asian Health Service,

and varied neighborhood clinics. FAM CM

140.04. Family Practice Preceptorship.

(1.5 per week) Su, F,W, Sp. Prerequisite: Con-

Students work with a family physician, alter-

natively general internist or general pediatri-

cian, in the office, observing the practice and

performing duties as training permits. Expe-

rience will teach common health problems

and primary care in a community. Rural

preceptorships are encouraged. FAM CM

140.05A-B-C-D. Social Medicine. (1.5

per week) F, W, Sp, Su. Prerequisite: Consent

Field work experience or research germane

to social medicine individually arranged with

consideration to student's major area of inter-

140.06A-B-C. Rehabilitation Medicine.

(1.5 per week) A, B, and C are offered in all of

the following quarters: Su, F, W, Sp. Prerequi-

A-San Francisco Bay Area; B-Fresno; C-

other sites. Students are assigned to rehabili-

phasis will be on the selection of patients who

tation facilities for two to four weeks. Em-

are suitable for rehabilitation and the inter-

professional approach to rehabilitation. FAM

140.15. Longitudinal Clinic. (1) Su, F,W,

would enable the student to pick up patients

Sp. Prerequisite: Senior clerkship which

in family practice. Students assume sub-in-

nity assignments may be individually ar-

(1.5 per week) Su, F, W, Sp. Prerequisite:

period, course covers all aspects of basic sciences relevant to dermatology. DERMATOL

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

Aly

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

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

Wintroub and Staff

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

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

Wintroub

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

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

Petrakis and Staff

Clerkships in clinical epidemiology in offcampus settings. EPID & BIOSTAT

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

Gelber

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

Gelber

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

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

I. Justice

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

170.10. Occupational Epidemiology. (1-

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

Mustacchi

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

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

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

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

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

A laboratory research project under direction of a member of the faculty. EPID & BIOSTAT

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

hours.

Davis and Guest Lecturers

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

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

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

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

140.40. Adv Inpatient Fam Med Clkshp.

(1.5 per week) Su, F, W, Sp. Prerequisite: Senior medicine clerkship.

R. Goldschmidt

The Family Practice Inpatient Service at SFGH employs the family practice approach to hospitalized adult patients with diverse medical problems. Students function as members of the multidisciplinary inpatient team at a junior intern level. Attending rounds are held daily. FAM CM MED

Family and Community Medicine

140.51. Emergency Medicine–VMC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110, Obstetrics and Gynecology 110, Pediatrics 110 and Surgery 110. **Kallsen, Fisher, Mechem**

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

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

Moir, Padilla

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

140.53. Inpatient Medicine/Family

Practice. (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 110, FCM 110, fourthyear standing.

Bradley, Nowlis

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

140.54. Primary Care in the Latino

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

Cruz

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

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

Barbaccia, Werdegar and Staff

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

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

Beck, Borgenicht and Johnson

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

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

Coady, Goldsmith, Petitti

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

150.01. Research. (1.5 per week) Su, F,W, Sp. Prerequisite: Consent of instructor. **Rodnick, Barbaccia and Staff** Clinical epidemiology, health services, or behavioral science research approaches are applied in the study of selected areas in family medicine or community health. FAM CM

MED

5 160.04. Seminars in Sports Medicine. (3) F. Open only to second-year School of Medicine students or graduate students in Physical Therapy. Seminar 2.5 hours. Field work 1 hour.

Brown

A seminar series and practical field experience providing basic information on a broad variety of issues in sports and dance medicine, including evaluation, prevention of injury, conditioning, environmental issues and sports psychology. FAM CM MED

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

D. Sanchez, N. Medina

Explores health care attitudes, health problems and health care resources in the multiethnic Mission District of San Francisco. Students receive clinical assignments in one or more community health and social service agencies. Field experience is analyzed in seminars and tutorials. FAM CM MED

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

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

160.70. Community Medicine in International Perspectives. (1.5 per week) F,W,

Sp. Prerequisite: Consent of instructor. Coady, Lane, Goldsmith, Petitti An elective involving placement at a supervised primary care training and/or service site abroad. Placements will be made according to student interest and language capability as well as availability of appropriately supervised sites. FAM CM MED

170.01A-B-C. Special Issues in Health

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

Rodnick and Staff

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

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

Barbaccia, Robinson, Weiss

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

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

L. Crain Resource overview with reading assignments correlated with field observations of the spectrum of community and institutional services, including comprehensive diagnostic, therapeutic, and counseling services for children and adults with developmental disabilities. FAM CM MED

170.04. Rehabilitation in Primary Care. (1) Su, F, W, Sp. Prerequisite: Consent of instructor. Seminar 2 hours for 6 weeks. **Byl, Berrol**

Course exposes medical and other health science students to the principles of rehabilitation and common therapeutic strategies. Emphasis will be on the development of a basic theoretical foundation on which the student can build clinical rehabilitation skills in practice. FAM CM MED

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

170.09. Health Issues in Central America. (1) W. Lecture 1 hour. Baron, Braveman, Perez-Stable

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

170.10A. Homeless Health Issues. (1) E Lecture 1 hour. **Desmond**

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

170.10B-C. Homeless Health Issues:

Case Discussion and Presentation. (1–1) W, Sp. Prerequisite: Involvement with student-run homeless health clinic. Conference 1 hour. **Lane**

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

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

Remen

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

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

Fundamental legal principles and procedures affecting medical practice, with emphasis on medical negligence; the physician's role in the litigation process; the areas of medical practice which most frequently involve litigation; and practical measures to minimize the risk of lawsuit. FAM CM MED

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

Tennenhouse

Fundamental legal principles and procedures affecting medical practice, with emphasis on medical negligence; the physician's role in the litigation process; the areas of medical practice which most frequently involve litigation; and practical measures to minimize the risk of lawsuit. FAM CM MED

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

Rodnick

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

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

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

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

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

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

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

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

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

Herskowitz and Staff

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

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

Epstein, Packman, Cox

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

224. Advanced Human Genetics. (1.5) § Sp. Lecture 1.5 hours. Offered in alternate years. Not offered 1994–95.

Epstein, Kan, Cox, Gitschier, Packman, Wolff

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

226. Human Developmental Genetics.

(2) § Sp. Seminar 2 hours. Prerequisite: Genetics 200A. Offered in alternate years. Offered 1994-95.

Epstein

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

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

BIOCHEM

Growth and Development

110. Normal & Abnormal Craniofacial Dev. (1) F. Lecture 1 hour. Kahn, S. Fisher, C. Cook, R. Coleman,

Kapila

Developmental processes underlying normal and abnormal craniofacial morphogenesis are presented and the biologic basis for congenital malformations are discussed. GR DEVEL

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

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

122. Oral Physiology. (1.5) E Lecture 3 hours. **A. Miller**

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

188. Relevance of Neuromuscular System to Craniofacial Dev. (2) F. Prerequisite: Physiology. Enrollment limited to senior dental students and postdoctoral graduate students in orthodontics, pediatric dentistry, removable prosthodontics.

211. Behavior and Ethical Considerations in Dentistry. (2) § Su. Prerequisite: Available for credit to students in dental postgraduate specialty programs and to graduate students in Oral Biology. Seminar 2 hours. Baumrind, Gerbert, Pollick This course includes discussion of behavioral issues that affect dental practice. Students will also be made aware of the ethical aspects of dental practice and dental research, and will consider how these concerns affect their decisions. GR DEVEL

Health Sciences Education

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

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

History of Health Sciences

Lecture 2 hours; term paper (optional) for 3

Emphasis is on the historical development of

professions, and the personalities who signifi-

Practice. (3) F, W, Sp. Prerequisite: Third- or

fourth-year standing and consent of instruc-

tor. Seminar 3 hours. Research project re-

Two-week non-clinical block devoted to

reading, library research, discussions and

presentations on the historical development

medicine: character of scientific medicine,

role of technology, medical ethics and mal-

cian-patient relationship. HIST HL SC

practice, corporate medicine, and the physi-

170.01. Historical Perspectives in Medi-

cine. (1-3) F,W, Sp. Prerequisite: Consent of

instructor. Lecture 1-2 hours. Optional 1-2

Course intends to develop a sense of histori-

cal perspective and the ability to assess present

ings and visual aids will focus on the scientific

issues in the light of past experience. Read-

and social aspects of the health sciences.

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

Historical research and/or directed reading

under supervision of a faculty member with

200A. Introduction to Medical History.

(2-4) § F. Prerequisite: Consent of instructor.

Lecture 2 hours. Seminar 1 hour (optional).

General survey chronologically arranged

from prehistory to the Renaissance. This

course examines the changing burden of

ments that in each period influenced the

sional activities. HIST HL SC

tional). Term paper (optional).

European society. HIST HL SC

Risse, Pressman

disease across cultural and geographic bound-

aries and presents broad conceptual develop-

evolution of medical knowledge and profes-

200B. Introduction to Medical History.

(2-4) § W. Prerequisite: Consent of instruc-

General survey from the Renaissance to the

end of the eighteenth century with special

emphasis on the mechanical revolution in

medical thought and the medicalization of

tor. Lecture 2 hours. Seminar 1 hour (op-

approval of the department chairperson.

Prerequisite: Consent of instructor.

hour seminar, conference, or independent

study or research paper.

Risse, Pressman

HIST HL SC

HIST HL SC

Term paper (optional).

Staff

Risse

of topics considered central to the practice of

pharmacy, its relationship to other health

cantly contributed to the advancement of

150.01. Issues in American Medical

health care. HIST HL SC

150. History of Pharmacy. (2 or 3) E.

units.

Sadee

quired.

Staff

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

Barbaccia

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

160.03. Family Practice Preceptorship. (1-3)

Su, F, W, Sp. Prerequisite: Medical student standing. Consent of instructor. Field work 4-12 hours.

Shore

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

L. Crain

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

170.07. Communication with Latino Patients. (2) F,W, Sp. Prerequisite: Medical student status. Lecture 2 hours. Lab 1 hour. Braveman, Koreck, Vasquez-Vega

A practical course designed to develop basic skills in overcoming cultural and linguistic barriers to health care for Spanish-speaking persons. FAM CM MED

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

Hughes

This course explores the general theory and practice of several widely utilized nonallopathic healing modalities with the aim of demonstrating how these therapies can be complementary to modern technologycentered health care. FAM CM MED

Barbaccia

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

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

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

Genetics

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

Herskowitz

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

A. Miller

Course illustrates how the neuromuscular system of the craniomandibular region affects and interacts with craniofacial development by modifying its function, diet, force development, impairing its development and function, and altering occlusion. GR DEVEL

210. Developmental Biology of the Craniofacial Complex. (2) § SS1, SS2. Prerequisite: Available for credit to graduate

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

Kahn, Derynck, Vargervik, Chierici, Damsky

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

200C. Introduction to Medical History.

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

Pressman

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

201A. Health and Plagues: Ecology and

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

Risse

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

Risse, Pressman

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

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

Risse, Pressman

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

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

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

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

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

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

Pressman

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

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

Pressman

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

210. Topics in the History of Nursing.

(2-3) § W. Prerequisite: Consent of instructor. Seminar 2 hours. Term paper (optional). Flood

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

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

Analysis of institutional developments from pre-Christian times, Christian hospitality and segregation schemes, to the secularization

and medicalization of the hospital during the Enlightenment. HIST HLTH SCI 211B. History of Hospitals II. (2-4). § Sp.

Prerequisite: Consent of instructor. Lecture 2 hours. Seminar 1 hour.

Risse, Pressman

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

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

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

Staff

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

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

Clarke

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

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

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

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

For graduate students engaged in writing the

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

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

Human Development & Aging

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

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

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

Kiefer

ence literature and world poetry and prose are brought together in the study of personality development in adult life. Compares insights from the two fields on how the developing person copes with social, historical, and psychological challenges. PSYCHIA-TRY

site: Consent of instructor. Lecture 3 hours. Mullan

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

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

Kiefer

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

229. Sociology of Stress. (2) § F,W, Sp. Prerequisite: Consent of instructor. Doctoral students only. Seminar 2 hours. Pearlin

Great Britain. HIST HL SC

Staff

thesis for the master's degree. HIST HL SC

Staff

Staff

Representative works from behavioral sci-

205. Data Analysis. (3) § F,W, Sp. Prerequi-

Course explores current theories and re-

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

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

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

Human Sexuality

159. Human Sexuality. (1.5) Sp. Lecture 1.5 hours. Offered in alternate years. Offered 1994-95. R. Day

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

Interdepartmental Studies

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

Calarco, Kelly, Rosen

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

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

Third-year standing. Good, J. O'Donnell, J. Morris, E. Tanagho

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

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

Parer, Sniderman

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

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

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

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

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

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

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

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

Medicine

160.02. Sexually Transmitted Diseases.

Course covers biological and clinical aspects

of the syndromes and agents of sexually trans-

mitted diseases, including herpes, chlamydia.

gonorrhea, syphilis, vaginitis, AIDS, and

others. This is an elective course oriensed

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

Course introduces the theory and techniques

of image cytometry, flow cytometry, and flow

sorting, and surveys the research and clinical

applications of these powerful techniques for

the analysis of individual cells. LAB MED

110. Medicine Core Clerkship-UC-

UC Papadakis, SFGH Haber, VA

Tierney, MZ Woeber, VAF/VMC

SFGH-VA-MZ-VAF-VMC. (1.5 per week)

Su, F, W, Sp. Prerequisite: Medicine 131A-B-

C and 132A-B-C. Open to UCSF students

Students are part of the ward team with the

housestaff and faculty. Bedside instruction in

history-taking, physical diagnosis, selected

seminars in general medicine including the

tions and demonstrations of relevant cases.

111. Mechanisms of Disease. (1.5 per

An in-depth study of the mechanisms in-

volved in serious disease processes. Emphasis

on acquisition of basic science information

of nosology and planning of intervention

by physicians and on the logical development

based on principles drawn from basic science.

112. Responsibilities of Med Prac. (1.5

per week) Su, Sp. Prerequisite: Medicine 110

and Surgery 110. Restriction: All fourth-year

students in School of Medicine for May ses-

sion; all third-year students in School of

Course will discuss the ethical, legal, and

131A-B-C. Introduction to Clinical

Medicine. (1-2-3) F,W, Sp. Prerequisite:

Interdepartmental instruction in clinical

problem-solving, interviewing, medical

care. On-going relationship with a patient

focused on: health promotion/education;

ance"; community resources; health team.

Small groups, lectures, and preceptorships.

132A-B-C. Introduction to Clinical

Medicine. (5-7-4) F,W, Sp. Prerequisite:

Anatomy 100, 103; Biochemistry 100; Inter-

departmental Studies 100, Medicine 131A-

B-C; Microbiology 100A-B (may be taken

concurrently); Pathology 101, 102 (may be

taken concurrently); Physiology 100, 101; or

Continuation of interdepartmental course on

pathophysiology of disease and techniques of

collecting and assessing clinical data, includ-

ing history-taking, examination of the pa-

tient, and use of laboratory tests. Lectures,

demonstrations, bedside work, laboratories,

conferences, and independent study. MEDI-

history, ethics, organization, and financing of

understanding barriers to access and "compli-

First-year standing or consent of instructor.

Lecture 1 hour Sp. Section work 2 hours F; 4

policy issues in the clinical practice of medi-

cine. Students are required to write a paper

analyzing a case that presented ethical dilem-

Medicine for June session.

M. Cooke, P. Braveman

mas. MEDICINE

hours W, Sp.

MEDICINE

consent of instructor.

M. Cooke

CINE

week) Sp. Prerequisite: Fourth-year standing

psychiatric aspects of medicine, and presenta-

toward medical students. LAB MED

(2) §W. Lecture 2 hours.

Palefsky, Brooks

Lecture 3 hours.

Medicine

only

Freeman

MEDICINE

MEDICINE

Lo

Kane

in medical school.

Mayall

Course covers the light and electron microscopic structure of organs with emphasis on the relationship of structure to organ function. The histology of endocrine and reproductive systems is presented in a separate course, Physiology 101. ANATOMY & BIOCHEM

Laboratory Medicine

140.01. Principles of Laboratory Medicine-SFGH. (1.5 per week) Su, F, W, Sp. Prerequisite: Two years of medical school. Gottfried, Ng, Hadley, Hung, Khayam-Bashi

Laboratory sessions, seminars and rounds at SFGH correlate laboratory tests with clinical case studies. This course covers general principles and specific topics in chemistry, hematology, microbiology, serology, immunology and transfusion medicine. The schedule can be modified to accommodate special interests. LAB MED

140.05. Clinical Pathology-VMC. (1.5

per week) § F, W, Sp. Prerequisite: Medicine

Clerkship in laboratory medicine including

indications for tests, problems of collection

and performance, interpretation of data to

assist clinicians in rendering diagnoses and

chemistry, radioisotopic pathology, hematol-

ogy, immunology and serology, blood bank-

140.06. Laboratory Medicine in Fresno.

(1.5 per week) Su, F, W, Sp. Prerequisite:

Utilization of different laboratory settings,

organizations, and approaches by pathologists

in hospitals throughout the Fresno commu-

nity. Included is coverage of traditional areas

of clinical pathology in addition to such spe-

cialized areas as cytogenetics and therapeutic

140.07. Hematology-UC. (1.5 per week)

Students participate in daily operations of the

hematology laboratory, working with a resi-

dent on either the Bone Marrow or Heme-

Coag rotations evaluating current case mate-

attending weekly teaching conferences. LAB

140.08. Laboratory Medicine Microbi-

ology. (1.5 per week) Su, F, W, Sp. Third- or

Course provides practical microbiology labo-

ratory instruction correlated with clinical

infectious disease rounds. The student will

observe laboratory diagnosis of viral, bacte-

is a better understanding of how to use the

laboratory for infectious diseases diagnosis.

SFGH, or UC (four weeks per site). LAB

The practical course may be taken atVAMC,

140.22A. Cardiovascular Problem Solv-

ing with Diagnostic Imaging Studies.

(6) F,W. Fourth-year medical students.

Lectures, student observation of imaging

seminars, and problem-oriented student

procedures, library research, case discussion,

reports and presentations are used to demon-

strate the physiological basis of a logical ap-

proach to the use of imaging procedures to

solve clinically common cardiovascular prob-

140.22E. Clinical Laboratory Medicine.

(6) W. Fourth-year medical students.

rial, fungal, and parasitic infections. The goal

fourth-year medical students.

Hadley, Pulliam, Brooks

rials, attending daily signout rounds, and

ing, microbiology, mycology, parasitology.

following therapy. Topics include clinical

110 and consent

Sobenes, Moseley

of instructor.

LAB MED

Medicine 110.

F, W, Sp.

MED

MED

Lull, Lim

lems. LAB MED

Atwater, Corash

Bauer, Beland, Mann

drug monitoring. LAB MED

Pressman

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

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

Risse

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

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

Staff

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

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

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

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

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

Course examines the socio-psychological aspects of aging and life cycle changes. Course also examines the socialization of an aged role, norms for older people, and special problems of aging individuals. PSYCHIA-TRY

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

Calarco, Kelly, Rosen

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

192. Introductory Molecular Biology.

(2.5) § F. Prerequisite: Interdepartmental Studies 191. Restriction: Permission of instructor. Lecture 3 hours, conference 1 hour: 6-week course.

Kelly

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

Newman, Waldman, Murphy, Nicoll Seminar course emphasizing independent learning. Topics will include: biology and clinical use of diagnostic and prognostic tests for HIV and cancer and general principles of how to evaluate diagnostic and screening tests, illustrated with cholesterol and lead testing. LAB MED

140.22K. Mechanisms of Bacterial Pathogenesis. (1.5 per week) W. Fourth-

year standing.

Griffiss, Hamadeh, Jarvis

This course is designed to cause students to approach bacterial infections as a dynamic interaction between living organisms rather than as a problem of identifying symptom patterns. The course will focus on the molecular strategies used by different bacteria. LAB MED

160.01. Radionuclides. (2) Su, F, W, Sp. Prerequisite: One year of medical school. Lecture 1 hour. Clinic 4 hours. Lull, Lim, Yen

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

132D. Introduction to Clinical Medicine. (2) Sp. Prerequisite: Medicine 131A-B-C (must be taken concurrently).

Hughes, Cooke

Working with a faculty preceptor over three quarters of the second year, students in the Clinical Skills Preceptorship are taught the skills of the physical examination, including techniques of the medical history, complete write-up, and oral presentations. MEDI-CINE

140.01. Acting Internship-UC-VA-MZ-VAF-VMC-SFGH. (1.5 per week) Su, F.W. Sp. Prerequisite: Completion of Medicine 110.

UC Papadakis, VA Tierney, MZ Woeber, VAF/VMC Freeman, SFGH Haber

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

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

Papadakis

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

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

Henderson

• .:

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

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

Jensen

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

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

Kline

Students manage one to two patients per week, giving them direct "hands-on" clinical experience. Students are expected to participate in all cardiology conferences, ward rounds, ECG reading sessions, Echocardiography and Nuclear Medicine rounds. MEDICINE

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

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

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

Scharschmidt

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

140.09. Clinical Cardiology-MZ. (1.5 per week) SS1, SS2, Su, F, W, Sp. Prerequisite: Medicine 110 and fourth-year standing. Consent of instructor.

Mailhot, E. Cohen, Paley

Students work up patients and follow patients through diagnostic and therapeutic procedures. There is considerable exposure to noninvasive, invasive, and interventional cardiology and post-operative cardiac care. Students participate in departmental conferences and hospital-wide conferences. MEDICINE

140.10. Pulmonary Medicine-MZ.

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

Addison

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

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

R. Cohen

Students evaluate and manage patients with blood coagulation and its disorders, hematologic and solid tumor malignancies. Learn the technique of bone marrow aspiration and biopsy, and the morphologic interpretation Attend boards rounde and conferences. MEDICINE

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

Bolan

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

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

Embury

Students, under supervision, evaluate hematology patients in the outpatient/inpatient consultation service; review relevant clinical data; interpret bone marrow slides. Emphasis is on the diagnosis and management of patients with hemoglobinopathies, sickle cell diseases, disorders of hematopoiesis, and abnormal coagulation. MEDICINE

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

Grendell

Students share consultations with GI fellows; work up patients on wards; see patients in outpatient; attend endoscopies; attend rounds and conferences. MEDICINE

140.19. Cardiology-VA. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110. Karliner

Students share consultations with cardiology fellows; work up patients on the wards; interpret EEGs and other Holter monitor studies: attend rounds and conferences. MEDICINE

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

Locksley

Hospitalized patients with a wide range of infectious diseases are evaluated and presented by students under the direct supervision of the infectious disease fellow. Students present patients at attending rounds, infectious disease conferences, and review appropriate literature on the subject. MEDICINE

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

Papadakis

Working experience with an internist on clinical faculty as he/she makes rounds in various private hospitals and at UC, sees patients in private office and on house calls, does follow-up studies, and reads electrocardiograms. MEDICINE

140.22B. Current Topics in Oncology. (6) F. Restriction: 4th-year medical students only

Humphreys, Schaufele, Luce

Following the introduction of a selected novel concept in clinical or erxperimental oncology, participant-initiated library research and subsequent discussion will be emphasized as a method to keep pace with the rapid changes in oncology that will occur post-graduation. MEDICINE

140.22D. Advanced Airway Pathophysiology. (6) W. Restriction: 4th-year medical students only.

Humphreys, Mustacci, Stulbarg This course will provide an in-depth understanding of the most pressing issues and challenges that asthma, chronic bronchitis, emphysema. and cystic fibrosis present at the bedside, in the laboratory, and at the community level. The course accommodates ample time for independent study, student presentations, and small group discussions. MEDI-

140.22F. Clinical Therapeutics. (6) W. Restriction: 4th-year medical students only Humphreys, Benowitz

CINE

This course emphasizes applied pathophysiology and clinical therapeutics. Case-ori-ented workshops will present the principles of therapeutics with application to specific therapy of common cardiovascular, respiratory, gastrointestinal, and infectious diseases 140.24. Rheumatology & Immunology-UC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110. Sack

Familiarization with clinical manifestations, rheumatic disease therapy, immunologic disorders. Participation in in/outpatient clinics. Basic immunologic principles as related to clinically apparent immunologic dysfunction. Assignment of pertinent literature, lectures, and introduction to principles and practice of various immunologic testing. MEDICINE

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

Students work up and follow up patients with a wide variety of renal and electrolyte disturbances, and see outpatients in a weekly Renal Clinic. Cases are discussed with attending physicians daily. Students also attend weekly Journal Club, Renal Grand Rounds, and Chief of Service Rounds. MEDICINE

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

Primary emphasis is on the management of critically ill patients in Coronary Care Unit and Intensive Care Unit. Includes teaching in the use of monitoring equipment, cardioversion, and related aspects of critical care medicine. MEDICINE

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

Pont

Students will attend rounds in the coronary care unit and receive instruction in cardiology, stressing electrocardiography; students may work in the pulmonary function laboratory and attend all teaching conferences and seminars. MEDICINE

140.28. Infectious Disease-SFGH. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110. Chambers

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

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

Students evaluate patients on the wards and outpatient clinics; review peripheral blood smears; participate in conferences and seminars. Emphasis on patients with blood coagulation disorders, hematologic malignancies, and anemia. MEDICINE

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

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

140.33. Coronary Care at Moffitt/

Long. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110, fourth-year standing or consent of instructor. A four-week cardiology elective or Medicine 140.01 is also recommended. Chatterjee

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

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

The student will join the renal team and participate under supervision in evaluation and treatment of patients with renal disease or 140.37. Emergency Medicine-H. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and fourth-year standing. Simon, English

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

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

Stulbarg

Students participate fully on the inpatient Pulmonary Consult Service, interviewing, examining, presenting, and doing follow-up of their own patients. Attend weekly conferences, receive some experience with procedures (e.g., bronchoscopy), learn pulmonary function interpretation, and do directed reading relevant to their patients. MEDI-CINE

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

Allison, Kaufman, Udkow, Grossman As a member of the GI Consult team, student will work-up patients, observe and participate in diagnostic and therapeutic procedures, and attend all rounds and GI diversion conferences. MEDICINE

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

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

140.42. Clinical Toxicology & Pharma-

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

The Poison Control Center handles over 200 calls per day, many from physicians managing an acute poisoning or drug overdose. Students will learn to use computerized and other poison information resources; participate in discussions of a variety of acute poisonings. MEDICINE

140.43. Rheumatology & Immunology-

VA. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110. Wofsy

This is an introduction to cardiac rheumatology and immunology. The student will participate in inpatient and outpatient care and take part in didactic conferences relating to rheumatology and immunology. MEDI-CINE

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

Siperstein, Arnaud

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

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

Hopewell, Sheppard

Pulmonary disease, including clinical manifestations, basic pathophysiology, use and limitations of diagnostic studies and treatment. Experience will be gained by seeing wards and thre

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

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

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

Luxenberg, Feigenbaum

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

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

Deedwania

or consent of instructor.

P. Baylor, Goebel

Fourth-year standing.

Amend, Vincenti

well. MEDICINE

Fourth-year standing.

R. Freeman

Laufer

CINE

Siu

CINE

Students see patients in the coronary care unit, wards and clinics at the University of California Teaching Facility at Fresno. They will develop and implement treatment plans with the consultant, read electrocardiograms, and attend all seminars and conferences. MEDI-

140.58. Pulmonary Disease-VAF. (1.5 per

week) Su, F, W, Sp. Prerequisite: Medicine 110

Students on Chest Service will have primary

under supervision of the Physician Director of

the Respiratory Care Service. Instruction on

topics such as the use of respirators, arterial

blood gas sampling and techniques. MEDI-

140.59. Adv Medicine Clerkship KTU-

Rotation through an active renal transplant

service including clinical immunology, clinical

renal pathophysiology, renal diagnosis such as

X-ray, biopsy, scan. The student's experience

encompass other internal medical problems as

in the care of inpatients and outpatients will

140.61. Advanced Medicine Clerkship-

Assignment to team with first- and second-

year resident; rounds with attending faculty

four to five times weekly; attend daily noon

conferences; increase skills in history-taking,

physical examination, write-ups, and oral

presentation. Experience in writing orders

140.62. Emergency Medicine-MZ. (1.5

per week) Su, F, W, Sp. Prerequisite: Medicine

Emergency room experience providing acute

population. Students see medical emergencies,

minor trauma, and acute problems in a variety

of disciplines including gynecology, ophthal-

mology, ENT, and orthopaedics. Attendance

at specialty conferences encouraged. MEDI-

140.63. Advanced Medicine Clerkship-

Fourth-year elective rotation for one month

the residency training program and will be

on medical wards at Kaiser Foundation Hospi-

tal in Oakland. Students will be integrated into

involved in the care of hospitalized patients in

an urban community prepaid health plan hos-

140.64. Cardiology-Electrophysiography

-UC. (1.5 per week) Su, F, W, Sp. Prerequisite:

care to a mixed inner city and middle class

countersigned by resident. MEDICINE

110 and fourth-year standing.

KP. (1.5 per week) Su, F, W, Sp.

pital. MEDICINE

Medicine 110.

Evans

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

UC. (1.5 per week) Su, F, W, Sp. Prerequisite:

care responsibilities for medical inpatients

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

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

140.13. Care of the Patient with AIDS at SFGH. (1.5 per week) Su, F, W, Sp. Prerequisite: Completion of core clinical clerkships. Fourth-year standing.

Stansell, Clement, Kaplan

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

as well as diabetes. MEDICINE

140.22G. Endocrine Pathophysiology. (6) W. Restriction: 4th-year medical students only.

Lingappa, Strewler, Woeber

One week each of lecture, discussion, and library research on selected topics in adrenal, thyroid, parathyroid, and lipid pathophysiology. MEDICINE

140.22N. Renal Clinical Pathophysiology. (6) Sp. Restriction: 4th-year medical students only.

Humphreys, Cogan

The course material will be clinically casebased with a format of small group seminars with supplementary lectures emphasizing pathophysiology of renal disorders. MEDI-CINE

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

Tyrrell

Students based at Moffitt Hospital, twelfth floor south, act as assistants to residents and to endocrine fellows for consultations as well as for hospitalized endocrine patients; attend endocrine and metabolic clinics and seminars, and teaching exercises of endocrinology and metabolism, including Medicine Grand Rounds. MEDICINE

disorders of fluid, acid-base, or electrolyte balance. Emphasis is placed on pathophysiology, history-taking, physical examination, and treatment. MEDICINE

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

Students see patients in consultation on wards and clinics, read electrocardiograms, improve auscultatory skills, review cases with cardiac consultant, observe cardiac procedures such as electrocardiograms and catheterizations, and attend all seminars and conferences. MEDICINE

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

Wang Advanced clerkship in emergency medicine with extensive hands-on instruction in procedures, decision-making, and management of acute patients. Two shifts spent with paramedics, one-half shift with the central EMS base station/dispatch. An excellent elective for students considering a career in emergency medicine. MEDICINE

ongoing conferences, ward rounds and review sessions under close faculty supervision. MEDICINE

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

Pollock

A broad array of acute and chronic renal disease patients are worked up by the student under the direct supervision of the attending physicians. MEDICINE

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

L. Drew, Mintz

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

The primary course focus is diagnostic cardiography. Students interpret 12-lead electrocardiograms, learn the indications for various studies, observe these studies, and describe how they influence patient care. Students will rotate on clinical cardiology teams and will attend selected conferences. MEDICINE

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

Holmes

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

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

Libke

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

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

Grayson

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

140.70. Hematology, Oncology-VAF-

VMC. (1.5 per week) Su, F, W, Sp. Prerequisite: Fourth-year standing and Medicine 110. Stolberg

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

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

Lohne, Hirasuna, van Gundy

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

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

Feigenbaum

Acting internship at this urban community prepaid health plan hospital. Students examine patients, participate in ward rounds, and attend teaching seminars and conferences of the Department of Medicine. MEDICINE

140.77. Endocrinology/Diabetes-

Freeno (1.5 per week) Su, F, W, Sp. Prerequiate: Medicine 110.

Shipp, Hawkins, Murthy, Ginier is gain extensive experience in care of minimum diabetes and other endocrine descare through active participation in special datheres inputient units, ward consultations, endocrine clinics, and patient educational programs located at Valley Medical Center and in the community. MEDI-CINE

141.78. Critical Care Medicine-VMC. (1.5 per week) Su, F, W, Sp.

Hirasona ment and Students participate in the mana evaluation of critically ill patients in the Medical Intensive Care Unit. This includes the interpretation of laboratory results, blood cases and chest X-rays and the use of medurnical ventilation and hemodynamic ring Supervision is by full-time fac-

with senior Medicine residents. MEDI-CINE

140.79. Inpatient Medicine-STM. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110.

Lemesh

The student, teamed with a resident, will evaluate and share in the care of patients admitted to a community based hospital. Students will take call, attend teaching rounds and conferences; will attend clinic one afternoon per week. MEDICINE

140.80. GI and Liver Diseases-VMC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 or consent of instructor.

Holmes, Arora, Peters

Students will become part of the GI-Liver team. In addition to basic patient evaluation, they will participate in the broad range of diagnostic and therapeutic endoscopic procedures. Participation in an active ambulatory clinic adds to the variety of patients seen. MEDICINE

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

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

160.10. Clinical Medical Ethics. (1) E Seminar 1 hour.

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

170.04. EKG Fundamentals-VA. (1) Su, F, W, Sp. Prerequisite: Medicine 132A-B-C. Lecture 1 hour.

M. Goldman

Instruction in basic electrophysiologic principles and interpretation of electrocardiograms. MEDICINE

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

Review of physical principles of electrocardiography and clinical application of electrocardiographic interpretation. MEDICINE

170.09. Current Topics in Medical Science. (2) F,W, Sp. Seminar 2 hours. Parslow

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

170.10. Introduction to Occupational Medicine. (1) E Seminar 1 hour Balmes

Practice of occupational medicine as related to the prevention, recognition, and treatment of disease and injuries resulting from employment. Interaction of economic, political, and social forces bearing on worker health problems, MEDICINE

170.11. Introduction to Environmental Medicine. (1) W. Seminar 1 hour.

Balmes Introductory course in health issues related to the environment. MEDICINE

170.12. Introduction to Geriatric Medicine. (1.5) W. Lecture 1.5 hours. Lanenberg

Course covers the physiology and psychology of normal aging and health care problems of the elderly, including functional status and cognitive impairment. Use of medications, health care policies, multidisciplinary geriatric health care teams, and ethics are reviewed. MEDICINE

170.15. Art and Science of Health Ser-

vices Research. (2) F. Prerequisite: Graduate training in applied health services research, e.g., public health, medical sociology, health economics, preventive medicine. Luft

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

170.18. Principles of Occupational Health. (2) Sp. Seminar 2 hours. Balmes

This course presents an overview of occupational health, with seminars and site visits. MEDICINE

180. Industrial Toxicology. (2) § F. Prerequisite: Consent of instructor. Lecture 2 hours. Osterloh

rstanding of basic principles To provide of toxicology as related to work environment and workers' health. Emphasis is on chemicals including heavy metals and pesticides, methods of surveillance, principles of acute and chronic toxicity testing. Includes lectures, student presentations, and discussion. MEDICINE

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

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

MEDICINE 400. Medical Staff Conferences. (2) F,W,

UC R.K. Root, SFGH Rapaport, VA Sleisenger

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

401. Interdept Clinical Correlation. (4) F, W, Sp. R.K. Root

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

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

VA Sleisenger

Seminars on recent literature in internal medicine, with assigned reading, required reports, and evaluation of presented material by interns, residents, and faculty. MEDI-CINE

403. Specialty Seminar. (2) F,W, Sp. R.K. Root

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

404. Specialty Seminar. (4) F,W, Sp.

SFGH H. Williams and Staff Seminars are conducted in cardiology, hematology, gastroenterology, infectious diseases, metabolic diseases, and pathology, involving discussions, required reading, and reports. MEDICINE

405. Specialty Seminar. (4) F,W, Sp. **VA Sleisenger**

Seminars are conducted in cardiology, electrocardiology, hematology, gastroenterology, radiology, fluid and electrolyte balance, endocrinology and pathology, involving discussions, required reading, and reports. Elective seminars include a chest disease conference, joint medical and surgical conference, tumor board, dermatology conference, and neuropsychiatry conference. MEDI-CINE

406. Research Elective. (1-10) Su, F, W, Sp. UC R.K. Root, SFGH Williams, VA Sleisenger

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

407. Clinicopathological Conference. (1) F, W, Sp.

SFGH H. Williams, VA Sleisenger Residents take an active part in the presentation and discussion of problems connected with the correlation of clinical manifestations of disease with postmortem studies. Conferences include reference to the literature, clinical demonstrations, and laboratory work. MEDICINE

408. EKG Interpretation. (2) Su, F,W, Sp. Sokolow

Seminars (individual instruction) for residents in medicine and trainees in cardiology by cardiac consultants in the interpretation of all electrocardiograms and phonocardiograms taken at UC. MEDICINE

440. Postdoc Seminar in Health Economics. (4) Sp. Restricted to postdoctoral fellows in RWJ Clinical Scholars Program & NIMH-funded Clinical Sciences Research Training Program. Seminar 4 hours.

Henke

Provides survey of economic methods, models, and empirical findings related to the health care sector. Students will learn to use economic techniques to examine health care problems and policy options. MEDICINE

450. Clinical Medicine. (10) Su, F, W, Sp.

SFGH H. Williams, UC R.K. Root Residents are responsible for the care of patients under the direction of the attending staff, and participate in student teaching. Third-year, senior and chief residents provide teaching and consultation service in the hospitals and outpatient clinics. MEDICINE

451. Clinical Medicine-MZ. (10) Su, F, W, Sp.

Woeber

Residents are responsible for the care of patients under the direction of the attending staff, and participate in student teaching. Senior residents provide teaching and consultation service in the hospital and outpatient clinics. MEDICINE

452. Clinical Medicine. (1.5 per week) Su, F, W, Sp.

VAF Rosenstiel

Residents are responsible for patient care under the direction of the attending staff, including history-taking, physical examinations, laboratory tests, and consultations. The chief resident, in addition, has certain responsibilities involving the residents, and consults for all other hospital services. MEDICINE

460. Clinical Primary Care. (1.5 per week) Su, F, W, Sp. Crede and Staff

Interns in the Primary Care Track of Internal Medicine are responsible for patient care in a multispecialty primary care clinic. Other rotations include those common to the regular Medicine Internship Program as well as related clinical services such as Dermatology, Neurology. MEDICINE

461. Clinical Primary Care. (1.5 per week) Su, F, W, Sp.

Crede and Staff

Residents in the Primary Care Track of Internal Medicine are responsible for patient care in a multi-specialty primary care clinic. Other rotations include those common to the regular Medicine Internship Program as well as related clinical services such as Dermatology, Neurology. MEDICINE

490. Clinical Medicine. (1.5 per week) Su, F, W, Sp.

SFGH H. Williams Interns rotate through medical wards and

emergency hospital. Under the supervision of the attending staff, they are responsible for the care of patients, including history-taking, medical workups, laboratory tests, and consultation. MEDICINE

491. Clinical Medicine. (1.5 per week) Su, F, W, Sp.

SFGH H. Williams

A modified "straight" medical internship consisting of eight to nine months service in general medicine, chest, and the emergency rooms, with three to four months spent in other hospital services. MEDICINE

495. Clinical Medicine. (1.5 per week) Su, F, W, Sp.

UC R.K. Root

Interns are responsible for the care of patients under the direction of the attending staff, and participate in student teaching. MEDICINE

Microbiology and Immunology

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

W. Levi

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

Comprehensive presentation of microor-

ganisms including bacteria, fungi, viruses;

immunology, disinfection, sterilization, and

antimicrobial agents. Laboratory studies and

demonstrations on indigenous oral flora and

applications of microbiology to dentistry.

120. Microbiology in Pharmacy. (4) Sp.

Fundamentals of microbiology for pharmacy

viruses. Morphology, physiology, and immu-

nology techniques used in laboratory diagno-

exercises in antibiotic susceptibility, disinfec-

150.01. Microbiology Research. (1.5 per

week) Sur, F, W, Sp. Prerequisite: Microbiol-

ogy 100A and 100B and consent of instruc-

Research in microbiology; block elective for

170.01. Medical Problem-Solving. (2) F,

W, Sp. First-year medical students only. Con-

ference 2 hours. Library research 2 hours.

Small-group medical problem-solving con-

board for exploration of underlying issues in

pathophysiological reasoning, independent

Socratic and minimally directive. MEDI-

basic and clinical sciences. The emphasis is on

learning, and working in a group. Teaching is

170.02. Case of the Week. (1) F. Prerequi-

site: Microbiology 100B concurrently. Semi-

Infectious disease cases are discussed in a

190A. Med Immunology-Grad Stdnts.

(2) § Sp. Prerequisite: Biochemistry 100A-B.

Lecture 2 hours for nine weeks. Equivalent to

Lectures on the fundamentals of immunol-

problems in this field. MICROBIOL

ogy. Small group seminars on patient-related

190B. Graduate Medical Microbiology.

(6) § F. Prerequisite: Biochemistry 100A-B.

Lecture 4 hours. Lab 3 hours. Conference 1

Pathogenesis of infection by bacteria, fungi,

ment, and epidemiology of diseases. Labora-

and viruses. Essentials of diagnosis, treat-

exercises of essential medical skills. Prob-

lem-solving exercises and small group semi-

nars involving clinical cases. MICROBIOL

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

Library research and directed reading under

supervision of a member of the faculty with

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

A laboratory research project under direction

of a member of the faculty with the approval

203. Cellular Immunology. (3) § F. Pre-

requisite: General knowledge of immunol-

ogy and biochemistry. Lecture 3 hours. Of-

fered in alternate years. Offered 1994-95.

DeFranco, J.W. Goodman

the approval of the chairperson of the depart-

Prerequisite: Consent of instructor.

Prerequisite: Consent of instructor.

of the chairperson of the department.

problem-solving format. MEDICINE

Microbiology 100A and 121.

ference using real clinical cases as a spring-

fourth-year students. MICROBIOL

students with emphasis on mechanisms of

disease production by bacteria, fungi, and

sis of selected bacterial diseases. Includes

tion, and sterility . MICROBIOL

Prerequisite: Successful completion of all

first-year required coursework. Lecture 3

fundamentals of infection and resistance,

Gross, DeFranco

MEDICINE

Levinson

Staff

W. Levinson

CINE

nar 1 hour.

W. Levinson

W. Levinson

hour.

Staff

Staff

MICROBIOL

W. Levinson

tory demonstrations and

ment. MICROBIOL

hours. Lab 3 hours.

150.01. Research in Medicine. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of faculty member in charge of student's research project and approval of third- and fourth-year coordinator.

Papadakis

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

150.03. Cancer Viruses. (1.5 per week) Su, F, W, Sp. Prerequisite: Basic course in microbiology.

J. A. Levy

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

160.04. Medical Science & Clinical

Problems. (0-2) Su, F, W, Sp. Prerequisite: Must be an M.D./Ph.D. trainee in the MSTP at UCSE Conference 1-2 hours. Parslow, Papadakis

Clinical contact is arranged with mentor for experience in ward rounds, clinic work, etc. in clinical departments with approved faculty. Student will choose mentor from list of available faculty. MSTP students are required to complete 6 units before completion of the DK D MEDICINE

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

Atchley

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

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

Papadakis

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

411A. Introduction to Molecular Genetics. (4) Su. Lecture 3 hours. Conference 1 hour.

Gitschier, Ganem, Parslow

A general overview of molecular genetics, aimed principally at fellows in clinical departments. MEDICINE

411B. Introduction to Cell Biology. (4) Su. Lecture 3 hours. Conference 1 hour. Kelly

A brief introduction to contemporary cell biology for clinical fellows. MEDICINE

411C. Laboratory Techniques. (3) Su. Prerequisite: Medical fellows in School of Medicine. Lab: 40 hours/week for 2 weeks. Welch, Pytella

A short, but intensive laboratory course in modern laboratory techniques of cell and molecular biology meant to facilitate transition of medical fellows beginning their rotation in basic research laboratories. MEDI-CINE

420. Intro to Structural Biology. (3) Sp. Lecture 3 hours.

Cohen, Kuntz, Craik

Introduction to structural biology. Focus on understanding protein structure and how protein structure is determined. Implications of protein structure for function. MEDI-CINF

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

100B. Medical Microbiology. (6) F. Prerequisite: Biochemistry 100A-B. Lecture 4 hours. Lab 3 hours. Conference 1 hour. Equivalent to Microbiology 190B. W. Levinson

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

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

Brodsky

Lectures on the fundamentals of immunology, drugs in hypersensitivity and immunosuppression. MICROBIOL

immunogenicity, properties of immunocompetent cells, cell interactions in the immune system, and regulatory circuits. MICROBIOL

Course covers chemical and genetic basis of

204. Molecular and Cellular Immunol-

ogy. (3) § F. Prerequisite: General knowledge of immunology. Lecture 3 hours.

DeFranco

Topics to be covered: hematopoiesis, structure and genetics of immunoglobulins, lymphocyte surface molecules. T cell receptors, signal transduction, antigen presentation, MHC restriction, tolerance, T cell effector mechanisms, lymphocynes, and autoimmunity. MICROBIOL

208. Biology of Animal Virus Infection.

(3) § W. Prerequisite: General knowledge of nucleic acid structure and chemistry. Lecture 3 hours. Seminar 4 hours. Ganem, Young, Andino

The nature of viruses: dynamics of virus-cell interaction with emphasis on animal virus systems, control of expression of virus-specific information in lytic and temperate infection, and role of viruses in malignant transformation of cells. MICROBIOL

Microbiology and Immunology

209. Special Topics in Immunology. (2) § Sp. Conference 2 hours. **Goodman**

Small group tutorial in which topics and correlative reading will be selected for discussion with individual faculty members. MICROBIOL

210. Research Problems in Mycology. (1-5) § F. Prerequisite: Microbiology 100A, 100B and 206. Lab and conference. Halde

Participation in research problems in a mycology laboratory. This is not a structured laboratory methods course, but rather a practical research experience involving basic research with pathogenic fungi. MICROBIOL

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

Staff

Lab research for one quarter with a departmental faculty member to familiarize new graduate students with experimental approaches to microbiological or immunological problems of current interest. MICROBIOL

220. Selected Topics Seminar. (1) § F,W, Sp. Seminar 1 hour.

Staff

General microbiology; individual research of advanced graduate students, invited speakers and staff members. Reviews of special topics and journal articles by advanced students and faculty. MICROBIOL

221. Graduate Research Seminar. (1) § Sp. Seminar 1 hour. **Staff**

Seminar series in which graduate students present their thesis research. MICROBIOL

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

MICROBIOL

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

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

Neurological Surgery

Core Clerkship–Neurology 110. Students serve as clinical clerks in the inpatient and outpatient clinics.

140.01. Advanced Neurosurgery Clerkship. (1.5 per week) Su, F,W, Sp. C.B. Wilson

The student will become a member of the housestaff, attending ward rounds, working up patients, assisting at operations, and taking night call on rotation with a resident. Limited to one student per hospital. NEURO SURG

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

Gauger, P. Weinstein

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

150.01 Research in Neurosurgery. (1-5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor and department. Passing grade in NB Examination Part 1.40 hours per week.

Staff

Research project under the direction of a member of the faculty. Extensive background reading will be required and discussion of important topics will be held at weekly laboratory and program project research conferences. NEURO SURG

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

Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the depart-

15 403. Literature Review. (1) Su, F, W, Sp. Pitts

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

450. Clin Neurological Surgery–UC. (10) Su, F;W, Sp. **C.B. Wilson**

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

451. Clin Neurological Surgery-SFGH. (10) Su, F, W, Sp. Gauger

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

453. Clin Neurological Surgery–VA. (10) Su, F, W, Sp.

P. Weinstein Residents are responsible for diagnosis and care of patients in wards and clinics and performance of studies and selected neurosurgical procedures under supervision

tients at conferences and attend seminars and

490. Clin Neurological Surg-SFGH-VA.

Interns rotate through neurological surgery

wards. Under the supervision of the attend-

ing staff, they are responsible for the care of

examinations, laboratory tests, diagnostic

procedures, and consultation. NEURO

patients, including history-taking, neurologic

Second-Year Coordinated Instruction-

Medicine 132A-B-C. Lecture-demonstra-

tions and section work devoted to the super-

Clkshp. (1.5 per week) Su, F,W, Sp. Prereq-

of common clinical problems and psychiatric

140.01A-B-C. Advanced Clinical Clerk-

ship. (1.5 per week) Su, F,W, Sp. Prerequi-

site: Neurology 110 and fourth-year stand-

UC Hauser, SFGH Simon, VA Sharp

Students serve as acting interns on the inpa-

clinical rounds, seminars, and conferences is

140.02. Off-Campus Clerkship. (1.5 per

week) Su, F, W, Sp. Prerequisite: Neurology

Clinical clerkship in approved hospitals by

and the chairperson of the department.

special arrangement and approval of the dean

140.03. Outpatient Clinical Neurology.

(1.5 per week) Su, F, W, Sp. Prerequisite:

Neurology 110 and consent of instructor.

Senior students participate in the outpatient

general neurology and subspecialty clinics.

Students further develop neurologic history

tient service. Attendance at departmental

aspects of neurology. NEUROLOGY

ing. A: UC. B: SFGH. C:VA.

required. NEUROLOGY

110.

Hauser

NEUROLOGY

Engstrom

vised examination of patients.

110. Neurology-Neurosurg Core

rounds at UC. NEURO SURG

(1.5 per week) Su, F, W, Sp.

Gauger, P. Weinstein

SURG

Neurology

of the attending staff. They also present pa-

Opportunities for research in one of the departmental laboratories by arrangement with the chairperson of the department. NEU-ROLOGY

150.02. Neuropathology. (1.5 per week) F, W, Sp. Prerequisite: Anatomy 103 and Pa-thology 102.

140.07. Neurology Clerkship-Fresno. (1.5

per week) Su, F, W, Sp. Prerequisite: Neurol-

Advanced students will have the opportunity

to broaden and enrich their clinical neurol-

ogy experience and expertise. Opportunity

will be given to participate in didactic and

case conference presentations. The opportu-

(e.g., behavioral neurology, neuromuscular

140.08. Pain Mechanisms and Manage-

uisite: Neurology 110 and consent of in-

ment-UC. (1.5 per week) Su, F, W. Prereq-

Diagnosis, medical and surgical management

of patients with chronic pain. Students will

participate in conferences and rounds of the

Parnassus campus. Direct patient contact will

be under supervision of attending physicians

(neurologists, neurosurgeons, anesthesiolo-

gists, psychiatrists). Students will learn to do

sensory examinations and simple local anes-

thetic nerve blocks. They will learn pain

management for acute post-operative pa-

and chronic pain. NEUROLOGY

tients, cancer pain, neuropathic pain, head-

ache, low back pain. They will be expected to

identify major psychological aspects of acute

150.01. Neurology Research. (1.5 per

week) Su, F, W, Sp. Prerequisite: Anatomy

multidisciplinary pain service at UCSF's

nity exists for subspecialty clinical experience

Felmus, Margolin, Ogren

disease). NEUROLOGY

structor. Enrollment limited.

Fields, Barbaro, McKay

ogy 110.

R.L. Davis

103.

Hauser

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

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

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

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

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

400. Neuroscience Seminar. (1.5 per

week) Su, F, W, Sp. Hauser, D. Greenberg, F. Sharp Seminars covering selected subjects in the basic sciences relevant to neurology including neuroanatomy, neurochemistry, neurophysiology, and neuropathology. NEUROLOGY

401. Grand Rounds. (1) Su, F,W, Sp. Hauser

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

402. Neurological & Neurosurgical Path. (1) Su, F, W, Sp. R. Davis

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

403. Neuropathology Research. (1-10) Su, F, W, Sp. Prerequisite: Second- and thirdyear residents.

450. Clinical Neurology–UC-SFGH-VA. (10) Su, F, W, Sp. Hauser

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

453. Clinical Electroencephalography. (1.5 per week) Su, F, W, Sp. **Aminoff**

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

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

Students learn the application of electromyography in the diagnosis of patients seen in the wards and in the outpatient clinic, with individual i nstruction as required. NEUROL-OGY

456. Clinical Neuropathology. (1.5 per week) Su, F, W, Sp. Malamud

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

458. Clinical Pediatric Neurology. (1.5 per week) Su, F,W, Sp. **Mobley**

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

460. Clinical Neuro-Ophthalmology. (4.5) Su, F, W, Sp. **W. Hoyt**

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

Neuroscience

117. Neurobiology. (6) Sp. Prerequisite: First-year Dentistry standing. Lecture 5 hours. Lab 2 hours. Conference 1 hour. Sargent, Wentworth, Christie, Steller Structure and function of the nervous system. The course will cover the fundamentals of neurophysiology and the organization of the nervous system. Emphasis will be placed on the oral cavity. STOMATOL

201. Basic Concepts in Neuroscience. (6) § F. Lecture 4 hours. Conference 2 hours. L. Jan, Y.-N. Yan

An interdisciplinary introduction to fundamental aspects of nervous system function. Course emphasizes the ionic basis of neuronal signaling, neurochemistry, the cell biology of the neuron, and mechanisms of neuronal integration. PHYSIOLOGY

210. Critical Reading Skills. (2) W. Prerequisite: Approval of instructor. Conference 2 hours. Reichardt

Important papers in different areas of neuroscience will be read and critically evaluated in class discussions. The aim is to develop reading skills. PHYSIOLOGY

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

Reichardt

A laboratory rotation course to familiarize new departmental graduate students with various approaches to neurobiological research. PHYSIOLOGY

220. Neurobiology Seminar. (1) § F,W, Sp. Prerequisite: Consent of instructor. Semi-

225. Neurobiology of Disease. (3) § Even Sp. Prerequisite: Neuroscience 201 and

sent of instructor. Seminar 3 hours. **Mobley, Fields, Rubenstein** Seminar format with students reading and presenting papers in the current literature neurobiological disease. Emphasis will be the physiological and molecular bases of

230. Biophysics of Membrane Excitabil-

ity. (3) § F, W, Sp. Prerequisite: Neuroscience 201 & consent of instructor. Seminar 3 hours.

Lansman

disease. PHYSIOLOGY

Course is designed to acquaint students with analytical methods used in studying excitation in nerve and muscle. Topics include: review of electrical fundamentals, LaPlace transforms, linear cable theory, thermodynamic and kinetic descriptions of electrodiffusion, voltage clamp methods, and Hodgkin-Huxley analysis of nerve excitation. PHYSIOLOGY

231. Synaptic Mechanisms in Peripheral

& CNS. (3) § F,W, Sp. Prerequisite: Neuroscience 201. Seminar 3 hours.

Nicoll, Malenka, Sargent This is primarily a reading course in which

recent papers on various aspects of synaptic physiology and plasticity in the CNS will be discussed in depth. PHYSIOLOGY

240. Advanced Topics in Integrative

Neurobiology: The Vertebrate Retina. (3) § F.W. Sp. Prerequisite: Neuroscience 201 & consent of instructor. Seminar 3 hours. Steinberg, Copenhagen

Selected topics in the physiology of the vertebrate retina. Emphasis is on the main problem areas of current retinal research as studied by electrophysiological and pharmacological methods. Study of the retina following the path of signal processing from photoreceptor to outer plexiform layer, inner plexiform layer, and the ganglion cell. PHYSIOLOGY

241. The Central Visual System (3) § F. Prerequisite: Neuroscience 201 & consent of instructor. Seminar 3 hours. **Stryker**

Course examines organization and function of central visual system with a view toward understanding the response properties of central visual neurons, the neural connections that underlie these response properties, and the role of these neurons in perception. PHYSIOLOGY

242. Advanced Topics in Integrative

Neurobiology: The Auditory System (3) § F.W. Sp. Lecture 3 hours. Merzenich

Course will review in lectures, laboratory demonstrations, and in discussions the state of understanding the peripheral and central nervous system processes underlying hearing and speech perception. PHYSIOLOGY

243. Somatosensory Systems and Pain. (3) § F.W. Sp. Prerequisite: Neuroscience 201 and consent of instructor.

Fields, Merzenich, Levine, Ralston This is predominantly a lecture and discussion format course. The course will examine the neural basis of somatic sensation including pain and pain modulation. A general theme will be the correlation of information derived from pharmacology, anatomy, physiology, behavior and human studies. Clinical problems will be reviewed insofar as they illustrate important principles or gaps in our understanding of the neurobiology of somatosensory systems and pain. PHYSIOLOGY

244. Motor Systems in Mammals. (3) § F, W, Sp. Prerequisite: Neuroscience 201 and consent of instructor. Seminar 3 hours.

Lisberger

Through readings from the literature and background lectures by the instructor, we will survey both classical and current approaches to understanding the control of motor activity in mammals. PHYSIOLOGY

 Clerk uisite: Medicine 132A-B-C. Concurrent enrollment in Psychiatry 135.

 Layzer
 Layzer

 f the
 Students are assigned patients for study under supervision of attending and resident staffs.

 d taking
 They attend work rounds, attending rounds, grand rounds, conferences and lecture-seminars, emphasizing diagnosis and management

ment. NEURO SURG

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

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

400. Staff Conference. (2) Su, F,W, Sp. C.B. Wilson

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

402. Clinicopathological Conference. (2) Su, F, W, Sp.

R. Davis, C.B. Wilson

Residents discuss clinicopathological aspects of cases, and their correlation with the literature and special studies. Faculty and visitors discuss developments in related fields. Second-year residents organize conferences and participate in gross autopsies on patients from the Neurological Surgery Service. NEURO SURG

and examination skills applicable to clinical problems (i.e., Parkinson's disease) likely to confront the neurologist and non-neurologist. NEUROLOGY

140.04. Child Neurology. (1.5 per week) Su, F, W, Sp. Prerequisite: Pediatrics 110, Medicine 110, and Neurology 110. **Mobley**

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

140.06. Advanced Neurology Clerkship-

VA. (1.5 per week) Su, F,W, Sp. Prerequisite: Neurology 110 and consent of instructor. F. Sharp

Students serve as clinical clerks in the outpatient clinics and on the consultation service. Attendance at departmental clinical rounds, seminars, and conferences is required. Prior arrangements must be made. NEUROL-OGY

R.L. Davis

Course involves pathologic and clinicopathologic research into various aspects of neuropathology. Specific subjects of research are chosen in conjunction with members of the staff. NEUROLOGY

407. Neuroradiology. (1) F, W, Sp. Dillon

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

411. Neurology Research. (5-13) Su, F, W, Sp.

Hauser

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

412. Neuropathology Research. (10) Su, F, W, Sp. VA Sharp

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

nar 1 hour.

Z. Hall

Topic in neuroscience is selected (e.g., development, anatomy and physiology of the visual system, biochemistry of membranes, etc.) and pertinent papers from the recent literature are read and discussed. Each student must participate regularly and present one seminar per quarter. PHYSIOLOGY

222. Advanced Topics in Neurochemistry and Molecular Neurobiology. (3) § F, W, Sp. Lecture 1 hour. Seminar 2 hours. Mobley, Levine

Lectures and critical discussion of current research on neurotrophic factors, their receptors, and molecular basis of neuronal signal transduction. PHYSIOLOGY

223. Developmental Neurobiology. (3) § F.W. Sp. Prerequisite: Neuroscience 201 and

consent of instructor. Lecture 3 hours. Reichardt, Y-N. Jan, L. Jan, J. LaVail This course will cover important areas of

This course will cover important areas of nervous system development with emphasis on molecular, genetic, and cellular approaches. Much of the course will focus on recent studies using nematodes, *Drosophila*, leeches, and zebra fish. PHYSIOLOGY

Stryker, Malenka

Lectures and critical discussion of current research on the limbic system in the mammalian brain and its relationship to behavior. Topics include the neural bases of learning, memory, motivation, and emotion; spatial learning; the meso-limbic reward system; and synaptic plasticity. PHYSIOLOGY

246. Neuroendocrinology. (1.5) § F,W, Sp. Prerequisite: Neuroscience 201 or consent of instructor. Lecture 1 hour. Seminar 2 hours. **Dallman, Weiner**

Lectures and critical discussion of current research on the hypothalamus and its relationship to vegetative behaviors. Topics include the neural bases and integration of circadian rhythms, hormone secretion, feeding, drinking, and sexual behaviors. PHYSI-OLOGY

250. Research. (1-8) § Su, F, W, Sp. Prerequisite: Consent of instructor. Laboratory. **Staff** PHYSIOLOGY 299. Dissertation. (0) § Su, F, W, Sp. Prerequisite: Advancement to candidacy and permission of the graduate adviser. Staff

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

Nursing

106. Management of the Care Environment. (4) F. Lecture 4 hours. Staff

Course examines the management of interpersonal, financial, and cultural factors in the nursing unit environment which influence the cost, quality and outcomes of care delivery.

107. Vulnerable Populations. (3) F. Lecture 3 hours.

Staff

Course provides an orientation to socioeconomically and/or developmentally vulnerable groups; low income children and adults; the homeless: immigrants. refugees, migrants; chronically ill and disabled; substance abusers; and the frail elderly. Emphasis is placed on risk factor identification and modification.

108. Family Nursing. (3) F. Lecture 3 hours. Seminar 1 hour.

Staff

Course examines family as primary unit of health care management. Theories for understanding and providing care to families of patients in primary, secondary, tertiary health care are reviewed/critiqued. Skills in conducting a theoretically relevant family health assessment are taught.

109. Psychosocial Nursing. (4) F. Lecture 2 hours. Lab 2 hours. Staff

Course presents psychosocial basis for assessment and intervention with actual or potential health problems. Interviewing and communication techniques are presented as an integral part of both assessment and intervention.

110. Community Health Nursing. (8) W. Lecture 3 hours. Lab 5 hours. Staff

Course explores application of nursing, family, and community health theory in community health settings, focusing on assessing, planning, implementing, and evaluating nursing care with families, groups, and communities.

111. Health Assessment. (4) W. Lecture 2 hours. Lab 1 hour.

Staff

Course covers health assessment of the wellhealthy client through history taking, physical examination, and identification of stressors altering health status. The laboratory provides an opportunity for integration of theory and mastery skills.

112. Health Policy. (3) W. Lecture 3 hours. Staff

Course provides an overview of health policy issues, legislations, and reforms affecting nursing practice, education, and research

113. Pathophysiological Concepts in Acute Illness. (5) Sp. Lecture 3 hours. Lab 2 hours

Staff

Course explores and describes pathophysiological concepts related to nursing care of the acutely ill adult. Description of the manifestations and nursing management appropriate to these concepts will be compared and contrasted across a variety of diseases

114. Nursing Science and Research. (3) Sp. Lecture 3 hours.

Staff

An overview of nursing science and research emphasizing the concepts, research styles, and language useful for scientific work in nursing. Engages students in analytic and reflective thinking through examination of selected scientific literature. Orients students to nursing's expanding science base.

142. Introduction to Nursing . (11) Su. Lecture 3 hours. Patient contact 24 hours. C. West

Course explores the concepts of health and illness and role of the professional nurse. Focuses on using the nursing process in care of persons across the adaptation and developmental continua. Concurrent laboratory designed to develop skills and knowledge common to the nursing care of adults. PHYSIOL NURS

143. Effective Communication. (3) F. Lecture 3 hours.

Staff Course reviews selected theories of human

interaction and presents principles and techniques of effective communication as they relate to establishing and maintaining a helping relationship. Students use laboratory experience to develop skills in communication and interaction. MENT HLTH COM ADM

144. Nursing Care of Med-Surg Patients. (14.5) F. Prerequisites: N141, N142. Lecture 5 hours. Patient contact 28.5 hours. C. West

Course focuses on nursing assessment, diagnosis and care of adults with common medical-surgical conditions including problems common to the elderly. Clinical experiences are provided to allow (for development of pertinent knowledge and skills) application of content with clients. PHYSIOL NURS

145. Pathophysiology. (2) F. Prerequisites: N141, N142. Lecture 2 hours.

S. Janson-Bjerklie

Course provides understanding of disease and its treatment as the basis for nursing assessment and intervention. Major disease entities will be explored, utilizing a conceptual organization of the content. PHYSIOL NURS

146. Parent-Child Nursing. (7.5). W. Prerequisites: N140, N141, N142, N144, N145. Lecture 4 hours. Patient contact 10.5 hours. C. Kennedy

This clinical course in the nursing care of children and families integrates theoretical concepts related to the management of pediatric patients in acute and ambulatory settings. Application of concepts of growth and development of the child and family is included. FAM HLTH

147. Childbearing Families. (7.5) Sp. Prerequisites: N140, N141, N142, N144, N145. Lecture 4 hours. Patient contact 10.5 hours.

N. Green

Course focuses on biopsychological concepts forming the basis for normal childbearing events and application to clinical situations. Emphasis is on nursing assessment and management of the woman and fetus during antepartum and intrapartum periods, and new mother and infant during the first postpartum month. FAM HLTH

148. Socio-Cultural Issues in Hith, Illness. (2) W. Prerequisites: N140, N141, N142, N144, N145. Lecture 2 hours.

S. Kaufman Course focuses on significant sociocultural variations in health and illness, prevention and care that make particular impacts on nursing practice in a variety of settings. Attention will be given to cultural diversity associated with ethnicity and social class. SOC BEH SC

149. Psych/Mental Health Nursing. (5.5) W. Prerequisites: N140, N141, N142, N143, N144, N145, N146, N147, N148. Lecture 3 hours, Patient contact 7.5 hours P. Underwood, S. Ziehm

Course presents theories of human behavior as they relate to function, alteration, and/or disruption of mental processes; reviews current knowledge related to nursing care, psychiatric treatment, and psychosocial rehabilitation of the identified mentally ill individual and his/her family. MENT HLTH COM ADM

150. Community Health Nursing. (8.5) Sp. Prerequisites N140, N141, N142, N143, N144, N145, N146, N147, N148. Lecture 4 hours. Patient contact 13.5 hours.

181. Law and the Practice of Name (2) § Sp. Lecture 2 hours. D. Tennenhouse

Survey of fundamental and critical current issues in law with respect to the theory and practice of nursing. Emphasis on legal contingencies encountered in the everyday practice of nursing in both hospital and community settings. PHYSIOL NURS

187. Scientific Writing. (1) § F,W, Sp. Prerequisite: Consent of instructor. Lecture 1 hour. Enrollment limited.

Course reviews bibliographic search methodology, the style of scientific writing, American Psychological Association (APA) editorial format, and composition of the introductory paragraph. PHYSIOL NURS

189. Survey of Human Sexuality. (3) § Sp. Lecture 3 hours.

T. Ayres

J. Grout

Theories and concepts of femininity, masculinity, and sexuality throughout the life cycle. Exploration of the wide range of human sexual behavior. Content includes sexual response, common sexual dysfunction and therapy, masturbation, homosexuality, and sexuality in some health conditions. FAM HLTH

197. Group Independent Study. (1-5) SS1, SS2, F, W, Sp. Lab 3-15 hours. Staff

Students collaborate in clinical investigation and study special problems related to nursing and health sciences under the direction of faculty. Students may select topics for study related to their area of interest

198. Supervised Study in Nursing. (1-5) § SS1, SS2, F, W, Sp. Prerequisite: Consent of instructor. Lab 3-15 hours. Staff

Student conducts library research and does directed reading under supervision of a faculty member with approval of the chairperson of the department.

199. Laboratory Project in Nursing. (1-5) § SS1, SS2, F, W, Sp. Prerequisite: Consent of instructor. Lab 3-15 hours. Staff

Student conducts a laboratory research project under direction of a faculty member with the approval of the chairperson of the depart-

201. Curriculum & Program Develop-

ment. (3) § W. Prerequisite: Graduate standing or consent of instructor. Lecture 1 hour. Seminar 2 hours.

H. Wilson

Course reviews educational principles, nursing models, and conceptual framework for curriculum and program development to enable students to analyze, critique, and develop curricula and programs for schools of nursing and health delivery systems. MENT HLTH COM ADM

202A. Theory Development in Nursing. (3) § W. Prerequisite: Doctoral standing or

consent of instructor. Lecture 1 hour. Seminar 2 hours.

A. Meleis

Critical analyses of contemporary strategies for the development of nursing theory building, particularly as they relate to selected nursing phenomena and an in-depth analysis of selected theoretical schools of thought. MENT HITH COM ADM

202B. Prototype Theories in Nursing. (3-4) § W. Lecture 3 hours. J. Faucett

Comparative study and critical analysis of major prototype theories from which conceptions of nursing are derived. Emphasis is placed on systems, symbolic interaction, developmental exchange, and adaptation level theories. MENT HLTH COM ADM

202C. Theories & Conceptual Frameworks. (3-4) § Sp. Prerequisite: Doctoral standing. Lecture 3 hours. A. Meleis

Comparative study and critical analysis of

188 ML Chainst Knowledge Developmanat. (4- § 8 Photospanner: N202A, Lab 6 beckers Sometimer & Beckerse I. Martimen

Nurman

210. Information Technology and Nurs-

ing Care. (3) § Sp, W. Lecture 3 hours. Lab

Course applies research from information

technology and selected aspects of nursing

care (dragnoses, nursing minimum data set,

outcomes for program planning activities.

MENT HITH COM ADM

lent. Lecture 3 hours.

H. Wilson

M. White

ADM

I. Martinson

3 hours.

Staff

PHYSIOL NURS

Seminar 3 hours.

NURS

W. Holzemer

COMADM

V. Carrieri-Kohlman

3 hours.

M. Dodd, P. Halliburton

S. Gortner

decision-making) in order to capture patient

211A. Introduction to Research. (3) § F.

Prerequisite: Elementary statistics or equiva-

Lectures and computer-assisted instructional

materials present an overview of the research

process, including sections on developing

research questions, experimental design,

instruments, sampling, and data analysis.

Differing views of science will be explored.

Course is designed as a competency-based

instructional program. PHYSIOL NURS

211.03B. Community Health Research

Critique. (3) § Sp. Prerequisite: Consent of

instructor, with preference given to Commu-

Course is a critical analysis of the published

literature in community health. Emphasis is

on the appraisal of research design, conclu-

sions and importance to community health

211.04B. Death in Childhood Res Cri-

tique. (3) § W. Prerequisite: Nursing 211A

and consent of instructor. Seminar 3 hours.

Critique of studies related to the professional

management of death, childhood develop-

ment of the concept of death, children's re-

fatally ill children, and impact of death of a

211.05B. Critique: Studies in Family

Health. (3) § W. Prerequisite: N211A or

equivalent or consent of instructor. Seminar

Course is a critique of research addressing the

family and its relationship to the health and

illness of family members. Research consid-

ered classic in the field will be reviewed, as

will contemporary research. FAM HLTH

211.06B. Neuroscience Research Cri-

This course presents the scholarly process of

critiquing research in neuroscience nursing.

The foci are: evaluation of the research pro-

cess, assimilation of the scientific basis for this

specialty, and examination of implications of

empirical findings for neuroscience nursing.

211.07B. Crit of Onc Nursing Studies.

(3) § W. Prerequisite: Consent of instructor.

Course presents the scholarly process of cri-

tiquing published research in oncology nurs-

ing. Emphasis will be on evaluation of the

research processes utilized by investigators,

oncology nursing practice. PHYSIOL

sent of instructor. Lecture 3 hours.

and the implications of empirical findings for

211.08B. Critique of Management Re-

search. (3) § F. Prerequisite: N211A or con-

studies which examine organizational behav-

ior and administrative practice. The emphasis

is on attitudes, insights, and abilities crucial to

The course provides a critical analysis of

appreciation, appraisal, and utilization of

research in management. MENT HLTH

211.09B. Research Critique: Critical

Care. (3) § W. Prerequisite: N211A. Seminar

Course critiques research studies related to

the nursing assessment, its plan, and therapy

tique. (3) § W. Seminar 3 hours.

child on the family. FAM HLTH

sponse to death in the family, death anxiety in

nursing practice. MENT HLTH COM

nity Health students. Seminar 3 hours.

bours vary.

S. Henry

Course defines the assure of advanced chancal practice relevant to the area of focus in the doctoral program. Problems common to selected patients are explored. Phenomena are analyzed to develop knowledge for advanced nursing in clinical and administrative settings. FAM HLTH

205.03. Clinical Knowledge Development. (4) § F. Prerequisite: N202A. Lab 6 hours. Seminar 2 hours. P. Underwood

Course defines the nature of advanced clinical practice relevant to the area of focus in the doctoral program. Problems common to selected patients are explored. Phenomena are analyzed to develop knowledge for advanced nursing in clinical and administrative settings. MENT HLTH COM ADM

206A. Nursing Management of Psychi-

atric Conditions in Adults. (3) § F. Prerequisite: N227 and N219 or equivalent, and consent of instructor. Lab 3 hours. Seminar 2 hours.

P. Underwood

Seminar is designed for graduate psychiatric nursing students to examine and discuss various theories and practice approaches to the nursing management of psychiatric conditions in adults. MENT HLTH COM ADM

207. Clin Nsg Physio. (3-5) § SS1, SS2, Su, F, W, Sp. Prerequisite: Doctoral standing. Lab 3-9 hours. Seminar 2 hours. Staff

Course is an advanced study of the theory and research in the care of patients with physiological disruption and/or illness. Indepth examination of patient problems, assessment and management in the student's selected specialty area. Seminar with clinical laboratory. PHYSIOL NURS

208.01A. Concept Delineation in

Physiological Nursing. (3) § W. Prerequisite: N205.01 or N205.02 or N205.03. Seminar 3 hours.

V. Carrieri-Kohlman

Seminar describes and analyzes phenomena relevant to nursing from theoretical, clinical, and empirical perspectives. Related concepts of interest to nursing are selected from observations in clinical settings and delineated in relation to the selected phenomena. PHYSIOL NURS

208.02 Special Problems in Family Pri-

mary Care (3) § W. Prerequisite: N245, N246, N247, N279A, N279B, or permission of instructor. Seminar 3 hours.

S. Shea, C. Chesla

Course explores complex health/illness problems, as they occur in families. Complex assessment and management of patients and their families, across the life span, are discussed. FAM HLTH

208.03A. Concept Delineation in Men-

tal Health, Community, and Administrative Nursing. (3) § W. Prerequisite: N205.01 or N205.02 or N205.03. Seminar 3 hours.

Staff

Seminar describes and analyzes phenomena relevant to nursing from theoretical, clinical, and empirical perspectives. Related concepts of interest to nursing are selected from observations in clinical settings and delineated in relation to the selected phenomena. MENT HLTH COM ADM

208.01B. Concept Measurement in Physiological Nursing. (3) § Sp. Prerequisite: N205.01 or N205.02 or N205.03.

Seminar 3 hours. P. Larson

Seminar focuses on measurement of selected concepts and their clinical manifestations Existing measures are examined from theoretical, clinical, and empirical perspectives when the need for new measures is identified. PHYSIOL NURS

208.03B. Concept Measurement in

115. Contemporary Nursing. (3) Sp. Lecture 3 hours.

Staff

Course explores nursing's role within the context of the changing health care system. Review the scope of expanding nursing practice responsibilities with special emphasis on nursing's role in improving access and quality of health care.

140. Integrated Sciences. (3) F. Lecture 3 hours.

M. Engler

Course focuses on microbiological concepts and chemical principles essential to nursing practice. PHYSIOL NURS

141. Anatomy and Physiology. (6) Su. Lecture 5 hours.

B. Peterson

This introductory course integrates human anatomy and physiology of the major organ systems and emphasizes the intimate relationship between structure and function. The course provides the foundation needed to understand human responses to wellness and illness. PHYSIOL NURS

A. Dingerson

Course explores application of nursing, family, and community health theory in community health settings, focusing on assessing, diagnosing, planning, implementing, and evaluating community health nursing care with families, groups, and communities. General principles will be applied to specific vulnerable populations. MENT HLTH COMADM

151. Issues in Nursing. (3) W. Prerequisites: N140, N141, N142, N143, N144, N145, N146, N147, N148. Lecture 3 hours.

B. Roberts

Course explores major issues and trends in contemporary nursing and health care delivery as they relate to nursing practice, education, and research. FAM HLTH

152. Community Gerontological Nursing. (1) Sp. Lecture 1 hour. M. Williams

Course focuses on the elderly person in the community and factors which influence independence. Common problems found in the elderly will be discussed along with an introduction to appropriate assessment/management strategies. An overview of community services will be presented. PHYSIOL

major conceptual models and theories in nursing. Considers relationship congruency of models to prototype theories; system, interaction, developmental, adaptation level theories. Examines the implica- tion of nursing theories and models for practice and research. MENT HLTH COM ADM

203. Consultation Theory & Process. (2-3) § W, Sp. Lecture 2 hours. Lab 0-3 hours. D. Oda

Course provides a study of theories and concepts of consultation as a facilitating process relevant to nurses working in primary, secondary, and tertiary prevention services. Emphasis will be on consultation strategies. Optional laboratory for theory testing. MENT HLTH COM ADM

205.01. Clinical Knowledge Develop-

ment. (4) § F. Prerequisite: N202A. Lab 6 hours. Seminar 2 hours.

P. Larson

Course defines the nature of advanced clinical practice relevant to the area of focus in the doctoral program. Problems common to selected patients are explored. Phenomena are analyzed to develop knowledge for advanced nursing in clinical and administrative settings. PHYSIOL NURS

Mental Health, Community, and Administrative Nursing. (3) § Sp. Prerequisite: N205.01 or N205.02 or N205.03. Seminar 3 hours.

Staff

Seminar focuses on measurement of selected concepts and their clinical manifestations. Existing measures are examined from theoretical, clinical, and empirical perspectives when the need for new measures is identified. MENT HITH COM ADM

208.03C. Social Support: Theory, Res & Meth. (2-4) § W, Sp. Prerequisite: Doctoral

standing. Seminar 2 hours. Independent study optional 3 or 6 hours for 3 or 4 units. S. Rankin

Analysis of the literature relating social support to various health and adjustment outcomes with emphasis on conceptual and methodological issues. Students will develop a focused review of the social support literature relevant to their research and/or clinical interests, MENT HLTH COM ADM

209. Comparative Research Designs. (3) § F. Prerequisite: Doctoral standing or by consent of instructor. Lecture 3 hours. M. Dodd, K. Lee

Course critically analyzes the elements of qualitative and quantitative research designs set within the context of the research question to he asked and the existing knowledge

of acutely ill patients with multi-system failure. Students will learn to appreciate, evaluate, and integrate research findings into their clinical practice. PHYSIOL NURS

211.10B. Critique: Studies in Child

Health. (3) § W. Prerequisite: N211A or equivalent or consent of instructor. Seminar 3 hours.

I. Martinson

Course is a critique of research addressing the health pediatric client and those experiencing chronic illness. Research considered classic in the field will be reviewed, as will contemporary research. FAM HLTH

211.12B. Occup HIth Res-Critical Re-

view. (3) § F. Prerequisite: N211A or consent of instructor. Lecture 1 hour. Seminar 2 hours.

J. Lipscomb

Course is a critical analysis of studies exploring the relationship of the workplace to health of the worker. Emphasis is on appraisal of relevant scientific literature, identification of research methods, and development of research proposals in occupational health nursing. MENT HLTH COM ADM

211.14B. Critique: Ment Hith Outcome Studies. (3) §W. Prerequisite: N211A or consent of instructor. Lab 3 hours. Seminar 2 hours.

L. Chafetz

Course will criticize outcome studies in psychosocial care of the chronically or severely mentally ill. The intent is to develop research consumerism, through promotion of attitudes, insights, and abilities necessary for critical evaluation and utilization of healthrelated research. MENT HLTH COM ADM

211.20B. Critique: Studies in Perinatal Care. (3) § W. Prerequisite: N211A or equivalent or consent of instructor. Seminar 3 hours.

D. Affonso

Course critiques research in perinatal health care with a focus on parents and neonates. Research considered classic in the field will be reviewed, as will contemporary research. FAM HLTH

211.21B. Cardiopulmonary Res Critique. (3) § W, Sp. Prerequisite: N211A or consent of instructor. Lecture 2 hours. Lab 3 hours.

B. Drew

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

211.23B. International/Cross-Cultural

Nursing Research. (3) § W, Sp. Prerequisites: N211A or doctoral admission. Seminar 2 hours. Conference 1 hour.

J. Lipson

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Seminar focuses on critical analysis of studies in selected areas of international cross-cultural health and nursing. Emphasis is on high risk groups and situational stressors. MENT HLTH COM ADM

211.24B. Institutional Care of the Aged.

(3) § W. Prerequisite: N211A. Seminar 2 hours. Field work 3 hours. J. Kayser-Jones

Seminar focuses on critiquing research studies in the institutional care of the elderly using a theoretical, historical, and cross-cultural approach. PHYSIOL NURS 211.25B. Research Critique: Trauma/

Emergency. (3) § W. Prerequisite: N211A. Seminar 3 hours

S. Janson-Bjerklie

Course is a critical analysis of studies that explore assessment and management variables in emergency and trauma nursing. Emphasis is on the critique process related to studies for applicability to clinical practice. PHYSIOL NURS

211,27B. Critique: Studies of Sick Children. (3) § W. Prerequisite: N211A, or equivalent, or consent of instructor. Seminar 3 hours.

M. Lynch

Course critiques research addressing the complexities of care for the acate/critically ill child with prolonged and/or complex care needs. Classic and contemporary literature will be analyzed through the critique process. FAM HLTH

211.28B. Critique: Studies in Nurse-

Midwifery. (3) § W. Prerequisite: N211A, or equivalent, or consent of instructor. Seminar 3 hours.

J. DeJoseph

Course critiques research addrsssing the childbearing family and its relation to nursemidwifery practice. Research considered classic in the field will be reviewed, as will contemporary research. FAM HLTH

211.29B. Critique: Studies in Women's Health. (3) § W. Prerequisite: N211A, or equivalent, or consent of instructor. Seminar 3 hours.

D. Taylor

Course critiques research addressing women's health and health care across the life span. Research considered classic in the field will be reviewed, as will contemporary research. FAM HLTH

213. Advanced Nursing Practice Roles. (2) § W. Restriction: Course is for secondyear M.S. students. Consent of instructor is required for other students. Lecture 2 hours P. Larson

218.02B. Concepts in Neuroscience

Nursing. (3) § W. Prerequisite: N218A.

Course explores phenomena which are com-

monly experienced by patients with a neuro-

logical diagnosis from a theoretical, scientific,

and clinical practice perspective. Emphasis is

on nursing interventions. PHYSIOL NURS

218.04B. Concepts in Adult Medical

Nursing, (3) §W. Prerequisite: N218A.

Course analyzes the needs of the medical

patient. Physiologic and pathophysiologic

mechanisms and appropriate treatments are

explored. Issues in clinical management are

discussed from the theoretical perspective,

and compared and contrasted with clinical

218.05B. Concepts in Oncology Nurs-

Course analyzes the needs of the cancer pa-

mechanisms are explored from the theoretical

tient. Physiologic and pathophysiologic

perspective and compared and contrasted

with clinical nursing practice. PHYSIOL

218.06B. Concepts in Critical Care

Nursing. (3) § W. Prerequisite: N218A.

Course analyzes the needs of the critically ill

patient. Physiologic and pathophysiologic

mechanisms and appropriate treatments are

explored. Issues in clinical management are discussed from the theoretical perspective,

and compared and contrasted with clinical

218.07B. Concepts in Trauma & Emer-

gency Nursing. (3) § W. Prerequisites:

N218A and N221.03. Seminar 3 hours.

Course examines human responses com-

monly experienced by trauma and emer-

for practice. PHYSIOL NURS

ing. (3) § W. Seminar 3 hours.

examined. PHYSIOL NURS

MENT HITH COM ADM

S. Janson-Bjerklie

H. Wilson

Staff

gency patients from a theoretical and clinical

practice perspective. Emphasis is on scientific

basis of nursing knowledge as the foundation

218.08B. Concepts in Pulmonary Nurs-

Course examines concepts in pulmonary

nursing care from a theoretical and clinical

practice perspective. Emphasis is on the sci-

foundation for practice. Issues related to de-

livery of care across practice settings is also

219. Psychiatric Assessment. (2-3) § F.

Course uses clinical material in the critical

examination of standard psychiatric diag-

noses. Emphasis will be on the utility of as-

sessment tools such as the mental status ex-

amination and the psychiatric history across

diverse clinical specialties and the life span.

220.01. Adv Sem in Nursing Research.

(3) § F,W, Sp. Prerequisite: Successful com-

consent of instructor. Seminar 3 hours.

pletion of the qualifying examination and/or

This seminar guides doctoral students in the

areas in cross-cultural and international nurs-

ing and mental health and community nurs-

220.02. Adv Sem in Nursing Research.

ing and completion of at least one research

methods course. Restriction: Second-year

graduate standing. Seminar 3 hours.

(3) § F. Prerequisite: Graduate nursing stand-

ing. MENT HITH COM ADM

design and conduct of research in specialty

Lecture 2 hours. Lab 3 hours (optional).

entific basis of nursing knowledge as the

practice. PHYSIOL NURS

S. Janson-Bjerklie

ing. (2) § W. Prerequisite: N218A. Lab 2

practice. PHYSIOL NURS

hours, Seminar 1 hour.

C. Miaskowski

Seminar 3 hours.

NURS

C. West

Lecture 3 hours.

Seminar 3 hours.

Staff

Staff

Course focuses on analysis of the content, scope, and issues of advanced nursing practice roles, using the context of role and organizational theory. PHYSIOL NURS

214. Community-Based Long-Term Care. (3) § F, Sp. Prerequisite: Graduate status or permission of instructor. Lecture 2 hours. Lab 3 hours.

L. Reif Course analyzes empirical research and theory dealing with noninstitutional approaches to long-term care. Examination of patient characteristics and needs, models of service delivery, factors affecting service utilization, and nurses' roles in provision and management of community-based long-term care. PHYSIOL NURS

215A. Health in the Community. (3) § F, W, Sp. Prerequisite: Consent of instructor. Lecture 3 hours.

M. White

Course provides exploration of theories, concepts, and principles pertaining to the practice of community health nursing with a focus on positive health factors and interaction with families, groups, and communities. MENT HITH COM ADM

215B. Health Planning for Communities. (3) §W. Lecture 3 hours C. Portillo

Course explores analytical planning models applicable to community health services. Using the community as a basis, this methods course includes assessment, planning, intervention, and evaluation techniques. Emphasis is on application of nursing process while working with communities. MENT HLTH COMADM

216. Interventions-Nurs Work Stress. (2) § F. Prerequisite: Graduate standing. Seminar 2 hours.

A. Baldwin

Course will help to enable students to evaluate the recent research and current models of nursing work stress. From this base, students will critically select strategies for assisting and intervening in nursing stress situations. **PHYSIOL NURS**

217. Psychosocial Care of Children. (2) § Sp. Prerequisite: Consent of instructor. Lecture 2 hours.

I. Martinson

Course explores theory related to the psychosocial experiences of illness and hospitalization for the child and family. Focus is directed to minimizing trauma and promoting growth. Concurrent practicum recommended. FAM HETH

218A. Phenomena Common to the Nursing Care of Ill or Injured. (3-4) § F.

Prerequisite: N276. Prior or concurrent enrollment in physiology or consent of instructor. Lecture 1 hour. Seminar 2 hours. Lab optional 3 hours for 4 units. N. Stotts

Knowledge is organized around phenomena common to ill or injured individuals across the life span. Concepts such as stress, healing, clotting, infection, consciousness, pain and coping will be examined from a theoretical and clinical perspective. PHYSIOL NURS

218C. Current Therapeutics. (1-5) § F. Prerequisite: Physiology, N218A and N218B. Seminar 1-5 hours.

V. Carrieri-Kohlman Course investigates the theoretical basis of

selected therapies commonly used with the ill or injured. Therapeutic aspects of interventions as well as side effects will be explored. Recent research will be used as the basis for discussion. PHYSIOL NURS

218D. Illness or Injury Rehabilitation.

(2-3) § W. Prerequisite: Graduate standing. A seminar which guides students in the de-N218A and N218B. Seminar 2 hours. Lab sign and conduct of research in specialty areas in family health care nursing. FAM HLTH

H. Kenneth

220.03. Adv Sem in Nursing Research. (3) § Sp. Prerequisite: Successful completion 221.03. Trauma and Emergency Pathophysiology. (4) § Sp. Prerequisite: N275AB (Physiological Basis of Nursing). Lecture 4 hours. **B.** Bires

Course focuses on pathophysiology of injury and emergent medical conditions. Exemplars of clinical states commonly seen in trauma and emergency care will be analyzed. PHYSIOL NURS

221.04. Critical Care Pathophysiology. (4) § Sp. Lecture 4 hours. V. Carrieri-Kohlman

Course offers study of the multi-system effects of frequently occurring pathologic states in the critically ill. Emphasis is on major mechanisms and consequences of the disorders which provide the basis for nursing assessment. PHYSIOL NURS

222A. Principles of Nurse Midwifery. (4) § F,W. Prerequisite: Enrollment in Nurse-

Midwifery specialty. Lecture 3 hours. Lab 3 hours.

L. Ennis, D. Anderson

Course critically analyzes scientific principles underlying selected obstetric and gynecologic diagnostic and therapeutic procedures in the management of health care of women throughout the childbearing cycle. FAM HLTH-UCSD

222B. Nurse Midwifery Management. (4) § W, Sp. Prerequisite: Enrollment in

Nurse-Midwifery specialty. Lecture 4 hours. V. Lops, S. Weiner

Course expands the theoretical knowledge base of the normal physiology of pregnancy Emphasis is placed on the intrapartal period with facilitation of normal processes and patient teaching. FAM HLTH-UCSD

222C. Complex Probs in Nurse Midwifery. (4) § Sp. Prerequisite: Enrollment in Nurse-Midwifery specialty. Lecture 4 hours. V. Lops, L. Ennis

Course explores the theoretical concepts and principles applied to the management of pathophysiological and psychosocial issues complicating the birthing process. Issues of professional practice, adjustment to primary care role, and medical collaboration and consultation are considered. FAM HLTH-UCSD

223. Mental Health and Aging. (3) § F,W, Sp. Prerequisite: Consent of instructor. Lecture 3 hours.

C. Deitrich

Course focuses on assessment and management of common mental health problems of the older adult. Factors contributing to mental health or illness, adaptive behaviors, specific psychopathologies, and the similarity of presenting features of physical and mental illness are explored. PHYSIOL NURS

224. 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 pathophysiological phenomena identified in the pediatric critical care population. The interrelationships of human responses, symptoms, processes, stressors, and interventions will be discussed specific to alleviating the phenomena identified in this population. FAM HLTH

225. Cardiac Rhythm: Theory & Analysis. (3) § Sp. Prerequisite: Consent of instructor. Lecture 3 hours.

B. Drew

Cardiac electrophysiology in normal and pathological states and the scientific base for nursing's response to cardiac arrhythmias. Content includes; theory and research on the mechanisms, diagnosis, electrocardiographic monitoring, treatment of cardiac arrhythmias, and use of the electrocardiogram for nursing research. PHYSIOL NURS

226. Perinatal Role Development. (2) § F. Prerequisite: N292AB, N254, N275C, or consent of instructor. Seminar 2 hours.

D. Affonso Course includes content on the multiple role nurse specialist including clinical practice, education, and research. Emphasis is on strategies for staff development, problem-solving, and role development in the clinical setting. FAM HLTH

228. Primary Prevention of CV Disease. (2) § Su, F, W, Sp. Prerequisite: Consent of instructor. Lecture 2 hours.

M. Engler, M. Engler

Course critically analyzes data related to the primary prevention of coronary artery disease, sudden death, stroke. Major risk indicators and treatments for these diseases are reviewed. Guidelines for managing disease risk across the life span are provided. PHYSIOL NURS

229. Philosophy of Nursing Science. (3) § F. Prerequisite: Doctoral standing or consent of the instructor. Lecture 2 hours. Seminar 1 hour.

S. Gortner, P. Benner

Contemporary philosophic viewpoints on the nature of nursing science, addressing natural science, integrative science, and human science traditions and scientific integrity. FAM HLTH

230A. Quality Assurance. (3) § F. Lecture 3 hours.

S. Henry

Course critically reviews strategies to design, monitor, and evaluate quality assurance programs. Theoretical linkages between QA and evaluation research are presented. MENT HLTH COM ADM

230B. Human Resources Development. (3) § W. Lecture 3 hours

S. Henry

Strategies to design, implement, and evaluate human resource development programs are critically reviewed. Theoretical linkages among QA, human resource development, and evaluation research are presented. MENT HLTH COM ADM

230C. Health Services Evaluation. (3) § W. Lecture 3 hours.

W. Holzemer, S. Henry

Course presents a patient outcome model for health services evaluation research. The contributions of patient/client, provider, and setting characteristics to individual and organizational outcomes are critically analyzed. MENT HITH COM ADM

231. Issues in Nurse-Midwifery Prac-

tice. (3) § Sp. Prerequisite: Enrollment in the midwifery program at UCSF School of Nursing. Seminar 3 hours.

J. DeJoseph, J. Flanagan

Seminar focuses on a critical analysis of current issues in midwifery, including the context of practice, health policy, and patient education. FAM HLTH

232. Clinical Pharmacology. (1-2). § Sp. Prerequisite: Consent of instructor. Lecture 1-2 hours.

S. Echaves

Sp. Lecture 3 hours.

C. Portillo

Course focuses on clinical application of pharmacology in the management of patients, including frequently prescribed drugs for the treatment of chronic diseases and minor acute illnesses across the lifespan. MENT HITH COM ADM

233A. AIDS: Primary Prevention. (3) §

Course focuses on the epidemiology and

primary prevention of AIDS. Ethical and

strategies for prevention with high-risk

behaviors. MEN HLTH COM ADM

233B. Applied Pathophysiology of

AIDS/HIV. (3) § F. Lecture 3 hours.

M. Dodd, A. Hughes

are emphasized.

I. Martinson

hours.

legal issues, access to care, and mental health

issues are discussed. Emphasis is on teaching

populations and those practicing high-risk

Course describes theories of the natural his-

tory of HIV/AIDS and related conditions.

ments, and investigational protocols are re-

viewed. Clinical cases and nursing manage-

233C. Issues in Hospice Care. (3) § Sp.

Prerequisite: Consent of instructor. Lecture 3

Course explores history, function, and mod-

ment using secondary prevention techniques

Symptomatology, diagnostic tools, treat-

211.51C. Clinical Research Methodologies. (3) § Sp. Prerequisite: N211A. Lecture 2 hours. Seminar 1 hour.

N. Stotts

Course provides the opportunity for students to apply research methods in the development of a research proposal. Students will address research of problems significant to their patient population. PHYSIOL NURS

211.53C. Illness Management Research.

(3) § F, W, Sp. Prerequisite: N211A, 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

212. Data Collection and Measurement. (3) §W. Prerequisite: N209. Lecture 3 hours. S. Weiss, N. Stotts

Course critically evaluates concepts underlying the validity, reliability, and appropriateness of data collection methods as a basis for

ıng p illness or injury. Nursing therapies which promote optimal adaptation and development are evaluated utilizing relevant research as a base. Clinical laboratory optional. PHYSIOL NURS

Course examines the theoretical basis for

218E. Trauma and Emergency Therapeutics. (3) § F. Prerequisites: N221.03 and N275. Seminar 3 hours.

S. Janson-Bjerklie

optional 3 hours.

C. West

ehahilitati

Course focuses on scientific basis of selected therapeutic interventions used in the care of trauma and emergency patients. Nursing interventions related to therapies will be evaluated and/or proposed. PHYSIOL NURS

218.01B. Concepts in Cardiovascular Nsg. (3) § W. Prerequisite: Consent of instructor. Cardiac physiology and pathophysiology. Seminar 3 hours.

P. Skov

Course analyzes the needs of cardiovascular surgical patients. Physiologic and pathophysiologic mechanisms and surgical interventions are explored. Issues in clinical management are discussed from the theoretical perspective, and compared and contrasted with clinical practice. PHYSIOL NURS

of the qualifying examination. Restriction: Doctoral-level course. Seminar 3 hours.

V. Carrieri-Kohlman

Seminar guides students in design and conduct of research in specialty areas in physiological nursing. PHYSIOL NURS

221.01. Pathophysiology of Cancer. (3) §

Sp. Prerequisite: Admission to graduate program and graduate-level physiology of the cell. Audits by permission only. Lecture 2 hours. Seminar 1 hour.

C. Miaskowski

Theories of carcinogenesis, the natural history of representative cancers and the mechanisms of action of certain therapeutic agents will be discussed. The clinical relevance for nursing of the associated pathophysiologic changes will be emphasized. PHYSIOL NURS

221.02. Cardiovascular Pathophysiol**ogy.** (3) § W. Lecture 3 hours. B. Drew

Course is a study of pathophysiology, diagnosis, and treatment of major cardiovascular disorders that provide the basis for the nursing management of this population. Emphasis is on the acute phase of illness. PHYSIOL NURS

227A. Theories of Major Psych Conditions. (4) § F,W. Prerequisite: Consent of instructor. Seminar 4 hours.

L. Chafetz

Course reviews major psychiatric conditions, outlined by the DSM-III-R, explores sociocultural, psychological, and biological theories as dimensions in understanding the etiology, onset, course, treatment, nursing care, and outcome of selected conditions. MENT HLTH COM ADM

227B. Theories of Major Psych Conditions. (4) § W. Prerequisite: Consent of instructor (N227A). Seminar 4 hours. P. Underwood

Course reviews major psychiatric conditions, outlined by the DSM-III-R, explores sociocultural, psychological, and biological theories as dimensions in understanding the etiology, onset, course, treatment, nursing care, and outcome of selected conditions. MENT HITH COMADM

els of hospice care. Supportive physical/ psychosocial nursing interventions to promote symptom control and family coping during end-stage of life are covered with emphasis on AIDS. Research, legal, ethical issues and nursing implications are discussed.

234.01. Specialty Research Seminar. (3) § Sp. Prerequisite: Doctoral standing or con-

sent of instructor. Seminar 3 hours.

N. Stotts

Course evaluates research in the student's area of specialization. Emphasis is on critique of the design, methodology, and findings. Synthesis of the evaluation of studies results in the identification of major research questions in the field of study. PHYSIOL NURS

234.02. Specialty Research Seminar. (3)

§ Sp. Prerequisite: Doctoral standing or consent of instructor. Seminar 3 hours. J. Hallburg

Course evaluates research in the student's area of specialization. Emphasis is on critique of the design, methodology, and findings. Synthesis of the evaluation of studies results in the identification of major research questions in the field of study. FAM HLTH

234.03. Specialty Research Seminar. (3) § Sp. Prerequisite: Doctoral standing or consent of instructor. Seminar 3 hours.

M. Styles

Course evaluates research in the student's area of specialization. Emphasis is on critique of the design, methodology, and findings. Synthesis of the evaluation of studies results in the identification of major research

questions in the field of study. MENT HLTH COMADM

235A. Child Mental Health Assessment. (2) § F. Lecture 2 hours.

S. Weiss

Course discusses assessment approach and diagnostic criteria for mental health problems occurring from infancy through adolescence. Child mental health status will be assessed across a spectrum of disorders through case studies. MENT HLTH COM ADM

235B. Child Mental Health Counseling II. (2) § W. Prerequisite: N235A. Seminar 2 hours.

S. Weiss

Course covers cognitive, behavioral, and gestalt theories of child mental health counseling. Theories of group counseling will also be examined, including methods based on play, activity, and interview. MENT HLTH COMADM

236A. Nurse Anesthesia Pharmacology

I. (3) § Su. Prerequisite: Admission to the Nurse Anesthesia Specialty and N211A, N275A, N276, N211.09, N221.02, N275B, N239A, N241D, N407.02. Lecture 3 hours. K. Karp

Course examines basic principles of pharmacokinetics and pharmacodynamics and applies them to administration of key pharmacologic agents in anesthesia nursing. Focus is on structural properties and physiological responses to intravenous induction agents, volatile inhalational anesthetics, and carrier gases.

236B. Nurse Anesthesia Pharmacology II. (3) § F. Prerequisite: Admission to the Nurse Anesthesia Specialty and N211A, N275A, N276, N211.09, N221.02, N275B, N239A, N241D, N407.02, N236A, N266, N407.03. Lecture 3 hours. K. Karp

Course examines pharmacology and therapeutics of major adjuncts employed in the anesthetic process. Emphasis on analysis of physiologic response patterns and perioperative clinical nursing management of the surgical patient.

236C. Nurse Anesthesia Pharmacology

III. (3) § W. Prerequisite: Admission to the Nurse Anesthesia Specialty and N211A, N275A, N276, N211.09, N221.02, N275B, N239A, N241D, N407.02, N266, N407.03, N261B, N239B, N407.04, N236A, N236B. Lecture 3 hours.

K. Karp

Course examines pharmacology and therapeutics of commonly used agents in the anesthesia process. Emphasis is on analysis of physiologic response patterns and perioperative clinical nursing management of the surgical patient.

237. Health Assessment through Life. (3-4) § F, Sp. Prerequisite: Department of Family Health Care Nursing students. Approval by F.O.R. Concurrent practicum required. Lecture 2-3 hours. Lab 3 hours. L. Ennis

Course presents theoretical principles of health assessment throughout the life cycle. Areas to be covered include methodologies of data gathering and data analysis essential to comprehensive health assessment of all groups. Laboratory experience provides application and integration of theory. FAM HLTH

238A. Infant & Child Development. (3) § F. Prerequisite: Consent of instructor. Lecture 3 hours. Staff

Course covers major theories and research findings dealing with social, emotional, and cognitive development of the child from

239B. Anesthesia for Specialty Practice. (2) § F. Prerequisite: Admission to the Nurse Anesthesia Specialty and N211A, N275A, N276, N211.09, N221.02, N275B, N239A, N241D, N407.02, N236A, N266, N407.03. Lecture 2 hours.

K. Karp

Analysis of the anatomy and physiology of pediatric and obstetric patients and common pathophysiologic conditions as the basis for clinical nurse anesthesia management. The use of various anesthetic techniques in these populations will be evaluated. PHYSIOL NURS

239C. Advanced Anesthesia. (3) § W. Pre-

requisite: Admission to the Nurse Anesthesia Specialty and N211A, N275A, N276, N211.09, N221.02, N275B, N239A, N241D, N407.02, N261, N266, N407.03, N261, N239B, N407.04: Lecture 3 hours. K. Karp

Analysis of the effects of aging, common acute and chronic illnesses, and major systemic pathology of body systems as the basis for advanced nurse anesthesia clinical practice. Content includes examination of strengths and limitations of inhalational, local, and regional anesthesia. PHYSIOL NURS

240A. Family Primary Care I. (5) § Sp. Prerequisite: Enrollment in Family Nurse Practitioner Program and N237. Lecture 5 hours.

S. Carroll

Theories, concepts and knowledge for comprehensive assessment and management of common health and illness conditions throughout the life cycle will be presented. Emphasis will be on primary care of the family unit. FAM HLTH

240B. Family Primary Care II. (4-5) § F. Prerequisite: N240A. Lecture 4-5 hours. B. Trinclisti

Course presents theories, concepts, and knowledge for comprehensive assessment and management of selected episodic, stable chronic illness, and related health conditions throughout the life cycle. Emphasis will be on primary care of the family unit. FAM HLTH

240C. Family Primary Care III. (4-5) § W. Prerequisites: N240AB. Lecture 4-5 hours.

B. McLain

Course presents theories, concepts, and knowledge for comprehensive assessment and management of special problems in family primary care. Emphasis will be on care of the family unit. FAM HLTH

241A. Role Development in Primary

Care. (2) § W. Prerequisite: Concurrent primary care clinical residency or consent of the instructor. J. Saxe

Course offers the student nurse practitioner the opportunity to discover strategies for promoting role development and advancing the nursing profession in the primary care area. MENT HITH COM ADM

241B. Role Development in Primary

Care. (2) § F. Prerequisite: Consent of instructor and concurrent enrollment in primary care clinical residency. Lecture 2 hours J. Saxe

Course offers the student nurse practitioner the opportunity to discover strategies for promoting role development and advancing the nursing profession in the primary health care arena. INTERDEPARTMENTAL

241C. Collaborative Role Development.

(1) & W. Prerequisite: Successful completion of N241B (Role Development in Primary Care) and concurrent primary care clinical residency. Lecture 2 hours every other week. S. Carroll, J. Saxe

Bi-weekly seminars deal with critical analyses of issues and research related to collaboration in primary care. Emphasis is on joint practice frameworks and practice management, marketing the nurse practitioner role, and legal/ professional issues. MENT HITH COM ADM

in nurse anesthesia practice. Historical devel-

authority, role in health care reform, relation-

ships with other health practitioners, ethical

issues, and key legal concepts specific to ad-

vanced anesthesia nursing practice is empha-

242A. Long-term Care of Older Adults.

(3) § Sp. Prerequisite: N257 (Biology of Ag-

ing) or consent of instructor. Seminar 3

Course focuses on nursing management

Emphasis is on the scientific basis for ad-

including the role of the interdisciplinary

strategies geared toward maximizing function

sized. PHYSIOL NURS

team. PHYSIOL NURS

opment of nurse anesthesia, prescriptive

K. Karp

hours.

G. Dowling

242B. Care of Acutely Ill Older Adults. (3) § F. Prerequisite: N257 (Biology of Aging)

or consent of instructor. Seminar 3 hours M. Wallhagen

Course addresses major phenomena common in the acutely ill older adult and focuses on the scientific basis for nursing management, the role of the multidisciplinary team in case management, and ethical issues that influence decision-making. PHYSIOL NURS

242C. Nursing in Managed-Care Sys-

tems. (3) § W. Prerequisite: Part of a 3course sequence, but may be taken alone or out-of-sequence, with permission of instructor. May also be taken as elective. Permission of instructor if not taken with N242A&B. Seminar 3 hours.

L. Reif

Course examines managed-care systems that deliver health and long-term services to the elderly. The course will explore the distinctive features of these new systems, and their impact on nursing roles and functions. PHYSIOL NURS

243.01. Family Therapies (3) § W. Lecture 3 hours. S. Weiss

Course offers a critical examination of theories guiding therapeutic work to enhance family mental health. Diverse theoretical perspectives for assessment and intervention with troubled families will be analyzed, including structural, strategic, and communication frameworks as well as psychoeducation. MENT HITH COM ADM

243.02. Trends in Group Psychother

Modalities. (2) § W, Sp. Prerequisite: Psychiatric/Mental Health students or consent of instructor. Seminar 2 hours. **B.** Furuta

Students will examine and discuss theories and practice of various group modalities in current use. MENT HLTH COM ADM

244A. Res Sem: Indiv, Fam, or Comm. (2-4) § W. Prerequisite: Completion of firstyear requirements for the Ph.D. program in nursing or consent of instructor. Lecture 2 hours, Independent study 0-6 hours. **D.** Weekes

Nursing 244ABC prepares students for original research through consideration of content methods and issues in an area of specialization. Nursing 244A focuses on evaluation of a content area and generation of research questions within it. MENT HLTH COM ADM

244B. Res Sem: Indiv, Fam, or Comm. (2-4) § Sp. Prerequisite: N244A or consent of instructor. Lecture 2 hours, Independent study 0-6 hours.

K. Lee Nursing 244ABC builds upon prior research content to prepare students to develop and defend a plan for original research. Nursing 244B focuses on identification of research questions and criticism of design/methods in the students' areas of interest. FAM HLTH

245. Prm Hlth Care I: Hlth Maint/

Prom. (2) § W. Prerequisite: N270 and concurrent enrollment in N405, N406, or N407. Lecture 2 hours. D. Taylor

Critical analyses of clinical strategies and nursing interventions in health promotion and maintenance using research findings and theoretical framework related to risk screening, disease prevention, and health promotion in primary health care across the lifespan. FAM HLTH

245.01 Seminar in Adult Primary Care. (1) § W. Seminar 1 hour. C. Kelber

Seminar is taken concurrently with N245 PHC I and provides the specialty content necessary for adult primary care nurse practitioners, Application from PHC I lectures will be made to the specialty area using case presentations and other relevant learning strategies. MENT HLTH COM ADM

246. PHCII: Symptom Assessment &

246.03. Seminar in Gerontological Primary Care. (1) § Sp. Seminar 1 hour. C. Deitrich

Seminar is taken concurrently with N246 and provides the specialty content necessary for gerontological primary care nurse practitioners. Application from N246 lectures will be made to the specialty area using case presentations and other relevant learning strategies. PHYSIOL NURS

246.04 Seminar in Pediatric Primary Care. (1) § Sp. Seminar 1 hour.

P. Jackson Seminar is taken concurrently with N246

and provides the specialty content necessary for pediatric primary care nurse practitioners. Application from N246 lectures will be made to the specialty area using case presentations and other relevant learning strategies. FAM HLTH

246.05. Seminar in Women's Primary Care. (1) § Sp. Seminar 1 hour.

D. Taylor, L. Lommel Seminar is taken concurrently with N246 and provides the specialty content necessary for women's primary care nurse practitioners. Application from N246 lectures will be made to the specialty area using case presentations and other relevant learning strategies. FAM HLTH

247. PHCIII: Complex Health Prob-

lems and Management. (3) § F. Prerequisite: N270, N245, N246, or consent of instructor. Lecture 3 hours. **B. Burgel**

Course introduces the more complex health problems encountered in primary care. Client's clinical presentation, underlying causes and appropriate treatment are discussed. Separate specialty track seminars permit elaboration of problems as they occur in the specialty.

247.01. Seminar in Adult Primary Care. (1) § F. Seminar 1 hour.

J. Saxe, B. Burgel, C. Kelber Seminar is taken concurrently with N247 and provides the specialty content necessary for adult primary care nurse practitioners. Application from N247 lectures will be made to the specialty area using case presentations and other relevant learning strategies. MENT HLTH COM ADM

247.02. Seminar in Family Primary

Care. (1) § F. Prerequisite: N270, N245, N246, N246.02, or consent of instructor. Seminar 1 hour. S. Shea

Seminar is taken concurrently with N247 and provides the specialty content necessary for family primary care nurse practitioners. Application from N247 lectures will be made to the specialty area using case presentations and other relevant learning strategies. FAM HLTH

247.03. Seminar in Gerontological Primary Care. (1) § F. Seminar 1 hour C. Deitrich

Seminar is taken concurrently with N247 and provides the specialty content necessary for gerontological primary care nurse practitioners. Application from N247 lectures will be made to the specialty area using case presentations and other relevant learning strategies. PHYSIOL NURS

247.05 Seminar in Women's Primary

Care. (1-2) § F. Prerequisite: N270, N245, N246, N246.05, or consent of instructor. Seminar 1-2 hour. J. Richards

Seminar is taken concurrently with N247 and provides the specialty content necessary for women's primary care nurse practitioners. Application from N247 lectures will be made to the specialty area using case presentations and other relevant learning strategies. FAM HLTH

248. Group Independent Study. (1-6) § F, W, Sp. Prerequisite: Consent of instructor. Lecture 1-6 hours. Staff

Students collaborate in clinical investigations

250.02 Clinical Research Rotation. (1-6) § Su, F, W, Sp. Prerequisite: Completion of first year of doctoral study and consent of adviser. Lab 3-18 hours. Staff

Nursing

The student will participate in ongoing faculty chinical research. This experience will contribute to the student's methodological or substantive expertise. INTERDEPART-MENTAL

251. Advances in Vascular Nursing. (3) 5 SS1, SS2, Su, F, W, Sp. Prerequisite: Con

of instructor. Learning modules 10 hours. C. Hubner

Course examines the theoretical basis prevention, intervention, simplation, and rehabilitation in perspheral vascular insufficiency utilizing relevant research. Composer simulations facilitate synthesis and application of content. PHYSIOL NURS

252. Issues in Scientific Inquiry. (2-4) § E Prerequisite: Consent of instructor. Restriction: Doctoral-level students who have completed the preliminary exam. Seminar 2-4 hours.

Staff

Course provides a forum for discussion of issues in the conduct of scientific investigations emphasizing those situations and problems associated with the content areas specific to the students' own interests. PHYSIOL NURS

253. Innovative Subsystems of Nursing Care. (3) § W. Restriction: Doctoral levelsuggested D.N.S. Seminar 3 hours. I. Martinson

Course provides instruction in the development of a nurse-directed subsystem of care, including the capability to develop a feasible, functioning system to plan design for collection and analysis of data needed for evaluation. FAM HLTH

254. Fetal-Newborn Development. (2) §

Course is a study of body system develop-

ment during embryonic, fetal, and postnatal

growth. Emphasis is on normal anatomical

and physiologic development, critical periods

of developmental alterations, and transitions

for extra-uterine adaptation. Implications for

nursing practice are explored. FAM HLTH

255.01. Pediatric Health Assessment. (2-

3) § Sp. Prerequisite: Consent of instructor.

Restriction: For students enrolled for 2U,

evidence must be provided of a concurrent

supervised physical assessment experience.

Course presents theoretical principles and

status of children, including health history

ratory or concurrent practicum required.

255.03A. Common Pediatric Illness

Course presents theories, concepts, and

of instructor. Lecture 2 hours.

assessment techniques for determining health

and physical examination. Focus is on collec-

tion and interpretation of clinical data. Labo-

Management. (2) § F. Prerequisite: Consent

knowledge for comprehensive assessment and

management of common pediatric illnesses.

Emphasizes the most common acute condi-

with pediatrician. Integrates history taking,

tions managed by a PNP in collaboration

physical findings, diagnosis, and manage-

255.03B. Common Pediatric Illness

Management. (3) § W. Lecture 3 hours.

Course presents theories, concepts, and

knowledge for comprehensive care of chil-

dren with common pediatric illness. It em-

phasizes common acute conditions managed

by a clinical nurse specialist in Pediatric Pri-

mary Care in collaboration with a physician.

Lecture 3 hours: Course may be repeated for

256. Transitions & Health. (3) § W, Sp.

Lecture 2 hours. Lab 3 hours.

P. Jackson, K. Duderstadt

FAM HLTH

P. Jackson

ment. FAM HLTH

K. Duderstadt

Sp. Lecture 2 hours.

M. Lynch

birth through school age. FAM HLTH

238B. Adolescent Development. (2) § W. Lecture 2 hours.

M. Savedra

Course explores relevant theory, literature, and research findings dealing with normal development during the adolescent period. FAM HLTH

239A. Basic Anesthesia Nursing. (5) § Sp. Prerequisite: Admission to the Nurse Anesthesia Specialty and N211A, N275A, N276, N211.09, N221.02, N275B. Lecture 5 hours. K. Karp

Course provides instruction in basic principles of anesthesia nursing. Emphasis is on physical assessment and patient evaluation through trending and analysis of human response patterns observed in various monitoring modalities, as a reflection of dynamic physiologic functioning. PHYSIOL NURS

Management. (3) § Sp. Prerequisite: N270 241D. Professional Aspects of Nurse and N245. Lecture 3 hours. Anesthesia. (5) § Sp. Prerequisite: Admis-Staff sion to the Nurse Anesthesia Specialty and Course introduces students to symptoms

N211A, N275A, N276, N211.09, N221.02, related to illness conditions commonly en-N275B, N239A. Seminar 5 hours countered in primary care. The client's clinical presentation, etiology and appropriate Seminar explores diverse professional issues management are discussed as they occur

across the life span.

246.01. Seminar in Adult Primary Care. (1) § Sp. Seminar 1 hour. Guyot, B. Burgel, C. Kelber, K. O'Mara, G. Collins-Bride

Seminar is taken concurrently with N246 and provides the specialty content necessary for adult primary care nurse practitioners. Application from N246 lectures will be made to the specialty area using case presentations and other relevant learning strategies. MENT HLTH COM ADM

246.02. Seminar in Family Primary Care. (1) § Sp. Seminar 1 hour.

and minimizing risk factors in older adults. S. Faust

Seminar is taken concurrently with N246 vanced nursing practice with this population and provides the specialty content necessary for family primary care nurse practitioners. Application from N246 lectures will be made to the specialty area using case presentations and other relevant learning strategies.

and other studies of special problems in nursing and health sciences under the direction of faculty. Students may select areas related to their long-term interests and future research or clinical program. INTERDEPARTMEN-

249. Independent Study. (1-5) § F,W, Sp. Prerequisite: Consent of instructor. Lecture 1-5 hours.

Staff

Student undertakes an individual study with emphasis on special problems in nursing. Students may select an area of study which is related to his/her area of interest or future goals. INTERDEPARTMENTAL

250. Research. (1-8) § F, W, Sp. Prerequisite: Admission to doctoral study and consent of instructor.

Staff

Course offers students an opportunity to engage in research with selected faculty. IN-TERDEPARTMENTAL

250.01. Research Rotation. (1-6) § Su, F, W, Sp. Prerequisite: Completion of first year of doctoral study and consent of adviser. Lab 3-18 hours.

Staff

The student will participate in ongoing faculty research. This experience will contribute to the student's methodological or substantive

A. Meleis

credit.

FAM HLTH

Critical and analytical review of theories and research that links health of the individual and families to relocations and transitions. Focuses on responses and coping with situational, developmental, health-illness, and sociocultural transitions. Nursing therapeutic theories will also be explored. MENT HLTH COMADM

257. Biology of Aging. (3) § W. Seminar 3 hours.

M. Wallhagen

Course focuses on the biology, pathophysiology and current theories of human aging. Clinical application of theory for nursing practice is provided. PHYSIOL NURS

258A. Family/Childbearing Theory. (3) § F. Seminar 2 hours. Field work 3 hours. J. DeJoseph

Course is an introduction to the theoretical foundation of knowledge about the childbearing family. A selection of nursing theories is used to assist the student to analyze the psychosocial and physiological factors impacting the family during the childbearing cycle. FAM HLTH

Nursing

258B. Family/Childbearing Phenomena. (3) § W. Seminar 2 hours. Project 3 hours.

K. Lee

Course studies perinatal phenomena identified in national reports for their theoretical, practice, and research implications. Phenomena include prevention of low birthweight infants, contemporary stressors for childbearing families, cognitive model to assess cultural diversity in perinatal health care, and related legislation. FAM HLTH

258C. Family/Childbearing Theory. (3) § Sp. Prerequisite: N 258A and N258B. Seminar 3 hours.

M. Gershwin

Clinical seminar addresses psychosocial and pathophysiologic issues of pregnancy, childbirth, parenting, and family/marital relationships during childbearing; focus on self-care practices for family; emphasis on midwife as facilitator of adaptation. FAM HLTH

259.01. Women's Reproductive Health. (1-5) § F. Lecture 1-5 hours.

L. Lommel

Course provides exploration of theories, concepts, and knowledge necessary to maintain and promote women's health. Emphasis is on application of current research: decision-making and management of pregnancy, the interconceptional period, and the climacteric, including collaboration with health team members. FAM HLTH

259.02. Special Problems in Women's

Health. (1-4) § W. Prerequisite: Consent of instructor. Lecture 1-4 hours. Seminar optional 1 hour.

D. Taylor, L. Lommel

Emphasis is on theory and management of bio-psychosocial deviations from normal in women before and during pregnancy, interconceptional period, and climacteric. Emphasis placed on critical analysis of research in metabolic, infectious, and functional disorders including collaborative management of women manifesting these disorders. FAM HLTH

259.03. Advanced Women's Health Seminar. (2) § Sp. Prerequisite: Consent of instructor. Lecture 2 hours. P. Bernal de Pheils

Course explores theoretical and management aspects of selected phenomena in women's health applicable to the nurse practitioner role. FAM HLTH

260A. Cultural Concepts in Hith Care. (3) § F, W, Sp. Seminar 3 hours. J. Lipson

Course introduces basic concepts and issues in medical anthropology and transcultural nursing. Provides opportunity to critically review research literature and discuss implications for nurses and other health care professionals. MENT HLTH COM ADM

260B. Intl & Cross-Cultural Theories. (3) § F,W, Sp. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours. A. Meleis

Course explores theoretical and conceptual aspects of international and cross-cultural nursing. Topic areas covered include culture and ethnicity; social policy and international development; health planning; ethics; and cross-cultural communication. MENT HLTH COM ADM

260C. Int/Cross-Cultural Nsg Issues. (3) § F, W, Sp. Prerequisite: Consent of instructor. Seminar 3 hours.

A. Davis

Seminar examines selected international nursing issues including primary care, nursing education and nursing service, women's roles, and patients' rights. MENT HLTH COMADM

261, Mental Health Nursing and the Law. (2) § W, Sp. Prerequisite: Enrollment in M.S. program in Psychiatric Nursing or consent of instructor. Lecture 2 hours.

G. Gresham

Course reviews history and development of mental health legislation and decisional law in the U.S. and California. Explores current 263. Bereavement. (2-3) § Sp. Lecture 2 hours. Lab 0-3 hours. I. Martinson

Course analyzes empirical research and theory dealing with bereavement. Underlying physiological and psychological mechanisms and responses related to death will be explored across the lifespan.

264. Foundations of Nursing Knowledge (3) § F. Prerequisite: Doctoral student or consent of instructor. Seminar 3 hours A. Meleis

Course analyzes historical trends in theoretical nursing in the U.S. and in selected other countries, and a critique of the dominant epistemological approaches that influenced the development and testing of theoretical knowledge in nursing. MENT HLTH COM ADM

265. Management of Clinical Occupa-

tional Health Problems. (3) § W. Prerequisite: Consent of instructor. Lecture 3 hours. Lab 1 hour.

B. Burgel

Multi-disciplinary course exploring the evaluation and clinical management of acute and chronic occupational and environmental health problems. Clinical diagnostic strategies and epidemiological methods are in evaluation of occupational health problems, including health hazards evaluations, surveillance, and disability evaluation. MENT HLTH COMADM

266. Nurse Anesthesia-Basic Sciences.

(5) § Su. Prerequisite: Admission to the Nurse Anesthesia Specialty and N211A N275A, N276, N211.09, N221.02, N275B, N239A, N241D, N407.02. Lecture 5 hours. K. Karp

Course examines human responses of the surgical patient to anesthesia. Emphasis is on chemistry, biochemistry, and physics as the theoretical foundation for physiologic responses and anesthesia nursing practice. PHYSIOL NURS

267. Ethical Dilemmas & Nursing Prac. (3) § F,W. Lecture 2 hours. Library research 3 hours.

A. Davis

Course explores selected ethical theories. ethical dilemmas in health care and nursing practice. Focus is on selected case studies depicting ethical dilemmas in nursing practice, nursing research, and health policy. MENT HITH COM ADM

268. Psychiatric Liaison Nursing. (2) § F,

W, Sp. Prerequisite: N211A and enrollment in the child or adult psychiatric nursing specialty tracks, Department of Mental Health, Community, and Administrative Nursing, or consent of instructor. Lecture 2 hours. L. Chafetz

Course reviews the emerging literature on psychiatric liaison nursing. Reports on roles of psychiatric nurses in medical settings will be critically analyzed, as well as clinical studies from the area of general hospital psychiatry. Comparative models of practice are discussed. MENT HLTH COM ADM

269. Historical & Contemporary Issues. (2-3) § F, W, Sp. Lecture 2 hours. Seminar optional 1 hour.

M. Styles

This course is designed to explore major issues and trends in contemporary nursing and health care delivery as they relate to nursing practice, education, and research. MENT HLTH COM ADM

270. Advanced Health Assessment. (2) § F,W. Lecture 2 hours.

C. Deitrich

Course introduces assessment concepts and skills to determine the health status of clients across the lifespan. Focuses on the collection and interpretation of clinical data derived from the history and physical exam. PHYSIOL NURS

271. Health Protection & Promotion. (2) § F. Lecture 2 hours. I. Saxe

Course emphasizes principles of individual health protection and promotion across the lifespan in advanced nursing practice. The examination of models of disease prevention and health promotion for individual wellness in the context of the family, community, and culture is emphasized. FAM HLTH

273B. Current Concepts in Occupational Health Nursing. (2) § F. Prerequisite: Consent of instructor. Lecture 2 hours. **B.** Nuchols

Course analyzes structure and organization of the occupational health systems, regulatory control mechanisms for worker protection, and labor's role in health and safety. Major issues and trends in occupational health are explored. MENT HITH COM ADM

274. Health and Safety Hazards/Workplace. (3) § Sp. Lecture 2 hours. Lab 3 hours. P. Quinlan

Course introduces principles of industrial hygiene and safety for identification of chemical, biologic, physical, ergonomic, and safety hazards of work. Students will identify environmental monitoring methods, select health surveillance and safety measures, and discuss methods of control exposures and injuries. MENT HLTH COM ADM

275A. Physiological Basis for Nursing. (1-3) § F. Lecture 1-3 hours. M. Engler

Course studies physiological theories applicable to nursing. Focus is on normal cell functions and nervous and endocrine systems functions which serve as a basis for nursing practice. PHYSIOL NURS

275B. Physiological Basis for Nursing. (1-3) § W. Lecture 1-3 hours. M. Engler

Course studies physiological theories applicable to nursing. Focus is on normal function of gastrointestinal, cardiovascular, renal and pulmonary systems which serve as a basis for nursing practice. PHYSIOL NURS

275C. Neonatal Pathophysiology. (2) § F. Lecture 2 hours. Lynch

Course is a study of the major disease processes encountered in the neonate and their relevance to nursing practice. The course will address etiology, manifestations and treatment during the acute phase of illness. FAM HLTH

276. Theoretical Perspectives for Nsg Practice. (3) § F. Lecture 3 hours. P. Benner

Comparative study of selected nursing conceptions and theories and their implications for nursing practice, curriculum development, and research. Critique of theories will address key questions relevant to nursing goals, intervention focus and outcomes, recipient of nursing, and social significance. PHYSIOL NURS

277. Assessment/Management of

Psychosocial Problems. (3) § Sp. Prerequisite: N270 or consent of instructor. Lecture 3 hours. J. Faucett

Course focuses on assessment and management of psychosocial problems and psychiatric conditions. Course is designed to assist students in determining patients for management and for referral and to develop beginning skills in managing selected patients. MENT HITH COM ADM

278. Nursing Science History & Philos.

(4) § W. Prerequisite: Doctoral-level standing or consent of instructor. Lecture 2 hours. Seminar 2 hours.

S. Gortner

Course is an analysis of history and philosophy of nursing science in the United States and abroad, addressing origins of scientific questions and activity, contemporary philosophic viewpoints, and debates currently ongoing regarding design, conduct, and outcomes of nursing research. FAM HLTH

279A. Family Nursing Theory. (3) § F. Lecture 2 hours. Seminar 2 hours every other week.

C. Chesla

Course provides an introduction to family theories about systems, development, and stress. Lectures identify relation of stressors with family health or illness and examine ways to apply family theories to nursing practice. Seminars focus on interviewing techniques to assess family health. FAM HLTH

281A. Res Sem: Hith & Its Correlates. (2) § W. Prerequisite: Enrollment in Ph.D. program in nursing or consent of instructor. Seminar 2 hours.

S. Weiss

Seminar critically examines theory and research focused on personal and environmental factors as they influence health and illness. Concepts of person, environment, and health will be analyzed and discussed as they pertain to the development of nursing science through research. FAM HLTH

281B. Res. Sem: Hith & Its Correlates.

(3-4) § Sp. Prerequisite: N281A and enrollment in Ph.D. program in Nursing, or consent of instructor. Lab 3 hours. Seminar 3 hours.

I. Martinson

Course critically examines faculty research investigating nursing science from the perspective of person, environment, and health. PHYSIOL NURS

282. Geriatric Pharmacology (3) § W. Lecture 3 hours.

S. Echaves, C. Deitrich

Course explores clinical management of pharmacology and integration of drug therapy into the therapeutic plan and nursing care of older adults. The course focuses on drugs commonly used in multiple settings for the treatment of chronic disease and minor acute illnesses. PHYSIOL NURS

283A. Pediatric Normal/Abnormal Function. (1-3) § F. Lecture 1-3 hours. M. Lynch

Course studies physiologic function of the cellular, neurological, and respiratory systems as modified by developmental needs, system immaturity, and pathophysiological processes in the pediatric population. Implications for pediatric nursing practice will be addressed in relation to normal/abnormal system function. FAM HLTH

283B. Pediatric Normal/Abnormal Function. (1-3) §W. Lecture 1-3 hours. M. Lynch

Course studies physiologic function of the cardiovascular, hematological, and immunological systems as modified by developmental needs, system immaturity, and pathophysiological processes in the pediatric population. Implications for pediatric nursing practice will be addressed in relation to normal/abnormal system function. FAM HLTH

283C. Pediatric Normal/Abnormal Function. (1-3) § Sp. Lecture 1-3 hours. M. Lynch

Course studies physiologic function of the gastrointestinal, renal and endocrine systems as modified by developmental needs, system immaturity, and pathophysiological processes in the pediatric population. Implications for pediatric nursing practice will be addressed in relation to normal/abnormal system function. FAM HLTH

284. Adolescent Health Care. (2) § Sp. Prerequisite: Consent of instructor. Seminar 2 hours.

M. Savedra, J. Broering

Examination and analysis of theory and research related to health care of adolescents and their families in a variety of settings. Emphasis will be on adaptation to selected stresses including trauma, chronicity, hospitalization, terminal illness and disability. FAM HLTH

285A. Qualitative Methods I. (5) § F.

Prerequisite: Second-year doctoral student. Seminar 3 hours. Field work 6 hours. J. Kayser-Jones, J. DeJoseph

Course reviews many of the types of qualitative research methods, emphasizing assumptions, approaches. Focus on design, entree, ethics, data-gathering techniques (interviewing, observing) data recording and management. Introduction to data analysis.

285B. Qualitative Methods II. (5) § W.

Prerequisite: N285A and second-year doctoral student. Seminar 3 hours. Field work 6 hours.

J. Kayser-Jones, J. DeJoseph

287A. Organizational Theory & Research. (3) § F. Prerequisite: Consent of

A critical review and analysis of major organ-

izational theories and research. Emphasis is

on open-system theories to examine charac-

287B. Behavior in Organizations. (3) §

W. Prerequisite: N287A and consent of in-

Course examines the characteristics, causes,

ences of individuals as they function in orga-

nizations. Emphasis is on personnel manage-

287C. Processes in Administration. (3) §

Sp. Prerequisite: N287A and 287B or consent

Course provides a synthesis and application

of management theories and administrative

processes. Emphasis on leading, planning,

organizing, controlling, decision making,

managing change, and evaluating. MENT

287D. Financial Management for Nurse

Administrators. (4) § Sp. Lecture 3 hours.

Course offers introduction to financial ac-

counting principles as they relate to financial

management in health care settings. Emphasis

is on the manager's role and responsibilities in

budgeting, monitoring, controlling, and in

costing nursing care. Laboratory permits skill

development. MENT HLTH COM ADM

288A. Executive Nursing Administra-

Seminar offered to doctoral students, analyz-

executive nursing roles in academic and serv-

ice settings. Course examines administrative

concepts pertaining to governance, use of

power, corporate designs, and executive

scholarship. MENT HLTH COM ADM

Management Research) or equivalent,

288B. Cost Methodology in Nursing. (3)

§ F, Sp. Prerequisites: N211.08B (Critique of

N287D (Financial Management for Nurse

Administrators) or equivalent, and doctoral

Course is a critical analysis and synthesis of

to the cost of nursing care. Cost methodol-

ogy is used to determine cost of service, cost

averages, marginal costs, cost-effectiveness,

288C. Academic Administration Semi-

nar. (3) § F,W, Sp. Prerequisite: Consent of

Seminar designed for doctoral students in

nursing administration interested in the field

ates theories, models, principles, and prac-

academic settings. MENT HLTH COM

tices relative to administrative roles in diverse

289A. Advanced Quantitative Research

Methods I. (3) § F. Prerequisite: N209 and

N212 or equivalent, B187 and doctoral stu-

dent only. Lecture 2 hours. Lab 3 hours.

Course addresses theoretical basis of ad-

vanced quantitative methods. Fundamental

issues of causality, and design issues pertinent

to causality, are addressed using randomized

clinical trials as models for experimental

data collection and measurement are ex-

N289B. Advanced Quantitative Re-

designs. Methods of sampling and issues in

E. Froelicher, R. Newcomer

of administration. Course analyzes and evalu-

and cost-benefit. MENT HLTH COM

accounting and economic principles relating

study or consent of instructors. Lecture 2

hours. Field work 3 hours.

instructor. Seminar 3 hours.

V. Cleland

ADM

Staff

ADM

ing theories and research relative to

tion. (3) § F,W. Prerequisite: Consent of

instructor. Seminar 3 hours.

ment and other managerial functions.

MENT HITH COM ADM

of instructor. Lecture 3 hours.

and consequences of behavior and experi-

structor. Lecture 3 hours.

H. DeGroot

S. Neidlinger

HLTH COM ADM

Lab 3 hours.

Staff

H. DeGroot

teristics of health service organization and the role of management. MENT HLTH COM

instructor. Lecture 3 hours. M. Flood

ADM

mental health laws as they relate to and influence the practice of psychiatric nursing in the public and private sectors. MENT HLTH COMADM

262A. Women's Health Roles/Issues I.

(1) § F,W. Prerequisite: Enrollment in Women's Health Nurse Practitioner Program or consent of instructor. Seminar 2 hours (every other week).

J. DeJoseph, J. Flanagan, D. Taylor, L. Ennis, L. Lommel

Seminar focuses on critical analysis of issues influencing role transition, role enactment, scope and control of practice, and professional growth of the women's health care provider. FAM HLTH

262B. Women's Health Roles/Issues II. (1) § W, Sp. Prerequisite: N262A. Seminar 1 hour.

J. Deloseph

Seminar focuses on critical analysis of issues influencing restraints and enhancements of contemporary practice for women's health care providers. Impact of current legal, legislative, technological, and health care delivery trends are examined. FAM HLTH

272. Children with Special Health

Needs. (2) § W. Prerequisite: N283ABC or consent of instructor. Lecture 2 hours.

D. Weekes

Course explores the unique health care demands of vulnerable children with need for prolonged health support. The impact of the care giving environment, community, and care providers will be addressed in relation to the well-being of the child and family. FAM HLTH

273A. Current Concepts in Occupational Health. (3) § F. Prerequisite: Consent of instructor. Lecture 2 hours. Seminar 1

hour.

B. Nuchols

Course analyzes structure and organization of the occupational health system, regulatory control mechanisms for worker protection, and labor's role in health and safety. Major issues and trends in occupational health are explored. MENT HLTH COM ADM

279B. Family Nursing Interventions. (3) §W. Prerequisite: N279A or consent of instructor. Lecture 2 hours. Seminar 1 hour. C. Chesla

Course integrates family theoretical and therapeutic concepts to focus on nursing assessment and intervention strategies for family problems in health and illness. FAM HLTH

279C. Cultural Issues in Family Health.

(2) § Sp. Prerequisite: N 279B and consent of instructor. Lecture 1 hour. Seminar 1 hour. Staff

Course involves analysis of family, cultural, and behavioral theories and issues leading to clinical intervention in family primary care. FAM HITH

280. Intl Primary Health Care. (2) § W. Seminar 2 hours.

J. Lipson

Seminar is a discussion of assigned readings on the political economy and practical implementation of community-oriented primary health care programs in the international realm, including discussion of the nurse's role in such programs. MENT HLTH COMADM

Course compares and contrasts modes of qualitative analysis. Examines issues in establishing plausibility, credibility, adequacy, Intensive data analysis and examination of the problems of presentation of findings with focus on questions of authority and preparation of text.

286A. Research in Stress & Coping. (3-4) § W. Prerequisite: Consent of instructor or

doctoral-level theory development. Lecture 3 hours. Contract for 1 unit for proposal development (optional).

P. Benner

Course critically analyzes the relationship of stress and coping to health and illness. Examines theoretical and empirical links between coping strategies and therapeutic interventions. Emphasis is on research programs. PHYSIOL NURS

286.02B. Stress & Coping in Cancer. (3-

4) § W. Prerequisite: Consent of instructor. Lecture 3 hours. Contract for 1 unit for research proposal (optional). P. Benner

Course examines the current nursing, behavioral, medicine, and epidemiological research relating stress and coping to the etiology and course of cancer. Theoretical and empirical links between coping resources, strategies, and helping interventions are also included. PHYSIOL NURS

search Methods II. (3) W. Prerequisite: N289A and doctoral student only. Lecture 2 hours. Lab 3 hours.

S. Janson-Bierklie, D. Taylor

plored. PHYSIOL NURS

Course covers continuing analysis of quantitative research methods including selected survey, longitudinal study designs. Focus compares and contrasts research designs, proposes strategies for maximizing strengths of various designs. Explores fit of research questions, methods, and statistical approaches. Examples of methods include questions answered by time series analysis, life table and survival analysis. PHYSIOL NURS

290.01. Family Health Nursing Theory.

(3-4) § W. Prerequisite: Enrollment in doctoral program. Lab 0-3 hours. Seminar 3 hours.

C. Gilliss

Comparative analysis of classical theories and methodologies for deriving a theory base for family health nursing. Emphasis is on interactional, role, structural-functional, and systems theories. FAM HLTH

290.02. Family Health Theory. (3-4) § Sp. Prerequisite: N290.01. Seminar 3 hours. Independent Study 0-3 hours. C. Gilliss

Course is a comparative analysis of theories/ approaches for deriving a theory base for family health nursing. Emphasis is on devel-

Course reviews clinical problems encountered in acute psychiatric services in community settings. In addition to direct care issues, students have the opportunity to discuss the socio-cultural, legal, ethical, and economic factors which influence provision of services. MENT HITH COM ADM

292A. Physiology of Pregnancy. (2) § F, W. Prerequisite: Consent of instructor. Lecture 2 hours

K. Lee, L. Ennis

Course reviews and analyzes advanced physiology and pathophysiology of pregnancy and their impact on the maternal-fetal unit as a basis for nursing practice and research. Emphasis is on reproductive and endocrine systems affecting adaptation and development during pregnancy. FAM HLTH

292B. Physiology of Pregnancy. (2) §W, Sp. Prerequisite: Consent of instructor, Lecture 2 hours.

S. Leibel, N. Green, L. Ennis

Course reviews and analyzes advanced physiology and pathophysiology of pregnancy as a basis for practice and research. Emphasis is on cardiovascular, hematologic, neuroendocrine, and renal systems affecting adaptation and development during pregnancy. FAM HLTH

292C. Biopsychosocial Alterations-Pregnancy. (2-3) § W. Prerequisite: N292A. Lecture 2 hours. Seminar 1 hour (optional). P. Bernal de Pheils

Course analyzes the biopsychosocial alterations of women during the childbearing year. Clinical conditioning and related therapies will be examined in relation to policy issues and risk assessment.

293. Complex Pediatric Health Prob-

lems. (4) § F. Prerequisite: N270, N245, N245.04, N246, N246.04, or consent of instructor. Lecture 4 hours.

K. Duderstadt

Course introduces the more complex health problems encountered in pediatric primary care. Clinical presentation, underlying causes and appropriate family centered treatment are discussed

294. Concepts of Nurse-Midwifery

Care. (3) § F. Prerequisite: Enrollment in Nurse-Midwifery Specialty. Lecture 3 hours. L. Ennis

Course focuses on theory supporting midwifery management of the low- to high-risk fetus and newborn. Content traces human development from conception through adaptation to neonatal life. Course articulates with clinical lab which covers newborn health assessment and management skills. FAM HLTH

296. Teaching-Learning Processes. (4) § Sp. Prerequisite: Consent of instructor. Lecture 2 hours. Seminar 2 hours.

Flood

Course analyzes principles, theories and research in the field of teaching with emphasis on teaching strategies and evaluation methods applicable to clinical and educational settings. A microteaching format is incorporated for application and evaluation of selected teaching interactions. PHYSIOL NURS

297. Human Responses to Pain. (2) § F. Lecture 2 hours

M. Savedra, C. Miaskowski Course explores research related to physiological, psychological, and social responses to human pain; nursing implications for pain assessment; and management of acute and chronic painful conditions across the life span. FAM HLTH

298. Thesis or Comprehensive Exam. (0) § F, W, Sp. Prerequisite: Advancement to candidacy and permission of the graduate adviser.

Staff

For graduate students engaged in writing the thesis for the master's degree or taking a comprehensive examination required for the

403. Consultation Residency. (4-12) § F, W, Sp. Prerequisite: Consent of instructor. Lab 12-36 hours Staff

Opportunity to apply and evaluate theories, concepts, and skills in the work setting under the supervision of a preceptor. MENT HLTH COM ADM

404. Clinical Residency. (4-12) § F,W, Sp. Prerequisite: Consent of instructor. Lab 12-36 hours.

Staff

Student has opportunity to apply and evaluate theories, concepts, and skills in the work setting under the supervision of a preceptor. **INTERDEPARTMENTAL**

404.01. Adult Primary Care Nursing-Clinical Preceptorship. (4-12) § F,W, Sp. Prerequisite: Consent of instructor. Lab 12-36 hours. Staff

Course provides an opportunity to apply and evaluate theories, concepts, and skills in the work setting under the supervision of a preceptor. MENT HLTH COM ADM

404.02. Advanced Practice Residency. (2-12) § Su, F, W, Sp. Prerequisite: Consent

of instructor. Patient contact 36 hours. Staff Course provides student with the opportunity to apply and evaluate theories, concepts and skills under the supervision of a preceptor

in one or more clinical practice settings. 404.03. Nurse Anesthesia Residency. (12) § Sp. Prerequisite: Admission to the Nurse Anesthesia Specialty, and N211A,

N275A, N276, N211.09, N221.02, N275B, N239A, N241D, N407.03, N261, N266, N407.02, N261B, N239B, N407.04, N407, N261C, N239C. Patient contact 36 hours. K. Karp

Application and evaluation of theories, concepts, and skills in advanced nurse practice under supervision of a preceptor. Residency will include administration, management, and evaluation of nurse anesthesia for complex and difficult cases.

404.06. Pediatric Nursing Residency (4-12) § Su, F, W, Sp. Prerequisite: Consent of instructor. Lab 12-36 hours.

P. Jackson

Course offers opportunity to apply and evaluate theories, concepts, and skills in the work setting under supervision of a preceptor. Focus is on development of the pediatric clinical specialist role in ambulatory and chronic illness care

405. Practicum in Mental Hlth & Com Nurs. (1-8) § F, W, Sp. Prerequisite: Consent of instructor. Lab 3-24 hours.

Staff Opportunity to apply theory in clinical practice to further develop skills and to extend clinical expertise in selected aspects of mental health and community nursing. Guided clinical laboratory experience is designed to develop mastery of advanced skills. MENT HITH COM ADM

406. Practicum in Family Hlth Care Nurs. (1-8) § F,W, Sp. Prerequisite: Consent of instructor. Lab 3-24 hours. Staff

Course provides student opportunity to apply theory in clinical practice to further develop skills and to extend clinical expertise in selected aspects of family health care nursing. Guided clinical laboratory experience is designed to develop mastery of advanced skills. FAM HLTH

407. Practicum in Physiological Nursing. (1-8) § F.W. Sp. Prerequisite: Consent of Instructor, Lab 3-24 hours.

Staff

Lab 6 hours.

Williams

hours.

K. Karp

sia, PHYSIOL NURS

Opportunity to apply theory in clinical practice to further develop skills and to extend clinical expertise in selected aspects of physiological nursing. Guided chinical laboratory experience is designed to develop mastery of advanced skills. PHYSIOL NURS

407.01 Clin Mgmnt of Older Adults. (2) § F. Prerequisites: N242B (Care of Acutely 12 Older Adults) (concurrently), N257 (Biology of Aging), or permission of instructor.

Course provides opportunity for skill devel-

acutely ill older adults. It emphasizes problem

identification as a basis for planning scientifi-

cally based care from a multidisciplinary per-

407.02. Nurse Anesthesia Practium. (3) §

spective and within the context of the life

Sp. Prerequisites: Admission to the Nurse

Anesthesia Specialty and N211A, N275A,

N241D, N261A, N266. Patient contact 9

Application of theory to develop essential

skills fundamental to nurse anesthesia prac-

tice. Focus is on integration of foundational

theories and concepts in anesthesia nursing

with clinical management of the patient un-

dergoing local, regional, and general anesthe-

N276, N211.09, N221.02, N275B, N239A,

continuum, PHYSIOL NURS

opment in comprehensive assessment of

407.03 Basic Anesthesia Management Practicum. (3-5) § Su, F, W. Prerequisites: Admission to the Nurse Anesthesia Specialty and N211A, N275A, N276, N211.09, N221.02, N275B, N239A, N241D, N407.02. Patient contact 9-15 hours. K. Karp

Application of theory in clinical practice to develop skills and extended clinical expertise in all phases of nurse anesthesia practice. Guided clinical experience is designed to develop mastery of advanced skills PHYSIOL NURS

407.04. Prac. Pulmonary Function in Nurse Anesthesia. (2) § F. Prerequisites: Admission to the Nurse Anesthesia Specialty and N211A, N275A, N276, N211.09, N221.02, N275B, N239A, N241D, N407.

02, N261A, N266, N407.03. Lab 6 hours. K. Karp Application of theory in clinical nurse anes-

thesia practice to further develop skills and to extend clinical expertise in evaluation of pulmonary function. Guided clinical experience is designed to develop mastery of advanced skills. PHYSIOL NURS

408. Clinical Residency. (4-12) § Su, F,W, Sp. Prerequisites: Consent of instructor. Lab 12-36 hours. Staff

Course provides the student an opportunity to apply and evaluate theories, concepts, and skills in the work setting under the supervision of a preceptor.

410. Teaching Practicum. (1-8) § F,W, Sp. Prerequisite: Consent of instructor. Lab 3-24 hours.

Staff

Supervised practice in selected components of the teaching role in nursing.

411A. Introduction to Computers. (2) § F, W, Sp. Lecture 2 hours. R. Slaughter

Course presents overview of the impact of computer technology upon nursing. Focus is upon hardware and software for nursing in the mainframe to micro environment. Word processing for scientific writing using IBM

PC is an integral part of the class. PHYSIOL NURS

411B. Fiscal Modeling. (2) § W. Prerequisite: N411A. Priority of space available to Administration students. Lecture 2 hours. **R. Slaughter**

Course emphasis is on the use of the computer as a tool for the nurse manager in financial planning. PHYSIOL NURS

411C. Computers in Administration. (2) § W. Prerequisite: N411AB. Lecture 2 hours. R. Slaughter

Course provides an introduction to administrative information systems and their impact upon patient care. Emphasis will be on data base management systems in a nursing administration environment. PHYSIOL NURS

411D. Introduction to Computers. (2) § F,W, Sp. Lecture 1 hour. Lab 3 hours J. Grout

Course provides an introduction to microcomputers, focusing on word processing, DOS basics and hard disk management, hardware and software applications, and purchasing a system. PHYSIOL NURS

411E. Data Management. (2) § SS1, F,W, Sp. Prerequisite: None. Biostatistics 187 or 185AB are recommended. Lecture 1 hour. Lab 3 hours S. Paul

Course offers a hands-on experience with computers and programs that can be used for data management and statistical analysis. The benefits of considering options for data collection, entry, analysis, and preparing research strategy before data are collected is emphasized. PHYSIOL NURS

Nutrition

200. Maternal & Infant Nutrition. (2-4) § Sp Prerequisite: Consent of instructor. Lecowner 2-4 hours.

249. Independent Study in Nutrition. (1-4) § F, W, Sp. Prerequisite: Completion of or concurrent enrollment in Nu200, or Nu202, or Nu208. Lecture 1-4 hours. Y. Gutierrez

Course is designed to focus on the exploration of selected nutritional issues in clinical nursing practice. Guided study will include analyses of scientific and popular nutrition literature, and identification and delineation of therapeutic approaches. FAM HLTH

Obstetrics, Gynecology and Reproductive Sciences

110. Ob/Gyn Core Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 132A-B-C.

R. Glass, Braga

Basic principles and fundamental techniques in obstetrics and gynecology are discussed in a series of seminars, case discussions, and teaching clinics. Students gain practical experience in clinics, wards, delivery room, and operating room under direct supervision. OB GYNRS

140.02. Advanced Clinical Clerkships.

(1.5 per week) Su, F, W, Sp. Prerequisite: Satisfactory com-pletion of Obstetrics and Gynecology 110, Pediatrics Core Clerkship and 110, and either Medicine 110 or Surgery 110 Core Clerkships. Robertson

Advanced clinical clerkship, obstetrics and/or gynecology at other accredited hospital, as individually arranged, and approved by department OB GYN R S

140.05. Advanced Ob/Gyn Clerkship-

VMC. (1.5 per week) Su, F, W, Sp. Prerequisite: Satisfactory completion of Obstetrics and Gynecology 110, Pediatrics 110, and Medicine 110 or Surgery 110. Open only to 4th-year medical students of schools in U.S.A. and Canada.

Reyes, Cooke, Sueldo

Practical clinical training in obstetrics and gynecology at Valley Medical Center of Fresno. Time is divided between labor and delivery experience, gynecology ward, and obstetrics and gynecology outpatient clinic. Students will have the opportunity to see normal, high risk, and adolescent pregnancies. OB GYN R S

140.06. Advanced Ob/Gyn Clerkship-SFGH. (1.5 per week) Su, F, W, Sp. Prerequisite: Obstetrics and Gynecology 110, Pediatrics 110, and either Medicine 110 or Surgery 110, or consent of instructor Grimes

The clerk will function as an acting intern on the gynecology inpatient service. Some gynecologic outpatient and emergency room experience will be possible as well as inpatient and surgical gynecology. OB GYN R S

140.08. Ob/Gyn Preceptorship. (1.5 per week) Su, F, W, Sp. Prerequisite: Obstetrics and Gynecology 110 and consent of instructor and chairperson of the department. Robertson

Clinical experience in a subspecialty area or general obstetrics and gynecology under the direction of a member of the faculty. OB GYNRS

140.09. High-Risk Pregnancy-Ad-

vanced Senior Elective. (1.5 per week) SS1, SS2, Su, F, W, Sp. Prerequisite: Obstetrics and Gynecology 110 **Kilpatrick and Staff**

Advanced clerkship focusing on outpatient special obstetrical care clinics and inpatient management of high-risk antepartum patients. Duties will include presentations at conferences, journal clubs, and at least one review of a pertinent topic. OB GYN R S

140.10. Advanced Obstetrics-SFGH. (1.5 per week) SS1, SS2, Su, F, W, Sp. Prerequisite: Obstetrics and Gynecology 110 at UCSF or equivalent course at recognized medical school. Satisfactory completion of equivalent basic clerkships in pediatrics and her medicine or sur

160.01. First- and Second-Year Ob/Gyn Preceptorship. (1) Su, F, W, Sp. Field work

Optimizer

3 hours. Brown

An opportunity for first- and second-year students to spend time in clinical faculty offices and be exposed to the field of general Ob/Gyn. OB GYN R S

198. Supervised Study. (1-5) Su, F, W, Sp. Prerequisite: Consent of instructor.

Robertson Library research and directed reading under

Staff

GYNRS

Skinner

OBGYNRS

Jaffe and Staff

Gates, Braga, H. Jones

and discussions. OB GYN R S

GYNR S

F, W, Sp.

Su, F, W, Sp.

held. OB GYN R S

ducted. OB GYN R S

Ophthalmology

vised examination of patients.

diagnosis and care of eye diseases.

or consent of instructor.

call the entire time.

OPHTHALMOL

M. Drake

(10) Su, F, W, Sp.

Gates

Conference 2 hours.

supervision of a member of the faculty with the approval of the chairperson of the department. OB GYN R S 199. Laboratory Project. (1-5) Su, F, W, Sp. Prerequisite: Consent of instructor.

A laboratory research project under direction

of a member of the faculty with the approval

210. Molecular and Cellular Biology of

Reproduction. (4) § W, Sp. Lecture 2 hours.

The molecular, cellular, and physiological

Biology will be reviewed. Emphasis will be to

from a physiological level to a molecular level

aspects of selected areas of Reproductive

convey an appreciation of taking a system

of understanding. Application of this infor-

molecular medicine aspects of each topic.

400. Staff Conferences. (1) Su, F, W, Sp.

Conferences comprised of formal discussions

401. Surgical Pathology Seminar. (1) Su,

by staff, faculty, and visiting lecturers. OB

Seminar includes the presentation of

pathologic material from the obstetric and

gynecologic services with formal instruction

402. Residents Core Lecture Series. (1)

Seminars include presentations of special

topics, literature reviews, and discussions.

Discussions of resident staff functions also are

450. Clinical Obstetrics & Gynecology.

UC Laros, SFGH R. Sweet, C. Webb

Residents are responsible for the care of pa-

tients in the hospital and outpatient clinic.

Formal and individual instruction is con-

First-Year Coordinated Instruction-

Medicine 131A-B-C. Lecture-demonstra-

tions and section work devoted to the super-

Core Clerkship-Surgery 110 and 111 in-

clude lectures and clinical experience in the

140.01A. Advanced Ophthalmology

Clkshp-UC. (1.5 per week) Su, F,W, Sp.

Prerequisite: Medicine 110 and Surgery 110

Students will serve as subinterns on the oph-

present patients, and attend surgery and post-

operative clinics. This is an intensive clerkship

where students will be on twenty-four hour

140.01B. Advanced Ophthalmology

Clkshp-UC. (1.5 per week) Su, F, W, Sp.

Students will observe, work up and present

ophthalmology outpatients at the Eye Clinic.

Prerequisite: Consent of instructor.

thalmology wards. They will work up and

Prerequisite: Practicing physicians only.

mation will be illustrated by investigating the

of the chairperson of the department. OB

master's degree.

299. Dissertation. (0) § F, W, Sp. Prerequisite: Advancement to candidacy and permission of the graduate adviser. Staff

For graduate students engaged in writing the dissertation for the Doctor of Nursing Science (D.N.S.) or Doctor of Philosophy in Nursing degree.

401. Teaching Residency. (4-12) § F,W, Sp. Prerequisite: Consent of instructor. Lab 12-36 hours.

Staff

Opportunity to apply and evaluate theories, concepts, and skills in the work setting under the supervision of a preceptor.

402. Administration Residency. (2-12) § SS1, SS2, F, W, Sp. Prerequisite: Completion of N287ABC and N287D, each with a grade of B or higher, and consent of instructor. Lab 6-36 hours.

Staff

Opportunity to apply and evaluate theories, concepts, and skills in the work setting under the supervision of a preceptor. MENT HLTH COM ADM

Gatherrez

Applement of current maternal nutrition research to train students in working with other beach proviewionals to offer interdisciphones management actrition counseling in the prevenues of how burth weight. Emphasis will be on come without factors in assessment and coaraching FAM HITH

202. Family Numinian Counseling. (3) § Sp. Prerequisiter Consense of inservacior. Lecture 3 hours.

Y. Gutierrez

Theory and practice in the interpretation of current concepts, principles, and research in nutrition for family courseling. Emphasis on cultural dietary patterns. FAM HLTH

208. Childhood Nutrition. (2-3) § Sp. Lecture 2 hours, Module 1 hour

Y. Gutierrez

Course provides study of nutritional principles, concepts, and knowledge related to infants and children, both healthy and ill. Emphasis is on growth processes, feeding practices, disease-induced nutritional deficiencies, common problems, and intervention approaches. Cross-cultural aspects included. FAM HLTH

Beckerman and Staff

Advanced obstetrics clerkship at San Francisco General Hospital. The clerk will participate as a senior student member of the OB team. Attendance at High Risk OB Clinic. Presentations at conferences and journal club will be expected. This rotation will not provide additional experience with routine deliveries. OB GYN R S

150.01. Research in Ob/Gyn & Repro

Sci. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor and chairperson of the department

Staff

A nonclinical research project under the direction of a member of the faculty. OB GYNRS

150.02. Clinical Research in Obstetrics.

(1.5 per week) Su. Prerequisite: Obstetrics and Gynecology 110 and consent of instructor, the dean, and the department. Pediatrics 110 and either Medicine 110 or Surgery 110. Restriction: One student per block. Four weeks.

Kilpatrick

Students participate in a clinical research project under the direction of faculty. Background reading is required prior to the elective. OB GYN R S

They will attend department rounds and conferences. OPHTHALMOL

140.02. Off-Campus Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor.

Good

Good

Clinical clerkship in approved hospitals by special arrangement and approval by the dean and the chairperson of the department. OPHTHALMOL

140.03A. Advanced Clinical Clerkship-

SFGH. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 or consent of instructor. One student per block.

Seiff, Good

Students serve as subinterns on the Ophthalmology Service. They work up and present cases in the outpatient clinic and on the wards; and have the opportunity to participate in the operating room. On-call and weekend responsibilities should be expected. OPHTHALMOL

140.06. Adv Ophthalmology Clerkship-

VA. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor.

Zarbin

Clinical observation of patients in clinics, wards and surgery. OPHTHALMOL

Ophthalmology

150.02. Ophthalmology Research. (1.5 per week) Su, F,W, Sp. Prerequisite: Consent of instructor and chairperson of the department.

S. Kramer

A research project under the direction of a member of the faculty carried out in the Department of Ophthalmology. OPHTHALMOL

198. Supervised Study. (1-5) F,W, Sp.

S. Kramer

Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. OPHTHALMOL

199. Laboratory Project. (1-5) F, W, Sp.

S. Kramer A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. OPHTHALMOL

400. Staff Conference. (1) F,W, Sp. **S. Kramer**

Residents prepare and present diagnostic and therapeutic problem cases. Discussion by faculty and visitors follows. Residents also present papers on various aspects of medicine and ophthalmology, which are discussed by faculty members. OPHTHALMOL

401. Staff Conference. (1) F,W, Sp. Prerequisite: First- and third-year residents. **S. Kramer**

Conferences include grand rounds and case presentations of hospital patients, review of recent literature in ophthalmology, and assigned reading with required reports. OPHTHALMOL

402. Special Topics Seminar. (6) F,W, Sp. **S. Kramer**

Seminars include didactic lectures in practical work covering pathology, neuro-ophthalmology, uveitis, physiological optics, refraction, ocular motility, glaucoma, and microbiology. OPHTHALMOL

403. Basic Ophthalmologic Science. (6) Su. Required for first-year residents. S. Kramer

Didactic lectures and demonstrations cover the basic sciences as applied to ophthalmology. These include anatomy, histology, biochemistry, physiology, and pharmacology. OPHTHALMOL

450. Clinical Ophthalmology. (1.5 per week) Su, F, W, Sp.

M. Drake

Residents, under supervision, are responsible for patients in the Eye Clinic. First-year residents assist in eye surgery and the Eye Bank program. Specialty clinics include external diseases, extraocular muscles, medical ophthalmology, ophthalmoscopy, refraction, cataract, glaucoma, neuro-ophthalmology, plastic surgery, and tumor. OPHTHALMOL

454. Clinical Ophthalmology. (1.5 per week) Su, F, W, Sp.

UC Beard, CHMC E. Stern

Residents, under supervision, are responsible for patient care including diagnostic studies and treatment of medical eye care, diagnosis, surgery, and follow-up treatment of surgical eye cases. Residents consult for other hospital services. OPHTHALMOL

455. Fourth-Year Residency. (1.5 per week) Su, F,W, Sp.

S. Kramer

Fourth-year residency taken at UC or at any approved institution subject to the approval of the chairperson of the department and the dean. OPHTHALMOL

457. Clinical Ophthalmology. (1.5 per week) Su, F, W, Sp.

PH A. Schwartz, STM R.N. Shaffer, Schatz, CHS, SRM Rathbun, DMC T. Moore

Residents or fellows, under supervision, are responsible for patient care, including diagnostic studies and treatment of medical eye care, diagnosis, surgery, and follow-up treatment of surgical eye cases. OPHTHALMOL

108.03. Cariology & Preventive Dentistry (3) W. Prerequisite: Oral Biology

108.01 & 108.02. Lecture 2 hours, seminar 1 hour.

Principles in the prevention and treatment of caries. Topics covered include composition and function of dentifrices, dietary factors in the pathogenesis of caries, the role of fluorides in caries prevention, and overall treatment planning for high caries risk patients. STOMATOL

111. First Year Special Study. (2) F. Prerequisite: Passing placement examination and consent of instructor. Lecture 2 hours. **Newbrun**

Discussion of biological problems of interest in dentistry including saliva, mineral metabolism, hydroxylapatite crystal structure, connective tissue, bacterial cell walls, oral bacterial metabolism, and blood coagulation. STOMATOL

116. Intro to Oral Biology. (2) F. Lecture 1 hour, lab 2 hours.

Ryder Introduction (

Introduction to oral biology correlating morphology, chemistry, function of dental and paradental tissues. Topics include enamel, dentin, cementum, pulp, dental caries, tooth eruption, periodontium, oral mucous membranes. STOMATOL

150. Introduction to Oral Biology. (1) F. Prerequisite: Dental Hygiene standing. Lecture 1 hour.

Ryder Introduction to oral biology correlating morphology, chemistry, function of dental and paradental tissues. Topics include enamel, dentin, cementum, pulp, dental caries, tooth eruption, periodontium, oral mucous membranes. STOMATOL

198. Supervised Study. (1-5) Su, F,W, Sp. Library research: 3-15 hours. **Staff**

Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the division. STOMATOL

199. Laboratory Project. (1-5) F,W, Sp. Prerequisite: Consent of instructor. Lab 3-15 hours

Staff

A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the division. STOMATOL

209. Connective Tissue Seminar. (2) § Sp. Seminar 2 hours.

Bhatnagar A course in connective tissue biology, concerned mainly with the development, differentiation, and pathology of connective tissues, including topics such as regulatory controls of connective tissue macromolecules, fibrosis, wound healing, inflammation, tissue destruction, and selected genetic disorders. STOMATOL

210. Topics in Virology. (1) § Sp. Prerequisite: General knowledge of microbiology, immunology, molecular biology, or consent of instructor. Seminar 1 hour. Offered in alternate years. Contact Oral Biology office for next offering.

Pereira Small group tutorial in which special topics in virology and correlated reading will be selected for discussion by students and staff members. STOMATOL

211. Saliva and Salivary Glands. (2) § F Prerequisite: Consent of graduate advisor and instructor. Seminar 2 hours. Offered in alternate years; contact Oral Biology office for next offering.

Newbrun

Recent information on the composition, regulation, and function of the secretions from the major and minor salivary glands. Special consideration will be given to salivary gland dysfunction and its consequences. STOMATOL

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223. Cell Physiology. (2) § Su. Lecture 1.5 hours, Conference 0.5 hours. Offered in alternate years. Contact Oral Biology office for next offering.

Rothman, Sargent, A. Miller, Gruenert Survey of selected topics in cellular physiology, including a discussion of cell permeability, electrical properties of cells, muscle contraction, secretion, and stimulus-response coupling. STOMATOL

224. Host Response. (2) § W. Prerequisite: Consent of graduate adviser and instructor. Seminar 2 hours. Offered in alternate years. Contact Oral Biology office for next offering. Pereira

Components of the immune system, survey of the various immunologic mechanisms in host responses, and current working concepts of the immune system. Overview of consequences that failure, exaggeration, or inability to distinguish self from non-self, may have for the host. STOMATOL

225. Oral Microbiology and Virology. (2) § F,W, Sp. Prerequisite: Oral Biology 224 or consent of graduate advisor and instructor. Lecture 2 hours. Offered in alternate years. Contact Oral Biology office for next offering.

Armitage, Pereira, and Staff

Current information on pathogenic mechanisms involved in oral infections, with emphasis on the structure, metabolism, genetics and ecological relationships of bacteria and viruses that affect oral tissues. STOMATOL

226. Advanced Oral Microbiology. (3) § F,W, Sp. Prerequisite: Oral Biology 224 & 225 or consent of graduate advisor and instructor. Lecture 3 hours. Offered in alternate years. Contact Oral Biology office for next offering.

Armitage, Newbrun, Bramanti, Johnson, Richards

Continuation of studies in oral microbiology begun in Oral Biology 225. In-depth study of the structure, metabolism, genetics, and ecological relationships of bacteria, yeasts, and fungi that affect oral tissues. STOMATOL

250. Research. (1-8) § F,W, Sp. **Staff**

STOMATOL

270. Journal Club. (1.5) § F,W, Sp. Seminar 1.5 hours. **Staff**

Students review a small group of related papers and examine intensively the most significant paper. Students will present four such Journal Club talks in their first two years. A written report will be required in the other quarters. STOMATOL

297. Special Study. (1-3) § F,W, Sp. • Staff

Reading and conferences under the direction of a member of the staff. STOMATOL

298. Thesis. (0) § F, W, Sp. Prerequisite: Advancement to candidacy and permission of the graduate adviser. **Staff**

For graduate students engaged in writing the thesis for the master's degree. STOMATOL

300A-B-C-D. Teaching Practicum. (1-4, 1-4, 1-4, 1-4) § F.W. Sp. SS1. Prerequisite: Consent of instructor.

Staff Practice in teaching in a course in oral biology under the supervision of the instructor in charge. STOMATOL

406A-B-C. Selected Topics. (1-1-1) F.W., Sp. Seminar 1 hour. **Staff**

A wide spectrum of selected topics related to oral biology is presented with emphasis on basic and applied research methodology, pertinence of problems, significance of findings, and critical evaluation of data. STOMATOL

Oral Diagnosis

139. Intro Clinical Oral Diag Sciences. (0-4) Su, F, W, Sp. Prerequisite: Successful completion of Orad 129, Rest Dent **189.** Acute Dental Care Clerkship. (1-10) F, W, Sp. Danford

Advanced instruction and clinical experience in the diagnosis and treatment of acute dental problems. STOMATOL

Oral & Maxillofacial Surgery

109. Clinical Oral Surgery. (0-5) SS, F,W, Sp. Prerequisite: Third-year standing. For senior rotation, student must have passed Oral & Max. Surgery 120, 130.01, 130.02, 130.03, 131, and 132 or have consent from the course supervisor. Clinic variable. **R. Smith, Gordon, Pogrel** Students learn to recognize and treat common dental and medical emergencies; perform routine exodontia and minor oral surgical procedures; assist on major procedures in operating room setting; utilize common techniques of pain and anxiety control; assist with admission, work-up and discharge of

hospital patients. ORAL & MAX SURG 120. Local Anesthesia. (0.5) Sp. Lecture 1 hour.

R. Smith, Gordon, Perrott Course covers local anesthetics and techniques as they pertain to the dentition and

niques as they pertain to the dentition and oral cavity. ORAL & MAX SURG 130.01. Dentoalveolar Surgery. (1) SS.

Prerequisite: Anatomy 117.01, 117.02, and Microbiology 116. Lecture 1 hour. Library research 1 hour.

Gordon, R. Smith, Perrott

An introduction to the basic principles of exodontia, dentoalveolar surgery, postoperative care, hemorrhage control, and management of common complications. ORAL & MAX SURG

130.02. Pain & Anxiety Control. (1) F. Prerequisite: Anatomy 117.01, 117.02, and Microbiology 116. Lecture 1 hour. Gordon, R. Smith, Perrott A didactic course outlining the basic principles and techniques of pain and anxiety control in the dental office. Emphasis is on nitrous oxide and oxygen and intravenous sedation, ORAL & MAX SURG

130.03. Diagnosis & Treatment of Oro-

facial Pain. (1) W. Prerequisite: Anatomy 117.01, 117.02, and Microbiology 116. Lecture 1 hour.

R. Smith, Gordon, Kaban

A didactic course covering current advances in the field of pain and a variety of topics such as physical evaluation of the pained patient, temporomandibular joint dysfunction, myofacial pain, and neuralgic pain. ORAL & MAX SURG

131. Reconstructive Oral & Maxillofacial Surgery & Implantology. (1) Sp. Pre-

requisite: Oral & Max. Surgery 130.01, 130.02 and 130.03 or consent of instructor. Lecture 1 hour.

R. Smith, Kaban, N. Gordon Procedural skills and academic knowledge the general dentist should be familiar with: includes preprosthetic surgery and implantology, treatment of developmental and acquired deformities of the jaws, infections, temporomandibular joint, fractures of the jaws and contiguous structures, osteomyelitis. ORAL & MAX SURG

132. Medical Emergencies & CPR. (1) F. Prerequisite: Third-year dental standing. **R. Smith**

This course covers the prevention and management of medical emergencies in the dental office. There is discussion on the management of the medically compromised patient. CPR training is also provided. ORAL & MAX SURG

152. Oral & Maxillofacial Surgery. (0.5) E Restriction: This course is offered for firstyear dental hygiene students. Lecture 1 hour. **R. Smith, Walsh**

This course offers the same lectures about prevention and management of common medical emergencies as are given to third-

200. Clinical Correlations. (2) § SS1, SS2.
Enrollment in master's or Ph.D. program in
Oral Biology. Seminar 20 hours per quarter.
Offered in alternate years. Not offered
1994-95.
Pogrel

Course focuses on critical analysis of theo-

retical, basic, and clinical concepts underlying

the assessment and management of problems

involving orofacial diseases, deformities, and

findings to clinical practice is stressed. ORAL

410. Advanced Techniques in Pain Con-

trol. (1) F. Prerequisite: Two-week anesthesia

The trainees will attend seminars in the phar-

macology and physiology of commonly used

419. General Dentistry in the Operating

pain control medications. OR AL & MAX

Room. (1) Su, F,W, Sp. Patient contact 4

The trainees will provide general dental ser-

quiring general anesthesia. ORAL & MAX

Maxillofacial Surgery. (1) Sp. Prerequisite:

vices in the operating room for patients re-

470. Risk Management in Oral and

Enrollment in the Oral and Maxillofacial

postgraduate training program. Lecture 2

Course reviews malpractice insurance, risk

cedures that are at high risk for litigation.

management, and oral and maxillofacial pro-

471. Applied Surgical Anatomy. (0-1.5) F,

W, Sp. Prerequisite: Course offered to first-

year residents in Oral & Maxillofacial Sur-

gery, other OMFS residents by arrangement,

UCSF School of Dentistry postdoctoral resi-

dents and students by arrangement, selected

senior dental students by arrangement as an

Relationships of gross anatomical structures

of the head and neck are studied during labo-

ratory dissections. Emphasis is placed on the

correlations of cadaver dissection findings to

473. Orthognathic Surgery Seminar. (1)

F,W, Sp. Prerequisite: Enrollment in oral &

max. surgery residency or general-practice

Residents will participate in evaluation and

defining treatment options for patients with

474. Oral & Max Surgery Seminar. (1) F,

W, Sp. Prerequisite: Limited to interns and

Perrott, Pogrel, R. Smith, N. Gordon,

Seminar includes presentation of case studies,

literature review, clinical pathology presenta-

tions, and occasional guest lectures. ORAL &

475. Adv Clin Oral & Max Surgery. (1.5

per week) Su, F, W, Sp. Prerequisite: Limited

Interns and residents, under supervision, are

laboratory work, preoperative patient prepa-

ration, attendance at surgery, postoperative

care, and attendance at follow-up clinics. In

addition, senior residents have administrative,

teaching and clinical responsibilities. ORAL

476. Clinical Methods. (4) Su. Prerequi-

site: Enrollment in a postgraduate specialty

program or consent of instructor. Lecture 2

hours. Patient contact 2 hours.

responsible for preparation of case records,

to oral & max. surgery residents. Hospital and

facial and dental deformities. OR AL &

diagnosis and on operating room surgery.

procedures. ORAL & MAX SURG

residency program. Seminar 1 hour.

Kaban, Pogrel, Perrott

residents. Seminar 1 hour.

Dodson, Kaban

MAX SURG

clinic 40 hours.

Kaban & Staff

& MAX SURG

Pogrel & Staff

MAX SURG

Dissections will be approached as surgical

dysfunctions. The application of research

& MAX SURG

Koppe

SURG

Koppe

SURG

hours.

Pogrel & Staff

ORAL & MAX SURG

elective. Lab 2 hours

Pogrel, Perrott, Koury

rotations. Seminar 1 hour.

490. Clinical Ophthalmology. (1,5 per week) Su, F, W, Sp.

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n(th Residents, under supervision of the attending staff, are responsible for patient care on wards and in the follow-up clinic, including diagnostic studies and consultation. This rotation is combined with patient-care. OPHTHALMOL

Oral Biology

108.01. Intro to Caries & Perio. (1) Sp. Prerequisite: Biochemistry 110A-B, Microbiology 116. Lecture 1 hour. Rvder

Introduction to the etiology, pathogenesis,

and diagnosis of dental caries and periodontal disease. STOMATOL

108.02. Micro/Immuno of Caries & Perio. (2) F. Prerequisite: Oral Biology 108.01. Lecture 2 hours.

Johnson

An in-depth study of the microbiology and immunology of periodontal diseases and dental caries. The formation and pathogenic potential of dental plaques are discussed. STOMATOL **215. Laboratory Rotation.** (4) § F,W, Sp Prerequisite: Consent of instructor. Lab 12 hours.

Staff

A laboratory rotation course to familiarize first-year graduate students with various approaches to research in Oral Biology. STOMATOL

220. Current Topics. (1) § F, W, Sp. Seminar 1 hour.

Staff A seminar series covering current advances in research in oral biology in a systematic manner. Current literature will be critically reviewed by students under faculty supervision, or by faculty or guest lectures. STOMATOL

221. Extracellular Matrices. (2) § F Prerequisite: Consent of graduate advisor and instructor. Seminar 2 hours. Offered in alternate years. Contact Oral Biology office for next offering.

Damsky

Assembly and composition of extracellular matrices, including interactions that occur between cells and matrices. Emphasis on the role of various extracellular matrices during development, function of cell-matrix interactions in the adult, and the perturbation of these relationships that accompanies various disease processes. STOMATOL completion of Orad 129, Rest Dent 116B&C, 126A-B-C, and Oral Med 122. Clinic 3 hours.

Brody, Herbert

Dental clinical problem solving: recognition and resolution. Clinical activities include review of medical and dental histories; examination of oral and para-oral structures; radiographic prescription, technique and interpretation; referral for appropriate medical or dental treatment; diagnosis and treatment of acute dental problems; management of the dental patient in pain, or desiring comprehensive dental treatment. STOMATOL

149. Adv Clinical Problem Solving. (0-2)

Su, F, W, Sp. Prerequisite: Successful completion of Orad 129, Omed 122, Rest Dent 116B&C, 126A-B-C. Clinic 6 hours **Brody, Herbert**

Recognition and resolution of dental clinical problems. Emphasis is on management of the patient in pain during clinic hours and oncall after hours. Students will examine oral and para-oral structures; review case histories for clinical implications for dental therapy; prescribe, make and interpret dental radiographs; treat or refer to appropriate sources. Senior students will take the place of teaching assistants for their junior partners. Seniors will present cases. STOMATOL year dental students (OMFS 132). However, the prerequisites do not apply, and the academic standards are adjusted to the student's background. OMFS 152 does not include the CPR experience. ORAL & MAX SURG

189.04. Adv Clin Oral Surgery &

Implantology. (0-16.5) F,W, Sp. Prerequisite: Fourth-year standing and approval of department chairperson.

R. Smith, Gordon

Clerkships at UC, affiliated or other institutions. Students participate in oral surgery care of ambulatory and hospitalized patients and attend seminars and conferences. ORAL & MAX SURG

198. Supervised Study. (1-5) F,W, Sp. Library research 3–15 hours. **Perrott & Staff**

Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. ORAL & MAX SURG

199. Laboratory Project. (1-5) F,W, Sp. Prerequisite: Approval of laboratory project by department chairperson. Lab 3-15 hours. **Kaban & Staff**

A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. ORAL & MAX SURG A history, physical, and diagnosis course for patients admitted to a hospital or surgicenter. Module 1 will consist of a didactic course, and module 2 will be a lab session where students master the techniques of clinical examination on each other . ORAL & MAX SURG

477. Clinical Methods II. (1-2) E Prerequisite: Completion of OMFS 476 and approval of course director. Restricted to students enrolled in a postgraduate specialty program. Lecture 2 hours, patient contact 4 hours, for 4-6 weeks.

Pogrel, Perrott

Physical examination of hospitalized patients demonstrating a wide range of physical signs and symptoms. ORAL & MAX SURG

478. Oral & Maxillofacial Surg Practice

Mgmt. (1) F Prerequisite: Enrollment in a postgraduate specialty program or consent of instructor. Lecture 2 hours.

Pogrel, Staff

Provides OMFS residents a broad spectrum of practice management information such as association memberships, disability insurance, loans, OSHA requirements, computers, and billing. ORAL & MAX SURG

Under direct faculty supervision, the trainee will provide dental consultation to hospitalized patients, treat medically compromised patients in the operating room, provide routine and complex oral surgery services utilizing conscious sedation and other pain control techniques. ORAL & MAX SURG

489.01. Clinical Oral Surgery. (1) FW, Sp. Prerequisite: Enrollment in general practice residency or advanced education program in general dentistry. Clinic 3 hours. **R. Smith**

Course is designed to teach dentoalveolar surgery, inhalation and intravenous sedation to residents in the oral surgery clinic. The trainee takes responsibility for care of the oral surgery patient including preoperative evaluation, surgery planning, and postoperative care. ORAL & MAX SURG

489.10. Advanced General Dental Care in the Hospital. (11) Su, F, W, Sp. Restriction: AEGD students enrolled in the second-

year program. Pogrel, Grimaldi, and Staff

This course will provide supervision of the trainee in the evaluation and care of the dental patient on the consultation, surgical, and outpatient services of the hospital. ORAL & MAX SURG

Oral Medicine

122. Clinical Oral Medicine. (4) Sp. Prerequisite: Oral Pathology 127A and 127B. Lecture 4 hours.

D. Greenspan

Introduction to recognition, diagnosis and treatment of oral manifestations of systemic diseases, and principles of clinical medicine through presentation of the mechanism, diagnosis and treatment of common organ system diseases. Will present modifications necessary for the dental treatment of patients with these diseases. STOMATOL

130. Clinical Oral Medicine. (2) Su. Prerequisite: Oral Medicine 122; second-year standing. Lecture 2 hours. Silverman

History taking, differential diagnosis, and therapeutics. Signs, symptoms, diagnosis, and treatment of oral mucosal diseases with em-

phasis on oncology. Management problems and solutions. STOMATOL
139. Clinical Oral Medicine. (0-1) Su, F,
W, Sp. Prerequisite: Oral Biology 126, Oral
Pathology 127A-B, Oral Medicine 122.

Seminar 2 hours. Clinic 2 hours. Chinn, Zier and Staff

Group rotation through a five-week section: clinical diagnosis-patient presentation entailing history-taking, examination, diagnosis, treatment, and follow-up; and medicineintroduction to internal medicine and physical diagnosis. STOMATOL

180A-B-C. Clinical Oral Medicine Conference. (1-1-1) F,W, Sp. Prerequisite: Fourth-year standing. Conference 1 hour. Lozada-Nur, Silverman and Staff Clinical pathology conference; biology, diagnosis, and treatment of various oral lesions and associated patient problems. Some oral conditions are critically re-evaluated in the light of current research advances. Specific medical knowledge is related to patient care. STOMATOL

189. Clinical Oral Medicine. (1-6) Su, F, W, Sp. Prerequisite: Third- or fourth-year standing and consent of instructor. Clinic 3-18 hours. **Staff**

Participation in the Oral Medicine Clinic: apply knowledge of history-taking and differential diagnosis; utilize various diagnostic techniques such as biopsy, cytology, and certain clinical pathology laboratory tests; interpret results, prescribe treatment and followup; hospital rounds and weekly seminar.

STOMATOL

489.10. Advanced Oral Medicine. (0-6.5) Su, F, W, Sp. Restriction: AEGD students enrolled in the second-year program. D. Greenspan

This course will provide clinical supervision of trainees in the diagnosis and management of patients with a variety of signs and symptoms related to oral disease. STOMATOL

Oral Pathology

127A-B. Introduction to Oral Pathology. (0-5.5) F.W. Prerequisite: Oral Biology 126. Lecture 4.5 hours. Lab 3 hours. J. Regezi

Course correlates clinical oral pathology with histologic changes. Emphasis is placed on the microscopic and laboratory interpretation of cellular, tissue, and chemical alterations. Laboratory sessions concentrate on clinical presentation of oral diseases. STOMATOL

198 Supervised Study. (1-5) Su, F, W, Sp. Library research 3-15 hours. **Daniels, Regezi, J. Greenspan**

Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the division. STOMATOL

199. Laboratory Project. (1-5) Su, F,W, Sp. Prerequisite: Consent of instructor. Lab 3-15 hours

Daniels, Regezi A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the division. STOMATOL

208A-B. Oral Pathology Seminar. (3-3) § F.W. Seminar 3 hours.

Daniels

Lectures and seminars on diseases of the jaws, oral mucosa and salivary glands. Disease entities are studied through review of current literature and presentation of their clinical and histopathological features, with emphasis on pathogenesis, diagnosis and management. STOMATOL

408A-B. Oral Pathology Seminar. (3-3) F.W. Seminar 3 hours. Daniels

Lectures and seminars on diseases of the jaws, oral mucosa and salivary glands. Disease entities are studied through review of current literature and presentation of their clinical and histopathological features, with emphasis on pathogenesis, diagnosis and management. STOMATOL

Oral Radiology

110.01. Oral Radiographic Imaging. (2) E Lecture 2 hours. Otis, Angin, Danford

This course presents radiobiologic theory and physical properties of ionizing radiation. The application of radiographic methods in dental practice, radiation safety, and normal radiographic anatomy are described. STOMATOL

110.02. Advanced Oral Radiographic Imaging. (2) W. Lecture 2 hours.

Otis, Angin, Danford Advanced oral and maxillofacial imaging techniques and interpretation emphasizing deviations from the normal are presented in this course. STOMATOL

131. Radiographic Interpretation. (1) Sp. Prerequisite: Oral Radiology 121. Lecture 1 hour.

Otis

Course is a continuation of Qral Radiology 121 and is intended to broaden the scope of radiographic interpretation. Additional aspects concerning radiation biology are also included. STOMATOL

186.01. Advanced Oral Radiology. (0-3) F, W, Sp. Prerequisite: Oral Radiology 121. Approval of Clinic Review Committee. Seminar 1-2 hours. Clinic 0-6 hours. **Staff**

Continuation of Oral Radiology 121 and 131

131.02. Orthodontics in General Practice. (2) F. Prerequisite: Orthodontics 121. Lecture 2 hours.

R. Boyd, Nielsen, G. Young

Recognition and treatment of orthodontic problems most commonly seen by the general practitioner. GR DEVEL

139. Clinical Orthodontics. (0-1) Su, F,W, Sp. Prerequisite: Orthodontics 121, 131.01 and 131.02. Orthodontics 131.01 or 131.02 may be taken concurrently. Clinic 3 hours. **R. Boyd, G. Young**

Evaluation and treatment of clinical orthodontic problems as experienced in general dental practice. Students will treat problems and refer others to specialists. GR DEVEL

160. Orthodontic Concepts. (1) Sp. Lecture 1 hour.

R. Lee

A discussion of recognition, etiology, and principles of orthodontics for the dental hygienist. GR DEVEL

170A-B-D-E. Orthodontic Diagnosis.

(1-1-1-1) SS1, SS2, F, W. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lecture 1 hour. **R. Boyd**

Classification, etiology, and diagnosis of malocclusion. The various diagnostic modalities used in patient evaluation and treatment planning will be presented. GR DEVEL

170.01A-B-C. Journal Club. (1-1-1) F,W, Sp. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Seminar 1 hour. **Nielsen**

A participation course in the review, analysis, and critical evaluation of the professional literature dealing with orthodontics and its related fields. GR. DEVEL

171. Orthodontics in Periodontic Prac. (1) W. Prerequisite: Consent of instructor and enrollment in a postdoctoral specialty program. Lecture 1 hour.

E. West Course includes

Course includes orthodontic principles and technics that are applicable in a periodontic practice. GR DEVEL

171.01D. Concepts of Occlusion. (1) SS1. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lecture 1 hour. I. Nielsen

Various concepts of occlusion and its biological determinants will be discussed as they affect functional problems of the temporomandibular joint. GR DEVEL

171.02A-B-C. Practice Management. (2-2-2) F,W, Sp. Prerequisite: Enrollment in

postdoctoral orthodontics or pediatric dentistry program or consent of instructor. Lecture 2 hours. D. Johnson

A survey course intended to prepare the student to deal with the realities of managing an orthodontic practice. Thirty-six topics are explored and discussed by students and faculty. Several visitors representing different areas are invited to present guest seminars. GR DEVEL

171.03. Functional Appliance Therapy. (2) SS1, SS2. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lecture 2 hours. Scholz

This course is designed to provide the skills necessary to select the appropriate functional appliance, design the appliance, instruct the laboratory in the making of the appliance, and manage the patient's treatment to a successful conclusion. GR DEVEL

171.05A-B-C-D-E. Growth & Development. (1-1-1-1) F.W. Sp. SS1, SS2. Lecture 1 hour. Nielsen

Orthodontic applications and implications of basic craniofacial growth and development. GR DEVEL

172.02. Independent Research. (0-3) SS1, SS2. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor.

Litt, Baumrind

Independent research experience. GR DEVEL

172.03A-B-C. Evaluation of Facial Form II. (2-2-2) F, W, Sp. Prerequisite: Enrollment in postdoctoral orthodontics or pediatric dentistry program or consent of instructor. Lecture 2 hours. **Nielsen**

en teacher d

Course teaches diagnosis, treatment planning, and treatment of all types of malocclusions on a systematic basis. The biologic basis for orthodontic treatment with respect to facial growth and development and the application of differential diagnosis is presented. GR DEVEL

173A-B-C. Orthognathic Surgery Conference. (1-1-1) F.W. Sp. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lecture 1 hour.

R. Boyd

Postdoctoral students in orthodontics, prosthodontics, and oral and maxillofacial surgery will participate in evaluating and planning treatment for patients with facial and occlusal deformities requiring combined multidisciplinary therapy. Periodic review and presentation of previously treated patients will be included. GR DEVEL

173.01A-B-C-D-E. Orthodontic Seminar. (3-5,3-5,3-5,3-5,3-5) F.W. Sp, SS1, SS2. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry programs or consent of instructor. Seminar 3-5 hours **R. Boyd**

Evaluation and treatment planning of various types of malocclusion will be presented. The seminars will include discussions of various basic science, clinical science, and general biological principles, as they apply to the field of orthodontics. GR DEVEL

173.02. Private Practice Seminar. (0-3) F, W, Sp. Prerequisite: First-year postdoctoral Orthodontic program. Seminar 1 hour. **Righellis**

This seminar is designed to integrate the second-year residents' postdoctoral orthodontic education with the private practice of orthodontics. GR DEVEL

174. Biomechanics & Tooth Movement. (2) W, SS1, SS2. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lecture 2 hours.

R. Boyd

Fundamental concepts of force systems will be presented. Included are equilibrium, force equivalency, and free-body analysis. Concepts will be related to orthodontic tooth movement, appliance design, and biological response to force application. GR DEVEL

174.01. Periodontics & Orthodontics.

(1) Su. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lecture 1-2 hours.

R. Boyd

Current literature in periodontics and orthodontics is reviewed and discussed. Case presentations involving treatment between the two specialists are discussed and evaluated by students and faculty. Emphasis is placed on the advances in preventive procedures and their impact on orthodontic practice. GR DEVEL

174.02. Orthodontic Techniques. (1) SS1, SS2. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lecture 1 hour. **Nielsen**

A lecture and participation course designed to familiarize the postdoctoral student with orthodontic appliances, their fabrication, and adjustment. GR DEVEL

175A-B-C. TMJ Pain & Dysfunction Seminar. (0-3) F.W. Sp. Prerequisite: Resi179.01A-B-C-D-E. Clinical Orthodontics I. (0-7) SS1, SS2, FW, Sp. Prerequisite: Enrollment in postdoctoral orthodontics or pediatric dentistry program or consent of instructor. Lab variable. Clinic 0-21 hours. R. Boyd

Diagnosis, treatment, and evaluation of clinical postdoctoral orthodontic problems as experienced in modern orthodontic practice. Students will treat patients with a broad spectrum of orthodontic problems. Students will work with other specialists in the management of complex orthodontic problems. GR DEVEL

179.03A-B-C-D-E. Clinical Orthodontics II. (0-7) SS1, SS2, F,W, Sp. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lab variable. Clinic 0-21 hours. Boyd

Diagnosis, treatment, and evaluation of clinical postdoctoral orthodontic problems as experienced in modern orthodontic practice. Students will treat patients with a broad spectrum of orthodontic problems. Students will work with other specialists in the management of complex orthodontic problems. GR DEVEL

179.05A-B-C-D-E. Ortho General Interaction. (1-1-1-1) F, W, Sp, SS1, SS2. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Clinic 3 hours. R. Boyd

Evaluation and treatment of clinical orthodontic problems, as experienced in general dental practice. Postdoctoral students will assist and supervise general dental students in the diagnosis, evaluation, and treatment of orthodontic problems. Emphasis is on the relationship between generalist and specialist. GR. DEVEL

189. Adv Orthodontics in Gen Practice. (1-2) Su, F, W, Sp. Prerequisite: Fourth-year standing. Clinic 3-6 hours. R. Boyd

Fourth-year dental students will work closely

with second-year orthodontic residents in the

clinical management of patients requiring

ered by the orthodontic specialist. GR.

DEVEL

Iezman

F. Lecture 1 hour.

comprehensive orthodontic treatment delive

410. Orthodontics for the Generalist. (1)

Lectures will emphasize diagnosis and treat-

ment planning for patients requiring minor

tions and section work devoted to the super-

Core Clerkship-Surgery 110 and 111 in-

clude seven to eight orthopaedic lectures,

methods of examination of patients with

gery Clinical Clerkship-UC-SFGH-

Specialties 110. Must be a senior.

SFGH ER-VA-PMC-SSF. (1.5 per week)

Su, F, W, Sp. Prerequisite: Surgery 110 and

D. Bradford, G. Paiement, R. Maurer

in examination and treatment of patients.

Students receive instruction and experience

Assistance in surgery and in use of treatment

140.02. Off-Campus Clerkship. (1.5 per

week) Su, F, W, Sp. Prerequisite: Surgery 110

modalities is required. Clinical demonstra-

tions, seminars, and conferences form the

basis for didactic instruction. ORTHO

diagnosis and principles of treatment.

case presentations, and outpatient climic

signments. Students are given instruction in

musculoskeletal disorders, with emphasis on

140.01A-B-C-D-E-F. Orthopaedic Sur-

tooth movement. GR DEVEL

Medicine 131A-B-C. Lecru

vised examination of patients.

Orthopaedic Surgery

First-Year Coordinated Instruction

198. Supervised Study. (1-5) Su, F, W, Sp. Staff

Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the division. STOMATOL

199. Laboratory Project. (1-5) F,W, Sp. **Staff**

A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. STOMATOL

206. Oral Medicine Seminar. (1-4) F,W, Sp. Seminar 1-4 hours. **Staff**

A wide spectrum of selected topics related to oral biology is presented with emphasis on basic and applied research methodology, pertinence of problems, significance of findings, and critical evaluation of data. STOMATOL

489. Advanced Oral Medicine. (0-6.5) Su, F, W, Sp.

Greenspan, Silverman, Lozada-Nur Under direct supervision of faculty, the trainees will take histories, examine, diagnose, and treat patients with a variety of oral signs and symptoms. STOMATOL

in a seminar teaching format. STOMATOL

198 Supervised Study. (1-5) Su, F,W, Sp. Library research 3-15 hours.

Otis, Taylor, Angin

Library research and directed reading under supervision of a member of the faculty with the approval of the director of the program. STOMATOL

199. Laboratory Project. (1-5) F,W, Sp. Otis

A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. STOMATOL

Orthodontics

121. Development of Occlusion. (1) Sp. Lecture 1 hour.

Vargervik

Course describes the mode of growth of the craniofacial complex. General aspects of growth with clinical implications for the growing child are discussed, including the eruption of teeth and their correlation with facial growth. GR DEVEL

131.01. Orthodontics in General Practice. (2) Su. Prerequisite: Orthodontics 121. Lecture 2 hours.

172A-B-C-D-E. Evaluation of Facial

Form I. (2-2-2-2-2) F,W, Sp, SS1, SS2. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lecture 2 hours. Nielsen

Use of diagnostic radiography in the evaluation of dental and facial morphology is presented. Evaluation of morphological relationships, facial growth and development, skeletal maturation, the biological response to treatment modalities, and the complex interrelationship of these factors will be discussed. GR DEVEL

172.01A-B-C. Research Design. (1-1-1) F, W, Sp. Prerequisite: Enrollment in postdoctoral orthodontic or pediatric dentistry program or consent of instructor. Lecture 1 hour.

Baumrind

Principles of statistics and research design will be explored. Topics include statistical inference, hypothesis testing, analysis of variance, correlation, and multiple regression. The design of experimental and quasi-experimental research will be discussed and experience in computer software usage provided. GR. DEVEL

dent standing in Orthodontics. Seminar 1 hour.

R. Lee

This course will provide the resident with the basic cognitive skills for recognizing, diagnosing, and treating patients with TMJ pain, TMJ dysfunction, and craniofacial pain in a "team environment" (i.e., prosthodontist, orthodontist, ortal surgeon, psychologist, neurologist, ENT, physical therapist, etc.). GR DEVEL

176A-B-C. TMJ Pain & Dysfunction

Clinic. (0-3) F,W, Sp. Prerequisite: Resident standing in Orthodontics. Clinic 3 hours.

R. Lee

This course will provide the resident with the basic clinical skills for recognizing, diagnosing, and treating patients with TMJ pain, TMJ dysfunction, and craniofacial pain in a "team environment" (i.e., prosthodontist, orthodontist, oral surgeon, psychologist, neurologist, ENT, physical therapist, etc.). GR DEVEL offered in off-campus hospitals approved by the chairperson of the department and the dean. ORTHO SURG

Orthopaedic surgery clinical clerkships are

140.03. Rehabilitation Medicine-S & VA. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 or Pediatrics 110.

Carpendale

SURG

and 111.

D. Bradford

Course will provide knowledge and skills in electrodiagnosis, neurologic rehabilitation, spinal cord injury, closed head trauma, the rheumatoid patient, orthopaedic rehabilitation, hazards of bed rest, and acute and chronic low back pain. ORTHO SURG

150.01. Research in Orthopaedic Surgery. (1.5 per week) Su, F.W. Sp. Prerequisite: Surgery 110 and 111 and permission of instructor.

Skinner

Research project under direction of a member of the faculty. ORTHO SURG

160.01. Fracture Conference. (1) Su, F,W, Sp. Conference 1 hour.

Skinner

Fracture conference on patients admitted to the emergency room, with emphasis on Xray findings and treatment modalities. ORTHO SURG

Orthopaedic Surgery

199. Laboratory Project. (1-5) Su, F,W, Sp. Prerequisite: Consent of instructor. Lab 3-15 hours.

Skinner

A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. ORTHO SURG

401. Orthopaedic Pathology. (1) W, Sp. Prerequisite: Third- and fourth-year residents.

UC J. Johnston

A lecture series covering tumors and infections of the musculoskeletal system, illustrated by microscopic slides and photographs of gross specimens. ORTHO SURG

402. Musculoskeletal System Physiol. (1) F, W, Sp.

Staff

Seminars cover connective tissue metabolism; muscle, bone, and joint physiology; preoperative and postoperative management of patients; wound infections; microbiology; and surgical principles. ORTHO SURG

403. Gross & Functional Anatomy. (1) Su.

Staff

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Course includes lectures by students and faculty on gross and functional anatomy, laboratory dissections of cadaver material, and demonstrations of surgical approaches. ORTHO SURG

404. Orthopaedic Literature. (1) F,W, Sp. Residents at C, DMC, SFGH, SSF, UC and VA.

Staff

Seminars are student presentations of selected orthopaedic surgery subjects featuring historical review complete with bibliography. They are moderated by an assigned faculty member. ORTHO SURG

406. Orthopaedic Medical Staff Conf. (1) Su, F, W, Sp.

UC D. Bradford

Clinical instruction in the care and management of orthopaedic problems in rheumatoid arthritis and allied diseases. Cases are presented by residents to attending staff and rheumatology consultants. ORTHO SURG

407. Orthopaedic Surgical Conference. (1) Su, F, W, Sp.

H Slabaugh

Seminars include presentation of problem cases by residents for consideration of diagnosis, treatment, and discussion by the attending staff. ORTHO SURG

408. Orthopaedic Surgical Conference. (1) Su, F, W, Sp.

SFGH **Staff**

Selected problems are illustrated by cases treated or under treatment. Cases are presented by the resident staff and discussed by members of the attending staff. ORTHO SURG

409. Orthopaedic Surgical Conference. (1) Su, F,W, Sp.

SSF Skinner

Conference with emphasis on children's problems in which residents make case presentations of inpatients for review and of new patients for consideration of diagnosis and therapeutic plan. ORTHO SURG

411. Orthopaedic Surgical Conference.(1) Su, F, W, Sp.

VA Maurer

Conference includes review of admissions and discharges of hospitalized patients by the attending and consulting staffs. Cases are presented by the residents. ORTHO SURG

412. Orthopaedic Clinical Seminar. (1) Su, F, W, Sp.

CHMC Debenham, H Slabaugh, SM Jensen

Seminars are held in rotation at each of these hospitals with residents from all three hospitals attending. They include literature review and demonstrations related to surgical approaches, anatomical dissections, diagnosis, and treatment. ORTHO SURG

414. Hand Surgery Conference. (1) Su, F,

455. Clinical Sports Medicine. (1) Su, F, W, Sp.

J. Glick and Staff

Clinical instruction in the care and management of orthopaedic problems in athletic injuries. Course consists of clinical practice under supervision as well as didactic lectures every third week. ORTHO SURG

490. Clinical Orthopaedics-SFGH. (1.5 per week) Su, F,W, Sp. **Staff**

Residents-I rotate through orthopaedic wards and follow-up clinics. They are responsible for patient care under the direction of the attending staff, including history-taking, physical examinations, X-ray conferences, and consultations. ORTHO SURG

Otolaryngology

First-Year Coordinated Instruction-Medicine 131A-B-C. Lecture-demonstrations and section work devoted to the supervised examination of patients.

Core Clerkship–Surgery 110 and 111 include lectures and case demonstrations on the examination and diagnosis of otolaryngological diseases, particularly those related to trauma and infection. Instruction is given in the examination and diagnosis of ward and clinic patients with otolaryngological surgical diseases.

140.01A. Adv Otolaryngology Clerkship. (1.5 per week) Sü, F, W, Sp. Prerequisite: Medicine 131A-B-C and Surgery 110. Lee

A practical course in general otolaryngology including diagnosis and treatment of common ear, nose, and throat problems; both inpatient and outpatient experiences will be offered. OTOLARYN

140.01B. Adv Otolaryngology Clerkship. (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 131A-B-C and Surgery 110. Lanser A practical course in general otolaryngology

including diagnosis and treatment of common ear, nose, and throat problems; both inpatient and outpatient experiences will be offered. OTOLARYN

140.01C. Adv Otolaryngology Clkshp-SFGH. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 131A-B-C and Surgery 110.

A practical course in general otolaryngology including diagnosis and treatment of common ear, nose, and throat problems; both inpatient and outpatient experiences will be offered. OTOLARYN

140.01F. Clinical Clerkship-MZ. (1.5 per week) Su, F,W, Sp. Prerequisite: Surgery 110. Singer exacts of the bacase of the device of This clerkship is in general otolaryngology and includes the diagnosis and treatment of common ear, nose, and throat problems. Both inpatient and outpatient experiences will be offered. OTOLARYN

140.02. Off-Campus Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 131A-B-C and Surgery 110.

Schindler Clinical clerkships in off-campus hospitals approved by the chairperson of the department and the dean. OTOLARYN

140.03. Otology and Neurotology. (1.5 per week) Su, F, W, Sp. Prerequisite: Third or fourth year (fourth preferred). **Iackler, Schindler**

A course in basic audiometric and vestibular testing; diagnosis and management of diseases

of the ear and skull base; and experience with surgery for hearing restoration, treatment of vertigo, and for removal of ear and skull base neoplasms. OTOLARYN

140.04. Introduction to Facial Plastics-UC-VA. (1.5 per week) Su, F,W, Sp. Prerequisite: IDS 110.

Maas

This clerkship in otolaryngology-facial plastic and reconstructive surgery will include the diagnosis and treatment of common 401. Head & Neck Surgical Anatomy. (1) Su. Seminar 2 hours. Kaplan

Didactic sessions in the surgical anatomy of the head and neck. Supplemental dissections included. OTOLARYN

404. Staff Rounds. (2) Su, F,W, Sp. Boles →

Weekly seminars are held with discussion of current problems concerning diagnosis and management of patients with references to current literature, modern theory, and controversial aspects. OTOLARYN

406. Turnor Conference. (1) Su, F, W, Sp. UC **Kaplan**

Conference includes presentation of patients, study of histories, and discussion of the treatment of the patient in light of modern progress in the field. OTOLARYN

407. Head & Neck Plastic Surgery. (1) Sp. Seminar 2 hours. Maas

Basic science and clinical aspects of cosmetic facial surgery and reconstructive surgery of the head and neck are covered in a weekly one-hour seminar. Slide presentations, videotape movies, didactic lectures, and anatomic dissections constitute the curriculum. OTOLARYN

410. Temporal Bone Anat & Pathology. (0.5-0.5) F. Laboratory 2 hours. **Jackler**

A laboratory course conducted in the ear, nose, and throat pathology laboratory. All resident staff members are required to familiarize themselves thoroughly with the microscopic anatomy of the temporal bone under formal staff instruction. OTOLARYN

412. Tumor Board. (1) Su, F, W, Sp. VA Kaplan

Tumor cases are presented for diagnosis and recommendations for treatment. OTOLARYN

413. Audiology Conference. (1) Su, F, W, Sp.

VA **Kaplan**

Combined Audiology and Otolaryngology Staff Conference where all patients evaluated for hearing problems are presented, and diagnosis and treatment recommendations are made. OTOLARYN

415. Otolaryngology Fundamentals Course. (1) W. Seminar 2 hours.

Jackler, Kaplan, Sooy A review of fundamental principles of otolaryngology head and neck surgery, encompassing both the basic and clinical sciences. This course is intended as a comprehensive review for the yearly "in service" training examination as well as preparation for board certification. OTOLARYN

450. Clinical Otolaryngology. (10) Su, F, W, Sp.

UC Boles, SFGH Wildes, VA Kaplan, C P. Bartlett

Residents, under supervision, are responsible for patient care in the wards and outpatient clinics including history-taking, physical examination, laboratory tests, preoperative and postoperative care, minor surgery, audiometry, vestibular testing, and consultations. Senior resident has certain administrative, teaching, and clinical responsibilities. OTOLARYN

490. Clinical Otolaryngology–SFGH. (1.5 per week) Su, F,W, Sp. **Lee**

Interns, under supervision of the attending staff, are responsible for patient care on wards and in the follow-up clinic, including history-taking, examination, and consultation. This rotation is combined with patient-care assignments in the Ophthalmology Service. OTOLARYN

Parasitology

135. Medical Parasitology. (2) W. Lecture 2 hours. **Heyneman, Lim** 101. General & Systemic Pathology. (4)

150.07. Pathology Research/Service

(1.5) Su, F, W, Sp. Prerequisite: Pathology

101, 102, 103 and consent of dean of the

program starting in the summer quarter.

Ferrell

Friend

department. Third-year standing. One-year

This one-year course, with stipend (starting

lows with techniques in autopsy and surgical

pathology and their application to diagnosis

160. General Pathology. (1) F. Prerequisite:

Courses in biochemistry, physiology, histol-

immunology. Lecture 1 hour for ten weeks.

ogy, microbiology, and an introduction to

Mechanisms of disease with emphasis on

dynamic nature of fundamental disease pro-

cesses: cell injury, immunopathology, inflam-

mation, responses to infectious agents, repair,

regeneration, hemodynamic derangements,

170.01. Clinical Cytology. (3) Sp. Prereq-

uisite: Anatomy 102, Pathology 101 and 102.

Lectures on basic fundamentals of cytology,

normal cells, malignant cells, abnormal non-

malignant cells, collection, and preparation

methods. Microscopic examination of speci-

pathology with colposcopic and clinical find-

men and correlation of cellular and tissue

170.04. Anatomy Pathology Confer-

ence. (1) F, W, Sp. Prerequisite: Medicine

110 and Surgery 110. Conference 1 hour.

Presentation of selected current cases seen in

the hospital pathology laboratory. Discussion

of pathological findings, and correlation with

170.05. Neuropathology. (2) W. Prerequisite: Pathology 102. Third- or fourth-year

clinical and radiologic findings and treat-

standing. Lecture and seminar 2 hours.

Emphasis is placed on clinicopathological

of study of gross and microscopic material

correlation of neurological diseases by means

and participation in conferences. PATHOL-

170.08. Studies in Pathology. (1-5) Su, F,

Studies in pathology at other institutions with

the approval of the chairperson of the depart-

170.09. Clinicopathological Weekly

Case. (1) W, Sp. Prerequisite: Pathology 101,

enrolled in Pathology 102/103. Restriction:

A weekly case discussion conference at which

students will generate a differential diagnosis,

examine gross and microscopic pathologic

specimens, and discuss the pathophysiology

170.10. Immunological Mechanisms in

Human Disease. (1.5) E Prerequisite: one

year basic science courses (graduate, medical,

or dental) or consent of instructor. Lecture 1

An introductory course in immunopathology

how basic immunological research is applied

disease. Topics will include transplant immu-

nology, immunoparasitology, immune defi-

ciency diseases, tolerance, and autoimmune

170.11. Problems of Medical Delivery in

White Androcentric Society. (1) W. Semi-

Feminist readings: how language can be a

tool of oppression; how power structure of

and clinical immunology that will review

to diagnosing and understanding human

Second-year medical students. Seminar 1

W, Sp. Prerequisite: Consent of instructor

and chairperson of the department.

ings on examination of the patient.

disturbances of cell growth, and neoplasia.

and patient care, as well as research. The

training and responsibilities are similar to

residents'. PATHOLOGY

DENT PUB HLTH

E. King, E. Hill

PATHOLOGY

ment. PATHOLOGY

D. Davis, DeArmond

ment. PATHOLOGY

Margaretten, Isenberg.

of the case. PATHOLOGY

hour. Seminar 0.5 hour.

diseases. PATHOLOGY

McKerrow

nar 1 hour.

Stern

Staff

OGY

Staff

hour.

in Summer quarter), acquaints student-fel-

F. Prerequisite: Substantive courses in anatomy, biochemistry, physiology, histology, microbiology (or concurrent enrollment), concurrent enrollment in Medicine 132A. If in doubt as to adequacy of preparation, consult the instructor. Lecture 3 hours. Lab 2 hours.

Ferrell

Mechanisms and language of disease are discussed, with emphasis on cell injury, inflammation, infectious agents, repair, regeneration, hemodynamic derangements, neoplasia. Recent advances and classical concepts of diseases as they affect the heart and blood vessels, lungs, gastrointestinal tract are presented. PATHOLOGY

102. Systemic Pathology. (3) W. Prerequisite: Pathology 101. Lecture 3 hours. Lab 2 hours. Ferrell

Recent advances and classical concepts of diseases as they affect the following organ systems are presented: pancreas, liver, central nervous system, kidney, endocrine system, skin. Emphasis will be on correlation of functional and morphologic characteristics of diseases of organ systems. PATHOLOGY

103. Systemic Pathology. (3) Sp. Prerequisite: Pathology 102. Lecture 3 hours. Lab 2 hours. Ferrell

Recent advances and clinical concepts of diseases as they affect the following organ systems are presented: reproductive systems, skeletal system, hematopoietic system, and lymph nodes. Emphasis will be on correlation of functional and morphologic characteristics of diseases of organ systems. PATHOLOGY

126. General Pathology. (4) F. Prerequisite: Substantive courses in biochemistry, physiology, histology, microbiology (first quarter, concurrent) or an introduction to immunology. If in doubt as to adequacy of preparation, consult the instructor. Lecture 3 hours. Lab 2 hours. Sanchez

Mechanisms and language of disease are discussed, with emphasis on the dynamic nature of fundamental disease processes: cell injury, immunopathology, inflammation, responses to infectious agents, repair, regeneration, hemodynamic derangements, genetic disorders, disturbances of cell growth, and neoplasia. PATHOLOGY

135. General Pathology. (3) F. Prerequisite: Substantive courses in biochemistry, physiology, histology, microbiology (first quarter, concurrent) or an introduction to immunology. If in doubt as to adequacy of preparation, consult the instructor. Lecture 3 hours. Friend

This course is identical to the lecture portion of Pathology 126. PATHOLOGY

135.01. General Pathology. (3) F. Prerequisite: Completion of prerequisite coursework in human physiology and microbiology or by consent of program director. Lecture 3 hours.

Sanchez

Mechanisms and language of diseases are discussed, with emphasis on the dynamic nature of fundamental disease processes such as cell injury, immunopathology, inflammation, response to infectious agents, repair and regeneration, hemodynamic arrangements, genetic disorders, disturbances of cell growth and neoplasia. PATHOLOGY

150.01. Surgery and Autopsy Pathology. (1.5 per week) Su, F, W, Sp. Prerequisite: Pathology 101. Consent of instructor. Enrollment limited. **Ferrell**

This clerkship is designed to acquaint students in the available techniques of tissue analysis and their application to diagnosis and patient care. The student is given training and responsibilities in surgical and/or autopsy pathology similar to those of first-year residents.

150.02. Off-Campus Pathology Clerk-

W, Sp **Staff**

Conference includes presentation of case studies in hand surgery with central subject for each session. ORTHO SURG

451. Clinical Pediatric Orthopaedics. (1.5 per week) Su, F, W, Sp. C **L. Larsen,** CHMC **Debenham,** SSF **Ashley**

Residents are responsible for patient care in the wards and outpatient clinics including history-taking, physical examinations, laboratory tests, elective surgery, fracture treatment, plaster techniques and consultations. ORTHO SURG

452. Traumatic & Adult Orthopaedics. (1.5 per week) Su, F,W, Sp. SFGH **L. Day**, SM **Jensen**, VA **Maurer**, H **Slabaugh**

Residents are responsible for patient care in the wards and outpatient clinics including history-taking, physical examinations, laboratory tests, elective surgery, fracture treatment, plaster techniques, and consultations. ORTHO SURG otolaryngologic problems associated with the facial area. Both inpatient and outpatient experiences will be offered. OTOLARYN

150.01. Research in Otolaryngology. (1.5 per week) Su, F, W, Sp. Prerequisite: Must be third- or fourth-year medical student. Must have approval of Chairman, Dean, and research faculty involved.

Jackler

Research project under the direction of a member (or members) of the Department of Otolaryngology. OTOLARYN

198. Supervised Study. (1-5) F,W, Sp. Prerequisite: Consent of instructor. **R. Schindler**

Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. OTOLARYN

199. Laboratory Project. (1-5) F,W, Sp. Prerequisite: Consent of instructor.

Merzenich

A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. OTOLARYN

400. Didactic Lectures. (2) Su, F,W, Sp. **Boles**

Lectures cover the anatomical, physiological, and clinical aspects of otolary mealows

An introduction to the protozoa, helminths, and anthropods that parasitize man. Parasite ecology and disease epidemiology, clinical and diagnostic aspects of parasite diseases and their treatment are considered. EPID & BIOSTAT

Pathology

100. Medical Parasitology. (1) Sp. Lecture 1 hour. Lab 4 hours (optional). Sakanari

An introduction to parasitic protozoa and helminths and the human disease they produce. Parasite epidemiology, biology, and life cycles, diagnosis, clinical aspects, treatment, and control are discussed in the lectures and labs. Laboratory demonstrations keyed to the lectures are displayed and an instructor is available for small group discussions. EPID & BIOSTAT ship. (1.5 per week) Su, F,W, Sp. Prerequisite: Pathology 101 and 102.

Bainton

Clinical clerkships in off-campus hospitals approved by the chairperson of the department and the dean. PATHOLOGY

150.05. Research. (1.5 per week) Su, F, W, Sp.

McKerrow, Parslow, Yen

The staff of the Pathology Department have various ongoing research interests and have a number of projects for students to work on. Requires approval of the Dean and the Department. Obtain necessary forms from the Office of Curricular Affairs. PATHOLOGY

150.06. Surgical Pathology–VMC. (1.5 per week) F, W, Sp. Prerequisite: Pathology 102 and consent of instructor. **H.M. Price, Bezmalinovic**

Clerkship is designed to acquaint students with available techniques of tissue analysis, from light microscopic to micromolecular levels, and their application in diagnosis and surgical care. Experience includes postmortem examination, review of surgical biopsies and frozen sections, electron microscopy. PATHOLOGY society maintains hegemony by defining "pathology"; how women, people of color, and gays are marginalized in this context. Explores how doctor-patient dialogue interferes with medical care. PATHOLOGY

180.01. General Pathology. (3) F. Prerequisite: Anatomy 118. Lecture 3 hours.

Stern

This course is identical to the lecture portion of Pathology 126. Elective in the dental hygiene curriculum. PATHOLOGY

198. Supervised Study. (1-5) § F,W, Sp. Prerequisite: Consent of instructor. **Staff**

Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. PATHOLOGY

199. Laboratory Project. (1-5) § F,W, Sp. Prerequisite: Consent of instructor. **Staff**

A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. PA-THOLOGY

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209. Applied Pathology. (3) § W. Prerequisite: Microbiology 126A-B and Pathology 126 or equivalents.

J. Greenspan

Weekly seminars are designed to provide students with an understanding of the basic principles of pathology. Emphasis is placed on research; students will critically review current literature in the field, under faculty supervision. PATHOLOGY

215. Laboratory Rotation. (3) § F,W, Sp. Prerequisite: Consent of instructor. Lab 9 hours.

Parslow

A laboratory rotation course, to familiarize students with various approaches to experimental pathology and research in the basic medical sciences, particularly in relationship to human disease processes. Intended primarily for new graduate students. PATHOLOGY

225. Connective Tissue Research Sem. (4) § F,W, Sp. Seminar 4 hours. R. Stern

Students and faculty review literature and discuss current concepts and experiments in connective tissue research. Included are role of structural proteins, such as collagen and elastin in pathology, cell matrix, interactions in developmental biology and morphogenesis. PATHOLOGY

230. Experimental Pathology Seminar.

(2) § F.W, Sp. Prerequisite: Permission of the graduate advisor of the department. Lecture 1 hour. Seminar 1 hour.

Parslow

Presentation of current research by graduate students. Topics in pathology and disease mechanisms. Faculty from basic and clinical sciences will discuss current research in a disease process. Advanced reading in that disease will be assigned before class. There will be formulation of test-hypothesis and discussion of an experimental design lead by a student leader at each session. PATHOL-OGY

240. Concepts in Parasitic Diseases. (4) § W. Lecture 2 hours. Seminar 2 hours. Bainton, Sakanari, Deneris

This course is for students interested in learning current issues on parasitic diseases (drug design, public health aspects, biochemical parasitology). Invited speakers give seminars on their area of expertise. Students evaluate papers relevant to concepts presented by the speakers. PATHOLOGY

250. Research. (1-8) § F,W, Sp. **Staff** PATHOLOGY

297. Molecular Biology of Human Disease. (3) § Sp. Prerequisite: Open to graduate students, housestaff, and MSTP students. Lecture 1 hour, seminar 2 hours. McKerrow

The course is designed to provide students with an up-to-date summary of our knowledge of atherosclerosis with particular emphasis on application of techniques of molecular and cell biology to understand both the pathogenesis and genetics of the disease. PATHOLOGY

298. Thesis. (0) § F,W, Sp. Prerequisite: Advancement to candidacy and permission of the graduate adviser. **Staff**

For graduate students engaged in writing the thesis for the master's degree. PATHOLOGY

299. Dissertation. (0) § F,W, Sp. Prerequisite: Advancement to candidacy and permission of the graduate adviser. **Staff**

For graduate students engaged in writing the dissertation for the Ph.D. degree. PATHOL-OGY

301. Teaching Practicum. (3) § F.W, Sp. Prerequisite: Consent of instructor. Lecture 3 hours. Lab 2 hours. Ferrell

Practice in teaching pathology under faculty supervision. Students supervise laboratory

405. Dermatopathology. (2) F, W, Sp. Prerequisite: Pathology 101 or equivalent by consent of instructor. Lab 2 hours. Seminar 1 hour.

Sagebiel

Survey of inflammatory and neoplastic skin diseases by study of histopathological changes and discussion with emphasis on clinicalpathologic correlations. PATHOLOGY

450. Pathologic Anatomy. (5-10) Su, F, W, Sp. Required for interns; elective for residents. Staff

Theory and methodology of pathologic anatomy, interpretation and correlation of data, and study of literature. PATHOLOGY

455. Electron Microscopy Seminar. (1) W. Prerequisite: Medicine 110 and Surgery 110 and consent of instructor. Lecture 1 hour. Elective for interns and residents. **Staff**

Course covers basic electron microscopic techniques, indications for use of electron microscopy in pathologic diagnosis, and the specific ultrastructural features of normal and diseased tissue. Emphasis is placed on renal biopsy and tumor diagnosis. Documented attendance is required. PATHOLOGY

495. Pathologic Anatomy. (1.5 per week) Su, F, W, Sp. Required for interns. **Staff**

Theory and methodology of pathologic anatomy, interpretation and correlation of data, and study of literature. PATHOLOGY

Pediatric Dentistry

120. Introduction to Pediatric Dentistry. (1) Sp. Prerequisite: Enrollment and satisfactory standing in second-year dental class

tory standing in second-year dental class. Lecture 10 hours per quarter. Braham and Staff

An overview of the physical, psychological, and dental growth and development of the pediatric patient from birth through adolescence, emphasizing the importance of approaching the child as an individual in its own right rather than as a miniature adult. GR DEVEL

130. Introduction to Clinical Pediatric Dentistry. (1) Su. Prerequisite: Satisfactory completion of Ped Dent 120 and third-year standing. Lecture 9 hours per quarter. **Braham and Staff**

An intensive review of clinical pediatric dental procedures and techniques. The course will stress the importance of sound diagnosis and treatment planning as a prerequisite to definitive comprehensive dental care. Specific attention will be paid to parent and patient management. GR DEVEL

139. Clinical Pediatric Dentistry. (0-4) Su, F, W, Sp. Prerequisite: Ped Dent 130 and third-year standing. Clinic 110 hours, seminar 5 hours per quarter.

Braham and Staff

A comprehensive introduction to clinical pediatric dentistry in general dental practice. Sound behavior management, examination, and treatment planning will be stressed. The complexity of cases will be increased as the students' skills develop. Clinical seminars will supplement clinical practice. GR DEVEL

170D-E. Intro to Ped Dent. (2-2) SS1, SS2. Prerequisite: Enrollment in postdoctoral pediatric dentistry program or consent of instructor. Lecture 2 hours.

Rothman and Staff

Course is offered to the incoming postdoctoral student as an introduction to the 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) F,W, Sp, SS1, SS2. Prereq-

uisite: Enrollment in postdoctoral pediatric dentistry or orthodontic program or consent of instructor. Seminar 5 hours. M. Morris and Staff

Oral examination, treatment planning, treatment of children including behavioral management. Time is spent in the Pediatric Dentistry Clinic at UCSFThe course involves clinical training, seminars, and treatment in the hospital operating room under general anesthesia. GR DEVEL **173C. Clinical Uses of Fluorides.** (2) Sp. Prerequisite: Enrollment in postdoctoral pediatric dentistry program or consent of instructor. Lecture 1 hour. Seminar 1 hour. M. Morris

Course gives a comprehensive update on the clinical uses of fluoride in pediatric dentistry. It is a combined lecture and seminar course. A term paper on an assigned topic is also required. GR. DEVEL

173.11B-C. Dentistry for the Disabled. (1-1) W, Sp. Prerequisite: Enrollment in postdoctoral pediatric dentistry program or consent of instructor.

M. Morris and Staff

Course provides knowledge of the congenital and acquired disabilities in children and adolescents. There is emphasis on the etiology, diagnosis, medical, and dental management, and prognosis of these conditions. GR DEVEL

174A-B-C-D-E. Lit Survey in Ped Dent.

(1-1-1-1-1) F, W, Sp, SS1, SS2. Prerequisite: Enrollment in postdoctoral pediatric dentistry or orthodontic program or consent of instructor.

M. Morris and Staff

Course reviews the latest issues of pediatric dentistry and related journals and critically evaluates the philosophies, clinical treatment, and applications to the practice of dentistry for the child patient. GR DEVEL

176A-B-C-D-E. Practice Teaching. (1.5-1.5-1.5-1.5-1.5) F, W, Sp, SS1, SS2. Prerequisite: Enrollment in postdoctoral pediatric dentistry program or consent of instructor. Seminar 1 hour. Clinic 1.5 hours. Morris and Staff

Student teaches junior and senior dental students in the pediatric dentistry clinics. In addition, the student will teach selected topics in a seminar format. GR DEVEL

177A-B-C-D-E. Hospital Dentistry. (3-3-3-3-3) F,W, Sp, SS1, SS2. Prerequisite: Enrollment in postdoctoral pediatric dentistry program or consent of instructor. Seminar 1 hour. Clinic 6 hours.

M. Morris and Staff

Course is specifically designed to provide the student with a working knowledge of dental rehabilitation procedures in a hospital operating room under general anesthesia and the associated hospital protocol. GR DEVEL

177.11A-B-C-D-E. Conscious Sedation. (1.5-1.5-1.5-1.5) F,W, Sp, SS1, SS2. Prerequisite: Enrollment in postdoctoral pediatric dentistry program or consent of instructor. Lecture 1 hour. Clinic 1.5 hours. M. Morris and Staff

A multiplicity of medications, routes of administration, and monitoring techniques will be employed under the direct supervision of a faculty person. The student will administer the medications and monitor the patients before, during, and after the procedure. GR DEVEL

178A-B-C-D-E. Research Seminar. (2-2-2-2-2) F, W, Sp, SS1, SS2. Prerequisite: Enrollment in postdoctoral pediatric dentistry or orthodontic program or consent of instructor. Lab 3 hours. Seminar 1 hour. **M. Morris and Staff**

Course will cover how to critically review research literature and do a term paper on a selected subject. It will discuss research methodologies and the development of a protocol and completion of a research project. GR DEVEL

179A-B-C-D-E. Advanced Clinical Ped

Dent. (1-10) F, W, Sp, SS1, SS2. Prerequisite: Enrollment in postdoctoral pediatric dentistry program or consent of instructor. Clinic 3-30 hours.

M. Morris and Staff

Course covers the clinical activities of the student and has the broad objective of providing a wide experience in all phases of contemporary pedodontic diagnosis and treatment. Students must demonstrate clinical competencies in care for the special child. GR DEVEL **186. Adv Pediatric Dent Seminars** (1) F, W, Sp. Prerequisite: Completion of third-year Pediatric Dentistry Lecture Course 130. Approval of instructor in charge of course. Seminar 1 hour for 8-10 weeks.

Ramos

Seminars on advanced pediatric dentistry, covering behavior and behavioral management techniques, advances in pediatric dental restorative techniques and materials, dental management of the special patient, preventive orthodontics. Emphasis on literature reviews. Course is of particular interest for students interested in the specialty of Pediatric Dentistry. GR DEVEL

410. Advanced Pediatric Dentistry (1) F. Lecture 1 hour. Katz

This lecture series will focus on behavior management of children in the outpatient and inpatient settings. GR DEVEL

Pediatrics

100. Medical Genetics. (2) Sp. Shapiro

This course will explore the role of genetic factors in the causation of human diseases, particularly those genetically influenced disorders which are most frequent in occurrence, and approaches to the diagnosis, management, and counseling of genetic disorders. PEDIATRICS

110. Ped Core Clerkship–UC-SFGH-L-C. (1.5 per week) Su, F, W, Sp. Prerequisite: Core curriculum in basic sciences. **Loeser**

Practical experience in the ward, newborn_ nursery, and outpatient clinics with emphasis on case assignments. Teaching and supervision by attending and resident staffs. Required seminars cover aspects of pediatrics, infectious diseases, and child psychiatry. PEDIATRICS

140.01A. Ambulatory Pediatrics–UC. (1.5 per week) F,W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Pantell

Students gain experience in well child care and in dealing with children with acute problems. Emphasis is placed on health maintenance, preventive care, and anticipatory guidance. Conferences focus on general pediatric issues and a review of patients seen in the emergency room. PEDIATRICS

140.01B. Ambulatory Pediatrics–SFGH (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Brown, Coulter, O'Connor Students evaluate and treat children with a variety of acute and chronic conditions. Patients with a high degree of acuity. There are morning conferences and ER case reviews. Supervision is provided by senior residents, chief resident, and faculty. PEDIATRICS

140.01D. Outpt Pediatric Clerkship-CHMC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Consent of instructor.

Wright Students are as

Students are assigned patients. They are supervised by attending and resident staff. They attend conferences when their patients are being discussed. They rotate through a variety of specialty clinics as well as the General Medical Clinic and the Emergency Room. PEDIATRICS

140.01E. Adv Inpt Pediatric Clkshp-CHMC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Wright

Students are assigned patients. They are supervised by attending and resident staff. They present patients on wards, assist with procedures, and attend specialty conferences when their patients are being discussed, as well as all daily formal teaching conferences. PEDIAT-RUCS

140.01F. Outpt Pediatric Clkshp-KP. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Consent of in-

140.01K. Neonatology–SFGH. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Pediatrics

Partridge, D.F. Wong

Students develop skills in assessment of newborns in the setting of a high-risk patient population. The experience involves care of patients, ranging from the healthy term newborn to the infant requiring intensive supportive care. PEDIATRICS

140.01M. Pediatric Critical Care-UC.

(1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. One student per rotation. Soifer and Staff

Students follow selected patients in the Pediatric Intensive Care Unit and participate in patient presentations, management conferences, and teaching rounds. Emphasis is on cardiovascular and pulmonary physiology in management of critically ill pediatric patients. Students become familiar with relevant literature concerning problems of patients being followed. PEDIATRICS

140.01N. Adv Inpatient Pediatrics (1.5/

wk) Su, F, W, Sp. Prerequisite: Pediatrics 110, Medicine 110. Restricted to 1-2 students per block.

Shapiro

Shapiro

Bayatpour

PEDIATRICS

dents only.

Van Hare

To provide exposure to typical pediatric inpatients in a setting where the student assumes primary responsibility for initial evaluations, diagnostic procedures, and ongoing management of patients. Students are assigned patient work-ups, participate fully in team work and teaching rounds, attend conferences, and are on night call with the resident. PEDIATRICS

140.02. Off-Campus Clerkship. (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Clinical clerkship in off-campus hospitals

approved by the chairperson of the depart-

per week) Su, F, W, Sp. Prerequisite: Medi-

Experience caring for sick and well children

with 27,000 patient visits/year. Preventive

medicine and anticipatory guidance along

All activities closely supervised by either

senior residents or faculty. Daily morning

140.04. Pediatric Cardiology. (1.5 per

week) Su, F, W, Sp. Prerequisite: Medicine

110 and Pediatrics 110. Open to UCSF stu-

Experience in clinical evaluation of children

with cardiac abnormalities is emphasized.

Daily ward rounds on pediatric cardiology

surgical procedures, catheterization, weekly

assignments, and daily attendance in private

office setting are included. PEDIATRICS

140.05. Pediatric Private Practice. (1.5

per week) Su, F, W, Sp. Prerequisite: Medi-

cine 110 and Pediatrics 110. Consent of in-

Working experience with a pediatrician on

patients in the office and in the hospital. Stu-

group, or subspecialty practice, or a combina-

the clinical faculty as the pediatrician sees

dent may select time in small group, large

140.07. Developmental Pediatrics in

Fresno. (1.5 per week) W, Sp. Prerequisite:

Students learn to identify children with de-

remediation to allow for achievement of their

greatest potential. Various settings are used in

acquiring skills in developmental assessment.

velopmental disabilities and direct their

structor. Open to UCSF students only.

L.P. Smith and Staff

tion of these. PEDIATRICS

catheterization conference, extensive reading

patients, attendance at designated cardiac

conferences, chart rounds, assigned readings.

with principles of growth and development.

140.03. Outpatient Pediatrics-VMC. (1.5

ment and the dean. PEDIATRICS

cine 110 and Pediatrics 110.

work, conduct conferences, and assist in preparing and grading examinations. Responsibilities are assigned according to the individual's stage of development. PATHOLOGY

400. Pathology & Lab Med Seminar. (1) F, W, Sp. Interns and residents. Prerequisite: Medicine 110 and Surgery 110 or consent of instructor. Seminar 1 hour.

Staff

Recent developments in diagnosis and research in pathology and laboratory medicine are discussed by faculty and guest speakers. PATHOLOGY

401. Special Topics Seminar. (Units to be arranged) Su, F.W, Sp. Interns and residents. Staff

Seminars focusing upon the pathology of specific organ systems are conducted by specialists. Emphasis is on the correlation between clinical manifestations of the disease and pathologic findings. PATHOLOGY

402. Pathology Research. (1-8) Su, F, W, Sp. Interns and residents. **Staff**

Students, under supervision, pursue original investigation in pathology and allied subjects. Investigators review the literature, make observations, and correlate physiological with

172D-E. 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

172.11A-B-C. Pediatric Medicine. (1-1-1) F, W, Sp. Prerequisite: Enrollment in postdoctoral pediatric dentistry program or consent of instructor. Seminar 1 hour.

M. Morris

Course will provide information on various topics of health care of children. Emphasis will be placed on the etiology, diagnostic procedures, prognosis, and management of common pediatric conditions. GR DEVEL **179.12D-E. General Anesthesia Rotation–**CHMC. (4-4) SS1, SS2. Prerequisite: Enrollment in postdoctoral pediatric dentistry or orthodontic program or consent of instructor. Clinic 30 hours.

Rothman and Staff

A practical rotation in the operating room of the Children's Hospital Medical Center of Northern California is provided under the supervision of senior staff anesthesiologist. GR DEVEL

180.02A-B-C-D-E. Pediatric Hospital Dentistry. (0-3) S, F, W, Sp. Prerequisite: Satisfactory progress in all previous pediatric dental courses. Seminar 3-5 hours per week in Hospital O.R.

Braham

Experience is provided in history-taking, admissions procedures, hospital dental protocol, laboratory tests, and chart documentation. Opportunity to work with the instructor in the hospital operating room, providing care for the handicapped and other refractory management cases, using a general anesthetic. GR DEVEL

structor. Applebaum

Students are assigned patients under supervision of attending and resident staff. They present patients on wards, assist with procedures, and attend specialty conferences for discussion of patients. PEDIATRICS

140.01G. Inpatient Pediatric Clkshp-K. (1.5 per week) Su, F, W, Sp. Prerequisite:

Medicine 110 and Pediatrics 110. Applebaum, Mohr

Students are assigned patients under supervision of attending and resident staff. They present patients on wards, assist with procedures, and attend specialty conferences for discussion of patients. PEDIATRICS

140.01J. Intensive Care Nursery-UC. (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Phibbs, Sola

Students gain experience in evaluation and management of sick pre-term and term infants. Supervision is provided, and it is expected that students will assume the role of primary physician in matters of clinical decision-making as well as diagnostic and therapeutic procedures. PEDIATRICS **140.08. Ambulatory Pediatrics.** (1.5 per week) F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

J.E. Anderson

PEDIATRICS

Pediatrics 110.

D.M. Snyder

Clinical experience in teaching hospital's busy pediatric clinic, working as member of health care team. Supervision from attending physicians with emphasis on developmental/ behavioral approach to pediatric practice. Continuity of care is encouraged and opportunity exists to follow patients admitted to ward. PEDIATRICS

140.10. Pediatric Hematology/

Oncology–UC-SFGH-CHMC. (1.5 per week) Su, F,W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Consent of instructor. Open to UCSF students only.

Koerper, Lubin, Mentzer

The student will participate in outpatient clinics, ward rounds, and laboratory evaluation of blood and bone marrow specimens. The pursuit of special interests in the clinic or laboratory is encouraged. PEDIATRICS

Principal

140.11. Cardiology-CHMC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Gerdsen, Hardy

Students participate in clinical experience including outpatient evaluation, instruction in the noninvasive methods of diagnosis, care of ward medical and surgical cardiac patients, cardiopulmonary laboratory, and cardiovascular conferences. Emphasis is on the physiological principles of diagnosis and management. PEDIATRICS

140.13. Endocrinology-UC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Consent of instructor. Grumbach, S.L. Kaplan, F. Conte Participation in the clinical and investigative aspects of endocrine and metabolic problems in children. Students spend time in the laboratory, on the wards, and in the clinics. PE-DIATRICS

140.14. Juvenile Diabetes-VCF. (1.5 per week) Su. Prerequisite: Medicine 110, Pediatrics 110, and consent of instructor. Simon

Students work in a Diabetes Summer Camp learning the clinical management of diabetes. Students have an opportunity to participate in the operation of the camp program and in the treatment of diabetes in children, adolescents, and young adults. PEDIAT-RICS

140.15. Oncology-UC. (1.5 per week) F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Consent of instructor. Ablin, K. Matthay, Zoger

Participation in management of patients with

solid tumors and leukemia; attendance at pediatric tumor board, ward rounds, and outpatient clinic. Special emphasis on psychosocial problems; supervised reading and discussion with preceptor. PEDIAT-RICS

140.16. Pediatric Nephrology-UC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Consent of instructor

D.E. Potter

Introduction to general nephrology with children having nutritional problems, ESRD, and chronic renal failure. Post-transplant and dialysis consultations, new cases from the nursery, and cases requiring TPN. Research projects may be arranged with instructors. PEDIATRICS

148.17. Genetics-UC. (1.5 per week) Su, F, W. Sp. Prerequisite: Medicine 110 and Pediatrics 110. Consent of instructor.

C. Epstein, M. Golabi, S. Packman Evaluation and management of children and adults with hereditary (including cytogenetic) diseases, with particular emphasis on

genetic counseling, patterns of human malformation, and the biochemical and genetic mechanisms involved in the pathogenesis and transmission of these conditions. PEDIAT-RICS

140.21. Pediatric Pulmonary & Allergy. (1.5 per week) Su, F.W. Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Cropp, Shames

Students participate in the activities of the polynomary and allergy service, in the outpatient and inputient settings, as well as conferences, journal clubs, etc. The course will emphasize clinical experience with common pediatric pulmonary problems, e.g., asthma, cystic fibrosis. PEDIATRICS

140.22H. Developmental Cardiopulmonary Pathophysiology. (1.5 per week) W. Prerequisite: Fourth-year standing. Soifer, Bristow, Froh

This course is designed to provide students with an understanding of the development of the cardiovascular and pulmonary systems by studying diseases in the premature (respiratory distress syndrome), newborn (pulmonary hypertension syndrome), infant (congenital heart disease), and child (cystic fibrosis). PEDIATRICS

140.26. Comprehensive Pediatric Care-KP. (1.5 per week) Su, F, W, Sp. Prerequisite:

140.31. Inpatient Pediatric Clkshp-VMC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Bayatpour Opportunity to develop and perfect skills in history-taking, physical examination, case write-ups, presentations, and procedures. Supervised problem-oriented learning/ teaching environment fosters basic diagnostic and management skills. Conferences, case work-ups and presentation, night call with resident, and assigned reading. PEDIAT-RICS

140.33. Pediatric Immunology/

Rheumatology. (1.5 per week) Su, F, W, Sp. Prerequisite: Pediatrics 110 and Medicine 110, and consent of instructor. Wara, Cowan

Evaluation and care of children with primary immunodeficiency diseases and rheumatologic disorders. Emphasis on ontogeny of immune response as it relates to immunodefi-

ciency, immunologic dysfunction involved in pathogenesis of the disorders, laboratory studies required for diagnosis, and care of children with chronic disease. PEDIATRICS

140.34. Medical Genetics. (1.5 per week) Su, F, W, Sp. Prerequisite: 4th-year standing. Curry

Experience will be gained in medical genetics, including dysmorphology, biomedical genetics and prenatal diagnosis. Rotation will provide general exposure to all these areas and give a basic understanding of methods used to reach specific genetic diagnoses and exact prenatal detection course for future pregnancies. PEDIATRICS

140.35. Infectious Disease-UC & SFGH (1.5 per week) Su, F, W, Sp. Prerequisite:

Pediatrics 110. S. Kohl

Students will learn principles of diagnosis and management of common infectious conditions, infectious complications in the immunocompromised host, and neonatal infections; will learn to properly interpret microbiologic data and use the microbiology laboratory. PEDIATRICS

140.37. Clinical Clerkship in Adolescent Medicine. (1.5 per week) Su, F, W, Sp. Prerequisite: Completion of basic clinical clerkships. Open to fourth-year medical students only.

Irwin, Shafer Clinical rotation on outpatient/inpatient adolescent medical service. Clinical experience will include general adolescent clinic, adolescent gynecology clinic, and inpatient consultation on adolescent medical and psy-

chiatric wards. PEDIATRICS 140.38. Behavioral & Developmental Pediatrics. (1.5/week) Su, F, W, Sp. Prerequisite: Pediatrics 110 and consent of instructor. Lecture 1 hour. Conference 10 hours. Clinic 4 hours.

Tanner Students are included in all phases of a comprehensive evaluation for a child with school and learning problems. Physical, neurological, psychological, speech and language, and

educational assessments as well as child and family interviews provide a truly biopsychosocial perspective. PEDIATRICS

150.04. Research in Pediatrics-UC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Shapiro and Staff

Student research projects under guidance of faculty members. Programs must be approved by instructors. Students may initiate or continue research programs under supervision of faculty members. PEDIATRICS

160.01. Clinical Correlation in Peds-UC. (2) Su, F, W, Sp.

Shapiro

Students prepare case presentations weekly from patients on the pediatrics wards. Course correlates patients' problems with work in the required curriculum. Experience on the ward in the clinical setting. PEDIATRICS

170.01. Peds Devel Resource Overview. (1.5 per week) Su, F, W, Sp. Prerequisite:

199. Laboratory Project. (1-5) Su, F,W, Sp. Prerequisite: Consent of instructor. Grumbach

A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. PEDI-ATRICS

400. Staff Conference. (1.5) Su, F, W, Sp. Interns and residents.

UC Rudolph Conferences include house staff preparation

and presentation of patient case histories with reference to the literature, laboratory work, and special studies. Faculty members and consultants from other departments as well as other universities discuss recent developments in their respective fields. PEDIAT-RICS

401. Pediatric-Roentgenology Conf. (1.5) Su, F, W, Sp. Interns and residents. UC Gooding

Conferences include review and discussion of recent X-ray studies of pediatric cases in the wards and outpatient service. PEDIATRICS

402. Clinical Seminar. (1.5) Su, F, W, Sp. UC Rudolph

Seminar includes review and discussion of selected cases of unusual interest, reports on special topics with review of recent literature. and clinicopathological conferences on pediatric cases, PEDIATRICS

420. Family Interviewing Seminar. (1)

Su, F, W, Sp. Prerequisite: Graduate-level student in health sciences health care providers only. Consent of instructor. Seminar 2 hours.

Baum and Staff

Seminar topics include family systems, communication patterns, family interviewing, presenting a difficult diagnosis, psychosomatic illness, chronic illness, and common behavioral problems. Teaching methods include group discussion, role play, and video taping. Emphasis is placed on learning through experience. PEDIATRICS

421. Behavioral Research Seminar. (1) F. W, Sp. Prerequisite: Graduate-level student in health sciences. Consent of instructor. Seminar 2 hours alternate weeks.

Boyce and Staff A survey of basic principles in epidemiologic

research, with special emphasis on issues relevant to behavioral pediatrics. PEDIAT-RICS

422. Behavioral/Developmental Core Curriculum. (1.5) F.W. Sp. Prerequisite: Post-M.D. or graduate nursing students and consent of instructor. Seminar 6 hours. P. Kaiser and Staff

Lectures and discussion of child development theory, clinically relevant research, and related common behavioral issues. Emphasis is on applicability of behavioral pediatrics in clinical practice. Includes screening, temperament, attachment, and hospitalization. Supervised experiences at daycare centers and schools. Reading assignments. PEDIAT-RICS

423. Child Development Literature

Seminar. (1) F, W, Sp. Prerequisite: Graduate-level student in health sciences and consent of instructor. Seminar 1.5 hours alternate weeks.

Tanner and Staff

This seminar presents classic theoretical and current research-based formulations of child development. Assigned literature readings are essential to seminar participation. Material covering pregnancy through school age years is presented over two-year cycle. PEDIAT-RICS

424. Neurodevelopmental Assessment

and Therapy. (1) W. Prerequisite: By instructor approval; pediatric residents and fellows in behavioral/developmental pediatrics. Lecture 1 hour. Lab 1 hour. Tanner and Staff

Overview of theories and principles of

neuromotor development and treatment modalities available for children with developmental disabilities. Includes assessing normal and abnormal sensory-motor development, neurodevelopmental therapy, sensory integration, pre-speech, and feeding therapy. Lecture, discussion, audiovisual aids, and patient demonstration, PEDIATRICS

462. Clinical Primary Care. (1.5 per week) Su, F, W, Sp. Rudolph

Interns in the Primary Care Track of Pediatrics are responsible for patient care in a multispecialty primary care clinic. Other rotations include those common to the regu lar Pediatrics Internship Program as well as related clinical services such as dermatology, otolaryngology. PEDIATRICS

463. Clinical Primary Care. (1.5 per week) Su, F, W, Sp.

Rudolph

Residents in the Primary Care Track of Pediatrics are responsible for patient care in a multispecialty primary care clinic. Other rotations include those common to the regular Pediatrics Residency Program as well as related clinical services such as dermatology, otolaryngology. PEDIATRICS

490. Clinical Pediatrics-SFGH (1.5 per week) Su, F, W, Sp.

M. Grossman

Interns rotate through newborn nursery, pediatric wards and clinic, communicable diseases ward, and emergency room. They are responsible for the care of patients, under the direction of the attending staff, including history-taking, physical examination, laboratory tests, and consultation. PEDIATRICS

495. Clinical Pediatrics. (1.5 per week) Su, F, W, Sp. Interns.

UC Grumbach

Interns, under supervision, are responsible for patient care in the wards and outpatient clinic including history-taking, physical examination, laboratory tests, diagnosis, and treatment. PEDIATRICS

Periodontology

130. Introduction to Periodontal Therapy. (1) Su. Prerequisite: Oral Biology 108.01, 108.02, 108.03. Lecture 10 hours per quarter.

Armitage

Introduction to the diagnosis and treatment of periodontal diseases. Emphasis will be placed on examination, diagnosis, and treatment planning. The rationale and techniques for treatment of gingivitis and early periodontitis will be discussed. STOMATOL

131. Principles of Periodontal Therapy. (1) F. Prerequisite: Perio 130. Lecture 10 hours per quarter.

Armitage

Principles of periodontal maintenance therapy. Role of local and systemic factors in the pathogenesis of periodontitis. Epidemiology and natural history of periodontal diseases. The rationale and techniques for the treatment of advanced periodontitis will be discussed. STOMATOL

132. Periodontal Therapy. (2) W. Prerequisite: Perio 131. Lecture 2 hours. Levine

Surgical periodontics and rationale for periodontal therapy. Emphasis will be placed on the rationale for various surgical modalities of treatment for periodontal diseases. Discussion of controversial treatment programs and medicolegal aspects of periodontal therapy will be included. STOMATOL

139. Clinical Periodontal Therapy. (0-4)

Su, F, W, Sp. Prerequisite: Perio 129. Clinic 3 hours. Seminar 1 hour. Levine

Treatment of a variety of periodontal diseases under the direct supervision of faculty. Small seminar and discussion groups will review diagnosis and treatment modalities. STOMATOL

149. Clinical Periodontal Therapy. (0-4) Su, F, W, Sp. Prerequisite: Perio 139. Clinic 12 hours Levine

Treatment of a variety of periodontal diseases in a general practice environment under the direct supervision of faculty. STOMATOL

162. Periodontal Therapy. (1) W. Prerequisite: Perio 161. Lecture 1 hour. Levine

180.01. Advanced Perio Lit. (1) F. Prerequisite: Perio 130 and consent of instructor. Seminar 1 hour. Abe

Study in depth, with literature review and seminar discussions of areas of periodontology having major clinical significance. STOMATOL

180.02. Advanced Perio Lit. (1) W. Prerequisite: Perio 131 and consent of instructor. Seminar 1 hour. Abe

Study in depth, with literature review and seminar discussions of areas of periodontology having major clinical significance. STOMATOL

180.03. Advanced Perio Lit. (1) Sp. Pre-

Study in depth, with literature review and

seminar discussions of areas of periodontol-

181. Periodontal Surgical Techniques.

(1) F. Prerequisite: Perio 132 or consent of

Surgical techniques are presented which may

be used to treat lesions occurring in the hard

182. Multidisciplinary Case Manage-

ment (1) W. Prerequisite: Periodontology

An introduction to the concept of compre-

the clinical disciplines. The relationship be-

tween periodontics, orthodontics, and re-

storative dentistry will be emphasized. Pre-

objective of this approach. STOMATOL

dictable long-term results are the therapeutic

189.01. Clinical Periodontics. (0-9) F,W,

Sp. Prerequisite: Perio 139. Clinic variable.

Continuation of clinical experience beyond

the level of Periodontology 139 and Perio-

dontology 149. Diagnosis, treatment plan-

ning, management and care of patients with

advanced periodontal disease or the need for

198. Supervised Study. (1-5) Su, F, W, Sp.

Library research and directed reading under

supervision of a member of the faculty with

the approval of the chairperson of the divi-

199. Laboratory Project. (1-5) Su, F,W,

A laboratory research project under direction

of a member of the faculty with the approval

202A-B. Molec & Biochem Basis of

Disease. (2-2) § F,W. Prerequisite: Bio-

tion to biochemistry. Lecture 2 hours.

chemistry 100A-B or equivalent introduc-

Course reintroduces students to the prin-

in relation to current concepts in the mo-

lecular basis of major disease entities includ-

ing cancer, metabolic disorders, fibrotic and

degenerative disorders of connective tissues,

209. Literature Review. (2) § F,W, Sp.

Seminar designed to correlate basic sciences

with problems in periodontology and evalu-

ate concepts in the direction of research.

papers in the literature are reviewed and

participate. STOMATOL

evaluated. Other instructors are invited to

clinical application, and teaching. Selected

inflammation, and wound healing.

ciples of biochemistry and molecular biology

of the chairperson of the division.

Armitage, Johnson, Richards,

Bramanti, Levine, Taggart

advanced therapy, including periodontal

surgery. STOMATOL

sion. STOMATOL

Armitage

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Seminar 1 hour.

Bhatnagar

STOMATOL

Seminar 2 hours.

Staff

hensive dental care through the integration of

132. Two hours/week over 5 sessions.

and soft tissues of the periodontium.

ogy having major clinical significance.

Seminar 1 hour.

STOMATOL

STOMATOL

Taggart

Engert, Pasquinelli

Levine

instructor. Lecture 1 hour.

Abe

requisite: Perio 132 and consent of instructor.

Medicine 110 and Pediatrics 110. Shum

Within the country's largest prepaid health care program, students will participate in office visits, urgent ambulatory care, health education, and inpatient care. They will work with staff and resident physicians, nurse practitioners and health educators. PEDIAT-RICS

140.27. Inpatient Pediatrics-KP. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110.

Shum

Students will perform histories and physical examinations on the pediatric ward under supervision of resident and attending physicians. They will attend resident conferences. see urgent clinic cases with resident and participate in outpatient clinic for discharged patients. PEDIATRICS

140.30. Gastroenterology & Nutrition. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Pediatrics 110. Heyman, Thaler

Students participate with fellows and staff in the diagnosis and treatment of gastrointestinal and hepatic diseases, and nutritional deficiencies in infants and children. They present patients on wards and in the outpatient clinic, assist with procedures, and attend specialty DEDIATOICO

Consent of instructor. L. Crain

Weekly seminar and reading assignments correlated with observation of the spectrum of community and institutional services; diagnostic, preventive, and program services for individuals with developmental disabilities included. PEDIATRICS

180.01A-B-C-D. Adolescent Development. (2-2-2-2) § F,W, Sp, Su. Prerequisite: Consent of instructor. Seminar 2 hours. Irwin

A four-quarter course covering the physiologic, psychologic, cognitive and social development of adolescence. Also included is material on sexuality, nutrition, family interaction, cultural differences, legal issues, school behavior, substance abuse and psychiatric problems, and common medical problems. PEDIATRICS

198. Supervised Study. (1-5) F,W, Sp. Prerequisite: Consent of instructor. Grumbach and Staff

Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. PEDIATRICS

450. Clinical Pediatrics-UC. (1.5 per week) Su, F, W, Sp. Interns and residents. UC Rudolph

Residents, under supervision, are responsible for patient care in the wards and outpatient clinic including history-taking, physical examination, laboratory tests, diagnosis and treatment. In addition, the chief resident has certain administrative, teaching, and clinical responsibilities. PEDIATRICS

451. Clinical Pediatrics-SFGH (1.5 per week) Su, F, W, Sp. Residents.

M. Grossman

Residents, under supervision, are responsible for patient care in the wards, communicable disease section, and outpatient clinic including history-taking, physical examination, laboratory tests, diagnosis, and treatment. Emphasis is on diagnosis and management of infection trauma, and pediatric emergencies. PEDIATRICS

Surgical periodontics and rationale for periodontal therapy. Emphasis will be placed on the rationale for various surgical modalities of treatment for periodontal diseases. Discussion of controversial treatment programs and medicolegal aspects of periodontal therapy will be included STOMATOL

170A-B-C. Histopathology of Perio-

dontium. (2-2-2) F,W, Sp. Lecture 1 hour. Lab 3 hours.

Dienstein (F,W), Ryder (Sp)

Dynamics of inflammation and its role in the periodontal tissues. STOMATOL

177. Periodontal Surgery Seminar. (2) F,

W, Sp. Prerequisite: D.D.S. degree and consent of instructor. Lecture 2 hours.

Raust

Study in depth with literature review and seminar discussions on surgical techniques used to treat lesions involving the hard and soft tissue of the periodontium. STOMATOL

180. Periodontics in General Practice. (1) W. Lecture 1 hour. Nathan

Implementation of the skills and knowledge of periodontology in the private practice environment. STOMATOL

401.01 Structure and Physiology of the Peridontium. (2) F. Prerequisite: Enrollment in postgraduate specialty program.

Lecture 2 hours.

Ryder

Advanced study in the oral tissues, with emphasis on their histophysiological aspects. STOMATOL

404. Applied Anatomy. (1) Sp. Prerequisite: Enrollment in postgraduate specialty program. Lecture 1 hour. Ryder

Course covers anatomy as it relates to anesthesia and periodontal surgery. STOMATOL

406.01. Hospital Anesthesiology. (6) Su. Prerequisite: Consent of instructor. Seminar 1 hour. Clinic 16 hours.

Taggart

Practical course in operating room anesthesia. Instruction in hospital administration, physical and preanesthesia evaluation of the patient, monitoring of vital signs, administration of intravenous psychosedation, general anesthesia, and handling of resultant medical emergencies. Clinical instruction is supplemented by seminars. STOMATOL

Clinical periodontics integrated into the regular medical and rehabilitative activities of MZ. Course provides patients with quality dental care, appreciation for preventive dentistry, and concept of total health care. Students are exposed to various medical conditions. STOMATOL

406.03. Hospital Periodontics. (4) W. Prerequisite: Perio 419.02. Lecture 4 hours. Taggart

Clinical periodontics integrated into the regular medical and rehabilitative activities of MZ. Course provides patients with quality dental care, appreciation for preventive dentistry, and concept of total health care. Students are exposed to various medical conditions. STOMATOL

406.04. Hospital Periodontics. (4) Sp. Prerequisite: Perio 419.03. Lecture 4 hours. Taggart

Clinical periodontics integrated into the regular medical and rehabilitative activities of MZ. Course provides patients with quality dental care, appreciation for preventive dentistry, and concept of total health care. Students are exposed to various medical conditions. STOMATOL

413.01. Treatment Planning & Surgery. (1) F. Seminar 1 hour. Taggart

Students present and discuss management of their cases that are either planned for treatment or currently under treatment. They are expected to defend their treatment plan and therapeutic procedure based on relevant literature and clinical experience. STOMATOL

413.02. Treatment Planning & Surgery. (1) W. Seminar 1 hour.

Taggart Students present and discuss management of their cases that are either planned for treatment or currently under treatment. They are expected to defend their treatment plan and therapeutic procedure based on relevant literature and clinical experience. STOMATOL

413.03. Treatment Planning & Surgery. (1) Sp. Seminar 1 hour. Taggart

Students present and discuss management of their cases that are either planned for treatment or currently under treatment. They are expected to defend their treatment plan and therapeutic procedure based on relevant literature and clinical experience. STOMATOL

413.04. Treatment Planning & Surgery. (1) SS1. Seminar 1 hour. Taggart

Students present and discuss management of their cases that are either planned for treatment or currently under treatment. They are expected to defend their treatment plan and therapeutic procedure based on relevant literature and clinical experience. STOMATOL

416. Advanced Periodontology. (0-2) Su, F,W, Sp. Seminar 1 hour. Levine

Each student will attend 20 literature-review sessions on topical issues in periodontology. STOMATOL

416.01. Original Investigation. (1-5) F. Prerequisite: Enrollment in postgraduate

specialty program or consent of instructor. Lab 3-15 hours. Armitage

Original research under the supervision of a mentor. STOMATOL

416.02. Original Investigation. (1-5) W. Prerequisite: Enrollment in postgraduate specialty program or consent of instructor. Lab 3-15 hours.

Armitage

Original research under the supervision of a mentor. STOMATOL

423.01. Adv Treatment Planning & Surgery. (1) F. Seminar 1 hour. Taggart

Students present and discuss management of their cases that are either planned for treatment or currently under treatment. They will be responsible for defending their treatment plan and therapeutic procedures based on relevant literature and clinical experience. STOMATOL

423.02. Adv Treatment Planning & Surgery. (1) W. Seminar 1 hour. Taggart

Students present and discuss management of their cases that are either planned for treatment or currently under treatment. They will be responsible for defending their treatment plan and therapeutic procedures based on relevant literature and clinical experience. STOMATOL

423.03. Adv Treatment Planning & Surgery. (1) Sp. Seminar 1 hour. Taggart

Students present and discuss management of their cases that are either planned for treatment or currently under treatment. They will be responsible for defending their treatment plan and therapeutic procedures based on relevant literature and clinical experience. STOMATOL

423.04. Adv Treatment Planning & Surgery. (1) SS1. Seminar 1 hour. Taggart

Students present and discuss management of their cases that are either planned for treatment or currently under treatment. They will be responsible for defending their treatment plan and therapeutic procedures based on relevant literature and clinical experience. STOMATOL

429.01. Periodontal Therapy. (6) Su. Prerequisite: Perio 419.01 or 419.02 or 419.03 or 419.04. Clinic 18 hours.

Taggart

Clinical procedures in periodontal therapy. This course is an enlargement on earlier clinical experience. STOMATOL

429.02. Periodontal Therapy. (6) F. Prerequisite: Enrollment in postgraduate periodontal therapy. Clinic 18 hours.

Taggart Clinical procedures in periodontal therapy. STOMATOL

429.03. Periodontal Therapy. (6) W. Prerequisite: Perio 429.02. Clinic 18 hours. Taggart

Advanced surgical techniques in manage ment of periodontal lesions. STOMATOL

429.04. Periodontal Therapy. (6) Sp. Prerequisite: Perio 429.03. Clinic 18 hours. Taggart

Advanced surgical techniques in manage ment of periodontal lesions. STOMATOL

Pharmaceutical Chemistry

111. Organic Chemistry. (2) F. Lecture 2 hours. Ketcham Survey of basic concepts and topics in phar-

maceutical chemistry, including acid/base behavior, stereochemistry, reaction mechanisms, carbohydrates, amino acids, and peptides. PHARM CHEM

112. Organic Chemistry. (2) W. Prerequisite: PC 111. Lecture 2 hours.

Miller Continuation of PC 111 with emphasis on oxidation/reduction reactions, lipids, heterocyclic compounds, molecules containing sulfur and phosphorus and biopolymers. PHARM CHEM

113. Bioanalytical Chemistry. (2) Sp. Lecture 1 hour. Lab 4 hours.

Kahl Lecture and laboratory experiments in identification and quantification of drugs and

metabolites in biological fluids. PHARM CHEM

120. Principles of Pharm Chem. (3) § F.

132. Drugs Acting on CNS. (3) W. Prerequisite: Pharmaceutical Chemistry 120. Lecture 3 hours. Gibson

A systematic survey of the chemical features of synthetic drugs, including correlations between chemical structure and biological activity. Emphasis on drugs affecting the central nervous system. PHARM CHEM

134. Antibiotics/Anticancer Drugs. (2) F. Prerequisite: Pharmaceutical Chemistry 120 and concurrent enrollment in Pharmacology 134. Lecture 2 hours. Oppenheimer

A systematic survey of the chemical features of synthetic drugs, including correlations between chemical structure and biological activity. Emphasis on anti-infective and antineoplastic drugs. PHAR.M CHEM

157. Bioanalytical Theory & Techniques. (3) W. Lecture 2 hours. Lab 3 hours.

E. Lin, W. Sadee Analytical theory and techniques for determining drugs and metabolites in biological

fluids. PHARM CHEM 170. Group Studies. (1-4) § F, W, Sp. Prerequisite: Consent of instructor and adviser. Agabian

Group studies of selected topics in pharmaceutical chemistry. PHARM CHEM

198. Supervised Study. (1-5) F,W, Sp. Staff

Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. PHARM CHEM

199. Laboratory Project. (1-5) F,W, Sp. Staff

A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. PHARM CHEM

201A. Basic Principles of Medicinal Chemistry. (2) § F. Lecture 2 hours. Wang

Introduction to basic principles of medicinal chemistry, with focus on physiochemical aspects of drug-target interactions, structure and biology of drug receptors, drug metabolism-bioactivation, and pharmacokinetics and drug targeting. PHARM CHEM

201B. Medicinal Chemistry & Pharmacology of Major Drug Classes. (2) §W. Lecture 2 hours.

Wang

A review of major drug classes with application of the basic principles of medicinal chemistry and pharmacology. PHARM CHEM

202A. Topics in Protein Structure. (2) §

W. Prerequisite: Consent of instructor. Offered in alternate years (alternates with 202B). Offered 1994-95. Lecture 2 hours. Kuntz, Cohen

Principles and recent advances in protein structure, including experimental and theoretical approaches. PHARM CHEM

202B. Topics in Nucleic Acid Structure.

(2) § W. Prerequisite: Consent of instructor. Offered in alternate years (alternates with 202A). Not offered 1994-95. Lecture 2 hours

Shafer, Shetlar

Principles and recent advances in nucleic acid structure, including experimental and theoretical approaches. PHARM CHEM

204. Introduction to Computer Programming. (3) § W. Prerequisite: Consent of Instructor. Lecture 3 hours Ferrin

An introduction to computer programming using the C language and the UNIX operating system. During the course, students learn to write, test, and debug programs of increasing complexity. Emphasis is on the basic principles in writing well-structured and modular code. PHARM CHEM

205. Molecular Biochemistry. (3) § Sp. Lecture 3 hours. Craik, Hawkes, Lameh

214. Adv Kinetics of Absorp & Disposn. (3) § W. Prerequisite: Pharmaceutical Chemistry 213 and Biochemistry 202 or equivalents. Lecture 2 hours. Lab 3 hours. **Benet and Staff**

Pharmacology

236. Transport & Reaction Processes. (3)

§ Sp. Prerequisite: Chemistry 260. Lecture 3

Basic principles applicable to transport and

reaction processes in model membrane and

237. Membrane Transport and Biophys-

structure; passive and active transport mecha-

nisms and implications for targeted and con-

ics. (2-3) § F. Prerequisite: Pharm Chem

236, Chemistry 260. Lecture 2-3 hours.

Biophysical consideration of membrane

trolled drug delivery. PHARM CHEM

238. Chemistry and Physics of Poly-

meric Systems. (2-3) §W. Prerequisite:

Pharm Chem 236, Chemistry 260. Lecture

Chemistry and physics of polymers relevant

to the design and function of programmable

drug delivery systems. PHARM CHEM

260. Computer Graphics. (3) § Sp. Pre-

requisite: Experience in programming and

hours. Offered in alternate years, Offered

consent of instructor. Lecture 2 hours. Lab 3

Application of interactive three-dimensional

computer graphics to modeling complex

biological systems, particularly large mol-

ecules and their interactions. Elements of

hardware and a detailed discussion of soft-

ware. Demonstration and self-scheduled

tory. PHARM CHEM

tor. Lecture 1 hour.

the graduate adviser.

sion of the graduate adviser.

Pharmacology

ference 1 hour.

PHARMACOL

Olson, Ives, Masters

Conference 2 hours.

toxicology. PHARMACOL

Masters

hours.

Staff

Staff

CHEM

Staff

CHEM

projects using the computer graphics labora-

266. Research Planning Conference. (1)

§ F,W, Sp. Prerequisite: Consent of instruc-

Discussion and practice in research problem

classes and small group sessions are organized

around students' interests by faculty within

the area of specialization. PHARM CHEM

Advancement to candidacy and permission of

For graduate students engaged in writing the

299. Dissertation. (0) § F, W, Sp. Prerequi-

site: Advancement to candidacy and permis-

For graduate students engaged in writing the

100A. Medical Pharmacology. (2) F. Pre-

requisite: Medical school 1st-year standing or

consent of instructor. Lecture 2 hours. Con-

Katzung, Benet, Trevor, Bourne, White,

pharmacodynamics, and pharmacokinetics.

General principles of pharmacology,

Pharmacology of antimicrobal drugs.

100B. Medical Pharmacology. (3) W.

Prerequisite: Pharmacology 100A or consent

of instructor. Lecture 2 hours. Conference 2

Katzung, Bourne, Burkhalter, Boushey,

Pharmacology of the autonomic nervous

airways, and the GI tract. Introduction to

100C. Medical Pharmacology. (3) Sp.

Prerequisite: Pharmacology 100A and 100B

or consent of instructor. Lecture 3-4 hours.

system, the cardiovascular-renal system, the

dissertation for the Ph.D. degree. PHARM

298. Thesis. (0) § F, W, Sp. Prerequisite:

thesis for the master's degree. PHARM

formulation and design selection. Core

250. Research. (1-8) § F, W, Sp.

biological systems. PHARM CHEM

hours. Guy, Siegel

Szoka, Guy

2-3 hours

Staff

1994-95.

Ferrin

Siegel and Staff

PHARM CHEM

Advanced consideration of pharmacokinetics including multicompartment models, assessment of intrinsic absorption and disposition parameters, nonlinear kinetics, and correlation of pharmacological response with the concentration-time course of a drug. Conference involves problem-solving exercises. PHARM CHEM

217. Fundamentals of Targeted Drug

Delivery. (2) § Sp. Prerequisite: One quarter of physical chemistry, kinetics and pharmacology, or consent of instructor. Hunt

The physical, chemical, biotechnological, and other techniques that are proposed to deliver active molecules to specific target sites in vivo are selectively explored in conjunction with toxological motivations for achieving targeted drug delivery. Feasibility and optimization are discussed. PHARM CHEM

219A. Enzymology. (3) § W. Lecture 3 hours. Offered in alternate years. Offered 1994-95

Santi, Kenyon

Selected topics on enzyme mechanisms. General survey of enzyme catalysis; general acid-base catalysis, propinquity effects, strain and conformational change. Covalent intermediates in enzyme catalysis. The role of cofactors in enzyme catalysis. Phosphate transfer reactions. PHARM CHEM

219B. Enzyme Mechanisms. (3) § Sp. Lecture 3 hours.

Santi, Kenyon

In-depth examination of specific enzyme reactions or systems, with emphasis on structure-function. PHARM CHEM

220. Research Conf in Pharmaceutics.

(1) § F,W, Sp. Lecture 1 hour.

Hunt, Lameh A program involving the presentation of core material in pharmaceutical chemistry in the pharmaceutics pathway. The presentations are made by graduate students and examination is by a series of cumulative examinations PHARM CHEM

221. Research Conf in Pharm Chem. (1)

§ F, W, Sp. Prerequisite: Graduate standing in the Department of Pharmaceutical Chemistry. Lecture 1 hour.

Kollman

A series of weekly research conferences in medicinal chemistry given by visiting lecturers, faculty, and advanced graduate students. PHARM CHEM

222. Physical Chemistry Seminar. (1) § F,

W, Sp. Prerequisite: Consent of instructor. Lecture 1 hour. **Kuntz and Staff**

Topics of current research interest in physical and biophysical chemistry. PHARM CHEM

225A-B. Graduate Research Opportunities. (1-1) § F, W. Prerequisite: Graduate standing in the Department of Pharmaceutical Chemistry. Lecture 1 hour. Craig

A series of weekly presentations of the research interests of the basic science faculty. The purpose is to acquaint new graduate students with the research in the Departments of Pharmacy and Pharmaceutical Chemistry, PHARM CHEM

230A. Spectroscopy. (3) § F or Sp. Prerequisite: Chemistry 162 or equivalent. Lecture 3 hours. Shetlar

electronic and vibrational spectroscopy; opti-

cal rotatory dispersion and circular dichroism.

The theory and application of molecular

230B. Spectroscopy. (3) § F or W or Sp.

Lecture 3 hours. Offered in alternate years.

Theory and application of nuclear magnetic

16.03. Original Investigation. (1-5) Sp. Prerequisite: Enrollment in postgraduate specialty program or consent of instructor. Lab 3-15 hours.

Armitage

Original research under the supervision of a mentor. STOMATOL

419.01. Clinical Periodontics. (5) F. Prerequisite: Enrollment in postgraduate specialty program. Clinic 15 hours. Taggart

Clinical procedures in periodontology therapy. STOMATOL

419.02. Clinical Periodontics. (5) W. Prerequisite: Enrollment in postgraduate specialty program. Clinic 15 hours.

Taggart

Clinical procedures in periodontology therapy. STOMATOL

419.03. Clinical Periodontics. (5) Sp. Prerequisite: Enrollment in postgraduate specialty program. Clinic 15 hours. Taggart

Clinical procedures in periodontology therapy. STOMATOL

419.04. Clinical Periodontics. (5) SS1. Prerequisite: Enrollment in postgraduate specialty program. Clinic 15 hours. Taggart

Clinical procedures in periodontology

Prerequisite: Chemistry 113. Lecture 3 hours.

Ortiz de Montellano

A study of physicochemical and biological factors which contribute to drug action; in vivo and in vitro biotransformations of drugs and related organic compounds. PHARM CHEM

121. Principles of Pharmaceutical

Chemistry. (2) W. Prerequisite: Pharmaceutical Chemistry 120 and concurrent enrollment in Pharmacology 121. Lecture 2 hours. Kahl

A systematic survey of the chemical features of synthetic drugs, including correlations between chemical structure and biological activity. Emphasis on steroids, prostaglandins, peptide hormones, and drugs for metabolic disorders. PHARM CHEM

122. Autonomic & Cardiovasc Drugs.

(3) Sp. Prerequisite: Pharmaceutical Chemistry 120. Lecture 3 hours.

Wang

A systematic survey of the chemical features of synthetic drugs, including correlations between chemical structure and biological activity. Emphasis on drugs affecting the autonomic nervous and cardiovascular systems as well as renal function. PHARM CHEM

The emphasis of the course will be on modern principles covering structural and functional aspects of nucleic acid and proteins; molecular biochemical methodologies that focus on topics of pharmaceutical interest; basic theories of molecular biology, plasmids, bacteriophage, nucleic acid and protein characterizations, site-directed mutagenesis, hybridomas and automated microchemical methods for protein and nucleic acid sequence determination. PHARM CHEM

206. Laboratory Rotation in Pharmaceutical Chemistry. (1-5) § F,W, Sp. Prerequisite: Consent of instructor. Lab 3-15

hours. Staff

A laboratory rotation course to familiarize new departmental graduate students with various approaches to research in the pharmaceutical sciences. PHARM CHEM

213. Kinetics of Drug Absorption &

Disposition. (3) § F. Prerequisite: Chemistry 115. Calculus background is recommended. Lecture 2 hours. Conference 2-3 hours. Øie, Giacomini

A basic study of the concentration-time course of drugs in the body, methods of pharmacokinetic analysis and modeling, and discussion of pharmacokinetic/physiologic interrelationships. Conference/workshop

PHARM CHEM

T. James

PHARM CHEM

Not offered 1994-95.

230C. Spectroscopy. (2) § W. Lecture 3 hours. Lab 2 hours.

resonance and electron-spin resonance.

Basus

Laboratory work in nuclear magnetic resonance. PHARM CHEM

231. Nuclear Magnetic Resonance. (3-4) § Sp. Prerequisite: undergraduate physics or physical chemistry. Chemistry 262 is recommended. Lecture 3-4 hours.

Basus

Theory and application of nuclear magnetic resonance. Following a basic core of lectures, lecture modules may be selected covering high-resolution two-dimensional NMR, magnetic resonance imaging, and in vivo magnetic resonance spectroscopy. PHARM CHEM

235. Mass Spectrometry in Life Sci. (2) § F. Prerequisite: Consent of instructor. Lecture 2 hours.

Falick

Elucidation of molecular structure, characterizations of mixtures, and quantitative measurements. Presentation of basic tools, concepts, and strategies in the complementary usage of currently available techniques in present biochemical and biomedical research. PHARM CHEM

Katzung, Trevor, Mi Masters

Pharmacology of the central nervous system and selected topics in endocrine and cancer drug therapy. PHARMACOL

121. Pharmacology. (1) W. Prerequisite: Concurrent enrollment in Pharmaceutical Chemistry 121. Lecture 1 hour. Masters

Systematic survey of action and uses of drugs with emphasis on steroids, hormones, and drugs for metabolic disorders. PHARMACOL

125. Pharmacology & Toxicology. (4) Sp. Prerequisite: Biochemistry 120A-B and Physiology 120 and 125. Lecture 3 hours. Conference 2 hours.

Masters

Systematic survey of action and uses of drugs acting on autonomic nervous and cardiovascular systems and the kidneys. PHARMACOL

126B-C. Dental Pharmacology. (2, 4) W,

Sp. Prerequisite: Physiology 110. Lecture 2 hours W; 3 hours Sp. Lab 3 hours Sp. Trevor

Objective of the course is to acquaint dental and dental hygiene students with the fundamentals of pharmacology. Various classes of drugs are examined in regard to actions, ab-

Pharmacology

130. Clinical Toxicology. (2) Sp. Prerequisite: Pharmacology 125 and 136. Lecture 2

hours. Burkhalter

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The occurrence, mode of action, recognition, and treatment of poisoning by environmental chemicals and therapeutic agents. PHARMACOL

134. Pharmacology. (2) E Prerequisite: Pharmacology 125 and concurrent enrollment in Pharmaceutical Chemistry 134. Lecture 2 hours.

Burkhalter, Guglielmo

Systematic survey of action and uses of antiinfective and anti-neoplastic drugs. PHARMACOL

136. Pharmacology & Toxicology. (4) W. Prerequisite: Pharmacology 125 and concurrent enrollment in Pharmaceutical Chemistry 136. Lecture 3 hours. Conference 2 hours. Masters

Systematic survey of action and use of drugs acting on the central nervous system. PHARMACOL

150.01. Pharmacology Research. (1.5 per week) Su, F;W, Sp. Prerequisite: Consent of instructor. Lecture and lab to be arranged. **Staff**

Students perform individual research in a field of their choice under the guidance and supervision of a member of the faculty. PHARMACOL

170. Group Studies. (1-4) F.W. Sp. Prerequisite: Consent of instructor. **Staff**

Group studies of selected topics in pharmacology. PHARMACOL

198. Supervised Study. (1-5) § F,W, Sp. **Staff**

Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. PHARMACOL

199. Laboratory Project. (1-5) § F,W, Sp. **Staff**

A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. PHARMACOL

206A. Mechanisms of Drug Action. (3) § W. Prerequisite: Consent of instructor. Students must register for both Pharmacology 206A and 206B to receive full credit after completion of both quarters. Seminar 3 hours.

Bourne and Staff

Lecture/seminar dealing with fundamental aspects of interactions between chemical compounds and components of biological systems. Mechanisms of drug action at molecular, biochemical, and membrane levels are considered. PHARMACOL

206B. Mechanisms of Drug Action. (3) § Sp. Prerequisite: Pharmacology 206A. Seminar 3 hours.

Lansman

Second quarter of 2-quarter lecture/seminar dealing with fundamental aspects of interactions between chemical compounds and components of biological systems. Mechanisms of drug action at molecular, biochemical, and membrane levels are considered. PHARMACOL

208. Oxidative Drug Metabolism. (2) § W Prerequisite: Consent of instructor. Lecture 2 hours.

Correie, Ortiz de Montellano

The biochemical, regulatory, and chemical aspects of mixed function oxygenases with particular emphasis on cytochrome P-450. PHARMACOL

220. Seminar. (0) § F, W, Sp. Correia

Presentations by guests and staff on current research in pharmacology. PHARMACOL

250. Research. (1-8) § F,W, Sp. **Staff**

PHARMACOL

298. Thesis. (0) § F, W, Sp. Prerequisite: Advancement to candidacy and permission of

Pharmacy

111. Non-Prescription Products. (1) W.

Conference 2 hours. Lem, Yee Evaluation and comparison of non-prescription medications and appliances. Discussion on their patterns of use in the community is included. Emphasis is on verbal communica-

tions. PHARMACY **112. Non-Prescription Products.** (1) Sp. Prerequisite: Pharmacy 111. Conference 2 hours.

Lem, Yee

Continuation of Pharmacy 111. PHAR-MACY

114. Biopharmaceutics & Biotechnology. (3) F. Prerequisite: Concurrent enrollment in Chemistry 115. Lecture 3 hours. **Cullander, Hoener**

A study of the physical, chemical, and biological factors which interact and dominate the design of dosage forms as drug delivery systems. PHARMACY

115. Biopharmaceutics & Biotechnol-

ogy. (2) W. Prerequisite: Pharmacy 114 and concurrent enrollment in Chemistry 116. Lecture 3 hours. Conference 2 hours. Workshop 2 hours.

C. Hunt, J. Lameh Continuation of Pharmacy 114. PHAR-MACY

116. Biopharmaceutics & Biotechnology. (3) Sp. Prerequisite: Pharmacy 115.

Lecture 3 hours. Guy, Szoka

Continuation of Pharmacy 115. PHAR-MACY

117. Biostatistics. (2) Sp. Lecture 2 hours.

Siegel, Verotta Survey of basic statistical methods useful for evaluating pharmaceutical and medical experiments and literature. Elementary theories of probability and hypothesis testing, parametric and nonparametric tests, linear regression and correlation. PHARMACY

123. Non-Prescription Drugs. (1) F. Prerequisite: Pharmacy 112. Conference 2 hours.

Lem, Yee

Continuation of Pharmacy 112. PHAR-MACY

127. Biopharmaceutics & Dispensing. (4) F Prerequisite: Pharmacy 116 and Pharmacy Administration 112. Lecture 2 hours. Lab 6 hours.

R. Day Communication of Pharmacy 116 with the addition of training in the professional and dispensing aspects of pharmacy. PHAR-MACY

128. Pharmacokinetics. (3.5) W. Prerequisite: Pharmacy 116. Lecture 3 hours. Conference 1-2 hours.

Hoener, Giacomini

Pharmacokinetic basis of variability in the therapeutic, pharmacologic, and toxicologic effects of drugs. PHARMACY

129. Pharmacokinetics. (3.5) Sp. Prerequisite: Pharmacy 128. Lecture 3 hours. Conference 1-2 hours.

Øie, Upton Continuation of Pharmacy 128. PHAR-

MACY

151. Community Health Education. (2) Sp. Lecture and discussion 2 hours. Participation in at least four community health education programs. **Lem**

Course is designed to train students for participation in community health programs dealing with drug abuse education and other drug-health related areas, such as poison prevention, venereal disease, and birth control. Course may be repeated for credit. PHAR.MACY

152. Special Topics in Pharmaceutics.
(2) Sp. Prerequisite: Pharmacy 116 or concurrent enrollment. Lecture 2 hours.
Szoka
An intermediate course offering an opportu-

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 interrelationship of pharmacist, veterinarian, and animal owner, and legal limitations on veterinary product dispensing. PHARMACY

168. Seminar in Clinical Pharmacokinetics–UC. (2) F,W, Sp. Prerequisite: Fourth-year standing or consent of instruc-

tor. Reports and conferences 6 hours. Enrollment limited. **Upton, Winter, Benet**

Discussion and review of the literature in the clinical application of pharmacokinetic principles in drug therapy. PHARMACY

168.02. Clinical Pharmacokinetics-UCI. (2) F.W, Sp. Prerequisite: Fourth-year standing or consent of instructor. Reports and seminar 3 hours. Enrollment limited. Shimomura

Discussion and review of the literature on the clinical application of pharmacokinetic principles in drug therapy. PHARMACY

170. Group Studies. (1-4) F,W, Sp. Prerequisite: Consent of instructor. **Staff**

Group studies of selected topics in pharmacy. PHARMACY

170.06. Molec & Cell Biology in Drug Devel. (2) Sp. Prerequisite: Consent of instructor. Lecture 2 hours. Szoka

Introduction to the role of cellular and molecular biology in developing new drugs, hormones, or therapeutic agents. PHAR-MACY

170.07. Communication Skills. (1.5) Sp. Prerequisite: First-year standing. Lab 2 hours. Seminar 1 hour. Enrollment limited. **Lem**

Aspects of communication which focus on skills pertinent to contemporary pharmacy settings. Discussion of principles of communication and practice of specific techniques in simulated practice situations. PHARMACY

198. Supervised Study. (1-5) F,W, Sp. Staff

Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. PHARMACY

199. Laboratory Project. (1-5) F.W. Sp. Staff

A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. PHARMACY

Pharmacy Administration

111. Pharmacy Laws. (2) W. Lecture 2 hours.

J.R. Nielsen

Introduction to court systems and administration boards and their relationship to the health professions. Discussion of basic principles of criminal law, negligence, and business law with particular emphasis on the legal relationship and responsibility of the practitioner to the patient. PHAR.MACY

112. Pharmacy Laws. (2) Sp. Lecture 2 hours.

J.R. Nielsen

A detailed examination of federal and state drug, cosmetic, and narcotic laws; their promulgation, enforcement, and effect upon the practice of pharmacy. Course involves some administrative work. PHARMACY

150. Marketing. (4) W. Lecture 4 hours. Lucaccini

An analysis of the marketing functions that facilitate the flow of pharmaceutical products from production to consumption, and of the decision-making processes of marketing institutions. Emphasis is given to the environmental factors affecting marketing decisions. **170. Group Studies.** (1-4) F,W, Sp. Prerequisite: Consent of instructor. **Staff**

204. Advanced PT Practice & Theory II.

(5) § W. Prerequisite: Concurrent enrolls

in the Kaiser Orthopedic Physical Therapy

and Clinical Residency Program or by con-

sent of program director. Lecture 3 hours

Course includes prioritizing patient com-

plaints, progressing treatment at optimal

rates, discharge planning, home exercise

programs, ergonomic analysis, function as-

for the neck, thoracic, lumbar spine, foot

lower extremity joints. PHYS THER

ture 1 hour. Lab 1.5 hours.

ankle, wrist/hand, shoulder, sacroiliac, and

205. Functional Anatomy Review. (1.5)

This course is designed for physical therapists

Using prosected (and/or dissected) cadavers,

the student is expected to relate the structures

to clinical kinesiology, biomechanics, and the

critically review research in applied anatomy.

206. PT Diagnosis of Physical Dysfunc-

tion. (1-4) § F, W, Sp. Prerequisite: Consent

of program director. Lab 3-12 hours.

Byl, Melnick, Richards, McKenzie,

Using clinical case examples, patient care

situations, directed observation, screening,

lectures, demonstrations, and clinical mea-

apply the principles of problem solving and

classifying problems of physical dysfunction.

210. Pharmacology & Radiology for

gram director. Lecture 2 hours.

PTs. (2) § Sp. Prerequisite: Consent of pro-

Survey course of pharmacology and radiol-

ogy of common psychological, social, and

neuromusculoskeletal disability. Pharmaco-

logical topics include principles, indications,

adverse reactions. Radiological topics include

principles, indications, advantages and disad-

vantages of appropriate radiological tech-

niques for assessing skeletal and soft tissue

218. Principles of Isokinetic Exercise.

(3) § W, Sp. Prerequisite: Permission of in-

Principles of isokinetic exercise applied to the

identification, assessment, and significance of

normal and abnormal muscle performance.

Patient preparation, exercise and testing pro-

tocols, test result interpretation, and equip-

ment maintenance will be emphasized. Vari-

able lecture/laboratory ratio. PHYS THER.

220. Current Topics (1) § Su, F, W, Sp.

Students, staff, or guest lecturers present

selected topics, reflecting developing direc-

tions in physical therapy (e.g., pain control,

neuroplasticity, premature high-risk infants,

TMJ problems, craniosacral therapy). May be

repeated for credit when topics vary. PHYS

250. Research Seminar in Physical

or by consent of program director.

Therapy. (1-8) § F. Prerequisite: Comple-

Problem solving, designs, methodologies,

data analysis procedures for specific topics in

basic and clinical physical therapy research.

Implementation of one facet of an ongoing

project, under guidance of the investigator.

251. Research Design and Applied Sta-

tistics. (2) § F. Prerequisite: Introductory

statistics and enrolled in the Graduate Pro-

gram in Physical Therapy and in the second

The functional application of parametric and

nonparametric statistics to different types of

research designs commonly used in physical

tion of PT research seminars through PT 253

rehabilitation engineering, mobilization,

structor. Lecture 2 hours. Lab 3 hours.

surements, the students will learn how to

pathological state. Students are expected to

Su. Prerequisite: PT 200 or equivalent. Lec-

sessment and advanced treatment techniques

Lab 6 hours.

McKenzie

PHYSTHER

Radtka, Arriaga

PHYSTHER

Byl and Staff

lesions. PHYS THER

Sadowsky

Seminar 2 hours.

Staff

THER

Byl

vear.

PHYSTHER

Byl. Melnick

Staff

Group studies of selected topics in pharmacy administration. PHARMACY

180A-B-C. Legal Problems in Health

Care. (2-2-2) F,W, Sp. Prerequisite: Thirdyear standing and consent of instructor. **J.R. Nielsen** Selected problems with directed readings and

library research on current legal (statutory and case law) issues affecting the delivery of pharmacy services. Discussion and paper. PHARMACY

198. Supervised Study. (1-5) F,W, Sp. Staff

Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. PHARMACY

Physical Therapy

110. Ortho & Rehab Diag/Treatment. (2) § F. Prerequisite: Completion of PT 200, PT 201, PT 202 and concurrent enrollment in Pathology 135.01 or by consent of program director. Lecture 2 hours. Hoaglund

Course presents the diagnostic, medical, and surgical principles and techniques which guide decision making and management by the orthopedic surgeon. Contraindications, precautions, and prognosis are discussed to guide the decision making of the physical therapist. PHYS THER

111. Neurology & Rehab Diag/Treat-

ment. (3) § W. Prerequisite: completion of PT 200, Anatomy 103.01, and Pathology 135.01 or by consent of program director. Lecture 2 hours. Garcia

Course presents the diagnostic and medical

clinical management by the neurologist.

cussed to guide decision making by the

physical therapist. PHYS THER

Lecture 1 hour.

Kaufman

Staff

principles which guide decision making and

Contraindications, precautions, and diagnosis

112. Pediatrics: Diagnosis & Treatment.

(1) § W. Prerequisite: Upper division course-

work in human development and Pathology

Course presents the diagnostic, developmen-

tal, behavioral, and medical principles of

and those with acute/chronic disease.

sis are discussed as they impact physical

therapy management. PHYS THER

Prerequisite: Approval by instructor.

riculum coursework. PHYS THER

program director.

Staff

McKenzie

clinical management for normal youngsters

Contraindications, precautions, and progno-

198. Supervised Study. (1-5) § Su, F, W, Sp.

This course is designed to permit physical

therapy students to do independent clinical

research under the supervision of faculty. This

course can be repeated as approved by faculty.

It cannot be used as a substitute for core cur-

199. Laboratory Project. (1-5) § Su, F, W,

Sp. Prerequisite: Approval of student faculty

adviser and project faculty or by consent of

project under direction of a faculty member

with the approval of the chairperson of the

200. Neuromusculoskeletal Anatomy. (6)

anatomy and human physiology or consent of

§ Su. Prerequisite: Upper division human

instructor. Lecture 3 hours. Lab 9 hours

Dissection and functional anatomy of the

neuromusculoskeletal system from a develop-

mental and biomechanical perspective, with

vascular and lymphatic systems related in a 3-

dimensional perspective. Principles and rela-

tionships reinforced through lecture, dissec-

Student conducts a laboratory research

department. PHYS THER

135.01 or by consent of program director.

of the different neurological diseases are dis-

the graduate adviser.

Staff

For graduate students engaged in writing the thesis for the master's degree. PHARMACOL

299. Dissertation. (0) § F,W, Sp. Prerequisite: Advancement to candidacy and permission of the graduate adviser. **Staff**

Staff

* *

For graduate students engaged in writing the dissertation for the Ph.D. degree. PHARMACOL

300A-B-C. Teaching Practicum. (1-3, 1-3, 1-3) § F,W, Sp. Prerequisite: Advancement to candidacy for the Ph.D. degree. **Staff**

Opportunity is provided to participate in a formalized way in the teaching of pharmacology under the direction of the faculty. PHARMACOL

nity to explore, in greater depth, special drug delivery systems and some fundamental relationships involved in their design or action. PHARMACY

154. Percutaneous Absorption. (2) W. Prerequisite: First-year standing. Lecture 2 hours. Offered in alcornets water. Not affered

hours. Offered in alternate years. Not offered 1994-95.

Guy, Potts

An elective course which presents material dealing with the penetration of drugs and other chemicals across the skin. PHAR-MACY

155. External Drug Products. (3-4) W, Sp. Prerequisite: Pharmacy 127. Lecture 2-3 hours. Lab 3-6 hours.

Blake

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. PHARMACY

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. PHARMACY

154. Community Pharmacy Management. (4) Sp. Prerequisite: Basic economics or consent of instructor. Lecture 4 hours. Lucaccini

Principles of management, specially directed toward developing familiarity with current problems peculiar to community pharmacy operation. Emphasis is given to elements in locating, organizing, operating, and adapting a pharmacy. PHARMACY

155. Accounting. (3) F. Lecture 1 hour. Discussion 2 hours.

Lucaccini

Consideration of the fundamental concepts of accounting and its applied uses, with special emphasis on the accounting requirements of the community pharmacy. Problem cases and demonstrations are presented. PHAR-MACY

160. Hith Prof Family & Business Law. (2) Sp. Lecture 2 hours.

J.R. Nielsen

A survey of laws relating to landlord-tenant dissolution, property division, support payments, probate and decedent's estates, with particular emphasis on how pharmacists may expect their practice to be affected by these laws, and some practical preventive legal techniques. PHAR MACY tion laboratories, studies of presections, and weekly integrative clinical seminars. PHYS THER

201. Kinesiology & PT Assessment. (3) § Su. Prerequisite: Completion of prerequisite coursework in kinesiology, exercise physiology, anatomy, and physiology or by consent of program director. Lecture 1 hour. Lab 6 hours.

Richards, Byl

Application of surface anatomy, structural and biomechanical principles to normal trunk and extremity motion within the physical therapy assessment. Principles of measurement, instrumentation, administration, and interpretation of standardized and clinical evaluation techniques reviewed in a lecture and lab setting. PHYS THER

202. Therapeutic Exer and Modalities.

(2) § W. Prerequisite: Completion of prerequisite coursework in exercise physiology and human physiology or by consent of program director. Lecture 1 hour. Lab 3 hours. **Richards**

In lecture and laboratory setting, physiological, theoretical, and administrative principles are applied to the application of therapeutic modalities and the design and implementation of therapeutic exercise programs to prevent disability, maintain positive health, and restore function. PHYS THER therapy research. This course builds on an introductory level of statistics and provides the logic for selecting the proper tests for research in physical therapy. PHYS THER.

252. Research Seminar: Critique of Physical Therapy Literature. (1) § W.

Prerequisite: Completion of a course in statistics or by consent of program director. Seminar 3 hours.

Byl, Sadowsky

The first seminar of a research series focusing on problems of research in physical therapy, practical statistics, writing abstracts and critiques of research publications, and learning how to organize a literature review for a research topic. PHYS THER

253. Research Seminar: Proposal Writ-

ing. (1) § F Prerequisite: grade B or better in PT 252 or by consent of program director. Seminar 3 hours.

Byl

Converting the research question to a research hypothesis, and proposal writing including preparation of a proposal for a research project. PHYS THER 254. Research Seminar: Data Analysis.

(1) § Sp. Prerequisite: Completion of PT research seminars 730, 252 and 253 or by consent of program director. Seminar 1 hour. Byl

This is the last seminar in the research series, and includes data analysis, data interpretation, problem solving, manuscript preparation, and presentation of results to class and other professionals, PHYS THER

300. Practicum in Teaching. (1-4) § F.W. Sp, SS3. Prerequisite: Enrolled in Graduate Program in Physical Therapy and satisfactory completion of PT 200. Consent of instructor. **Staff**

Training in teaching in a course offered by the Graduate Program in Physical Therapy under the supervision of instructor in charge. Laboratory teaching, presentation of lecture material, experience in setting up and correcting of examinations, and participation in course. PHYS THER

410. Clinical Clerkship. (0) § W. Prerequisite: Completion of academic coursework with overall *B* average or by consent of program director. Clinic 1 day/week. **S. Richards**

Students observe and assist the physical therapy clinician in the provision of assessment, evaluation, and physical therapy treatment services in one practice setting, one day a week for 11 weeks. PHYS THER

411. Clinical Clerkship. (0) § Sp. Prerequisite: Enrolled in Graduate Program in Physical Therapy and satisfactory completion of academic coursework with overall *B* average to enter the clinical clerkships Open only to students enrolled in the Graduate Program, or by consent of program director. Clinic 1 day/week.

S. Richards

Students develop their physical therapy assessment skills and integrate their didactic information with patient treatment by working closely with a clinical preceptor in the clinical setting to evaluate patients under supervision and directly observe staff provide physical therapy treatment. PHYS THER

414. Clinical Clerkship. (0) § SS3, F,W, Sp. Prerequisite: PT 410, PT 411. Open only to students enrolled in the Graduate Program. Forty hours/week for 6-12 weeks. **S. Richards**

Students provide patient care under the guidance and supervision of a clinical preceptor in a clinical facility affiliated with UCSEThe student is expected to progress to increased independence of physical therapy practice. PHYSTHER

418. Advanced Clinical Clerkship. (0) § Su, F, W, Sp.

S. Richards

This advanced clinical clerkship is specifically arranged to enable the student to develop advanced clinical skills under the supervision of a clinical preceptor in one clinical setting. Setting and emphasis will vary. PHYS THER

Physiology

100. Organ System Physiology. (6) § W. Prerequisite: Anatomy 100 and Interdepartmental Studies 100 and concurrent enrollment in Biochemistry 100; or by consent of instructor. Lecture 4 hours. Lab 4 hours. Conference 2 hours.

Bunnett

Normal function of the cardiovascular, respiratory, and renal systems and the metabolic functions of the body as a whole are studied in lectures, conferences, laboratory exercises, demonstrations, and clinical illustrations. PHYSIOLOGY

101. Endocrinology & Gastroenterol-

ogy. (5) § Sp. Prerequisite: Anatomy 100A-B, Biochemistry 100, Physiology 100, Interdepartmental Studies 100, or consent of instructor. Lecture 1 hour. Conference 4 hours. Lingappa

Within the framework of endocrine and gastrointestinal physiology, the course will strive to teach the information necessary to achieve an understanding of key physiologic principles. PHYSIOLOGY **120.01. Mammalian Physiology.** (2.5) W. Prerequisite: Physiology 125.01 required for students in graduate program in Physical Therapy. Open only to students enrolled in the Graduate Program in Physical Therapy; or by consent of instructor. Lecture 2 hours. Conference 1 hour.

Ganong

Study of the integrative systems of the mammalian organism, particularly the gastrointestinal and endocrine systems. PHYSIOLOGY

125. Mammalian Physiology. (6) E Prerequisite: Consent of instructor. Lecture 4 hours. Lab 4 hours. Conference 2 hours. **Mines**

Physiology of the human cardiovascular, respiratory and renal systems is stressed, with special attention to developing problem solving skills using the material. PHYSIOLOGY

125.01. Mammalian Physiology. (5) F. Prerequisite: Completion of course work in summer term or by consent of instructor. Lecture 4 hours. Conference 2 hours. **Mines**

Physiology of the human cardiovascular, respiratory and renal systems is stressed, with special attention to developing problem solving skills using the material. PHYSIOLOGY

126. Neuroscience for Pharmacy. (4) W. Prerequisite: Physiology 125 or consent of instructor. Lecture 3 hours. Lab 1.5 hours. Conference 1 hour.

Korenbrot and Staff

Course is designed primarily for students in the School of Pharmacy. The course will present an integrated approach to the physiological operations of the nervous system and the morphological or anatomical substrates in which these occur. PHYSIOLOGY

150.01. Research in Physiology. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor. Lecture and lab to be arranged. **Staff**

Individual research in endocrinology, respiratory physiology, neurophysiology, cardiovascular physiology, cell physiology, or other areas offered by individual staff members. PHYSIOLOGY

170.01. Medical Scholars Program

Workshops. (1) W. Prerequisite: Consent of instructor (this course is offered as part of the UCSF Medical Scholars Program, which endeavors to encourage students to pursue careers in academic medicine).

Dallman.

Workshops in organ system physiology, offered concurrently to the first-year course, which will present challenging material in the form of problem sets which students will solve in groups. Material geared toward highachieving students will augment basic coursework with clinical and basic science information. PHYSIOLOGY

198. Supervised Study. (1-5) § F,W, Sp. Prerequisite: Consent of instructor **Staff**

Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. PHYSIOLOGY

199. Laboratory Project. (1-5) § F,W, Sp. Prerequisite: Consent of instructor.

Staff A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department.

PHYSIOLOGY 201. Advanced Integrative Physiology. (4) § Sp. Prerequisite: Physiology 100 or

equivalent. Lecture 2 hours. Reid and Staff

The purpose of this course is to review in depth selected topics in regulatory and integrative physiology. The emphasis will be on cardiovascular, renal, and respiratory physiology, but other systems will also be covered. PHYSIOLOGY

203. Adv Topics in Cell Physiology. (4) § Sp. Seminar 4 hours.

 Korenbrot, Verkman
 Study of cellular and molecular mechanisms of membrane transport. Course will be based on lectures and discussions of current literature on both active and passive transport of electrolytes and non-electrolytes across biological cell membranes. PHYSIOLOGY

223. Physiology Research Seminar. (1) § F.W. Sp. Prerequisite: Consent of instructor. Seminar 1 hour. Hall

Seminar presentations by guest speakers, alternating with discussion by Physiology staff members of their current research. Each quarter, a different topic of physiological interest is the subject of guest presentations. Students may enroll for any number of quarters. PHYSIOLOGY

224. Molec Biol of Lipid Metabolism.

(2) § Sp. Prerequisite: Consent of instructor. Lecture 2 hours. Offered in alternate years. Offered 1994-95. Taylor, Fielding

The structure and regulation of the genes and proteins that control lipid metabolism, including plasma apolipoproteins, receptors, and enzymes. Molecular and cellular biology of mammalian lipid metabolism examined with respect to regulation of various proteins involved in transport, binding, and utilization of lipids. PHYSIOLOGY

227. The Scientific Method. (2) § W. Prerequisite: Graduate or professional education in at least two of the following: biochemistry, microscopic anatomy, cellular physiology or biophysics, systems physiology, microbiology, or equivalent, or by permission of instructor. Seminar 2 hours.

Rothman

Focus on the evaluation of modern research in the biological sciences, in terms of the consonance of particular experimental efforts with the historical and philosophic basis of scientific investigation. STOMATOL

228. Secretion. (2) § W. Lecture 1 hour. Rothman

Origins and experimental basis of vesicular and non-vesicular theories for the secretion of organic cell products. Goodness of fit of data to theoretical models and the role of scientific test in evaluating hypothetical constructs will be emphasized. STOMATOL

250. Research. (1-8) § F;W, Sp. Prerequisite: Consent of instructor. Lab variable. **Staff** PHYSIOLOGY

298. Thesis. (0) § F,W, Sp. Prerequisite: Advancement to candidacy and permission of the graduate adviser.

Staff For graduate students engaged in writing the thesis for the master's degree. PHYSIOL-OGY

299. Dissertation. (0) § F,W, Sp. Prerequisite: Advancement to candidacy and permission of the graduate adviser. **Staff**

For graduate students engaged in writing the dissertation for the Ph.D. degree. PHYSIOL-OGY

300. Teaching Practicum. (0) § F,W, Sp. Prerequisite: Previous training in physiology and consent of instructor. Lecture and lab variable.

Staff

Practice in teaching physiology under faculty supervision. Students supervise laboratory work, conduct conferences, deliver lectures, and assist in preparing and grading examinations. Responsibilities are assigned according to the individual's stage of development. PHYSIOLOGY

301. Scientific Writing. (0) § W. Prerequisite: Consent of instructor. Seminar 4 hours. **Coleridge, Zeiger**

A seminar designed to teach postdoctoral fellows and graduate students how to best put into words, tables and figures work done in the laboratory, and how to do so clearly, simply, precisely, convincingly, and briefly, so that others may understand. PHYSIOLOGY

302. Teaching Techniques. (0) § F.W. Prerequisite: Consent of instructor. Lecture 1.5 hours. Enrollment limited. **Staub**

A course in teaching techniques. Students present short lectures, and videotapes of these presentations are analyzed by self- and group criticism. PHYSIOLOGY

100B. Psychological Foundations of Medical Practice II. (1) W. Prerequisite: Psychiatry 100A. Two hours per week total will vary with lectures, panels, and seminars. Kaltreider, Cohen

The life cycle in health and illness, personality style, emotion and psychotherapy will be covered. PSYCHIATRY

110. Psychiatry Core Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 131A-B-C, Psychiatry 100A, 100B and 131A-B. Open to UCSF students only. Kaltreider

Six-week assignment to a psychiatric service at UC orVAE Students, under supervision, are responsible for patient evaluation and participation in treatment planning for inpatients, outpatients, and consultation/liaison. They attend seminars related to clinical work, and make field visits to other types of psychiatric facilities. PSYCHIATRY

131A-B. Intro to Clinical Psychiatry. (2-2) W, Sp. Lecture 1 hour. Seminar 2-3 hours. Elkin, Shuchman (A), Marmar, Vinogradov (B)

Introduction to clinical psychiatry with particular emphasis upon knowledge important in general medical practice. Course format includes lectures, small group teaching, interviewing patients, syllabus reading, and the use of clinical videotapes and film. PSYCHIA-TRY

140.01. Advanced Psychiatry Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Psychiatry 110 and consent of instructor. **P. Martin**

Participation in psychiatric assessment and treatment, with supervision of attending and resident staff. Options include consultationliaison service, or inpatient adult or child service. Other special focus experiences such as outpatient, AIDS, geriatrics, may be arranged with instructor. PSYCHIATRY

140.02. Off-Campus Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of Department of Psychiatry. P. Martin

Clinical clerkship in off-campus hospitals, approved by the chairperson of the department and the dean. PSYCHIATRY

140.06. Behavioral Medicine: Biopsychosocial Approach to Patients-VAE (1.5 per week) Su, F, W, Sp. Prerequisite: Psychiatry 110.

Leigh

A 4-6 week elective rotation at the Behavioral Medicine Center and the Psychiatric Consult Service. Students given opportunity for comprehensive patient evaluation using the biopsychosocial treatment plan; participation in psychosomatic medicine research, work with interdisciplinary team. Housing provided by UCSE PSYCHIATRY

140.07. Advanced Adult Inpatient Fo-

rensic Psychiatry–AS. (1.5 per week) Su, F, W, Sp. Prerequisite: Completion of core curriculum in Psychiatry and approval of Dean's Office. Restriction: Must be by prior arrangement only. Make arrangements with Department of Psychiatry, UCSF Fresno, 2615 E. Clinton Avenue, Fresno, CA 93703. Lecture 5 hours. Seminar 2 hours. Library research 8 hours.

Leigh, Saunders

In world's largest forensic hospital, students will observe admissions, evaluations, interviews of patients with a wide spectrum of psychopathology. Will participate in treatment planning and forensic seminars. Emphasis on legal aspects of psychiatry. Room and board provided through Atascadero State Hospital. PSYCHIATRY

140.08 Consultation Clerkship-VMC. (1.5/wk) Su, F,W, Sp. Prerequisite: Psychiatry 110 and consent of Department of Psychiatry. **Ahles**

Supervised evaluation and treatment of patients on the Psychiatry Consultation Service, Liaison Units, Psychosomatic Clinic, and Emergency Room. Learning opportuni-

150.01. Psychiatric Research. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of Department of Psychiatry.

Kaltreider, Jones

Participation according to students' level of experience in experimental work in areas such as neurophysiology, operant conditioning, psychophysiology, immunochemistry, and nonlexical communication. All work is under the close supervision of members of the faculty. PSYCHIATRY

170.02. Alcoholism. (1) F. Lecture 1 hour. P. Stewart

General issues in substance abuse as well as the pharmacologic, medical, and neurologic aspects of alcohol abuse. Treatment issues will be considered with emphasis on Alcoholics Anonymous. Family issues arising from alcohol abuse and special concerns for the health professional. PSYCHIATRY

170.17A. Issues in Psychiatry. (1-3) F,W, Sp. Prerequisite: Consent of Department of Psychiatry. Seminar 1-3 hours. **Kaltreider**

Explores focal psychiatric issues in systematic format. Current electives include substance abuse, women's psychological health, the development of physician identity, crosscultural issues. New topics are designed according to faculty/student interests. PSY-CHIATRY

170.17B. Issues in Psychiatry. (1-3) F,W, Sp. Prerequisite: Consent of Department of Psychiatry. Seminar 1-3 hours. **Kaltreider**

Explores focal psychiatric issues in systematic format. Current electives include substance abuse, women's psychological health, the development of physician identity, crosscultural issues. New topics are designed according to faculty/student interests. PSYCHIATRY

170.17C. Issues in Psychiatry. (1-3) F,W, Sp. Prerequisite: Consent of Department of Psychiatry. Seminar 1-3 hours. **Kaltreider**

Explores focal psychiatric issues in systematic format. Current electives include substance abuse, women's psychological health, the development of physician identity, crosscultural issues. New topics are designed according to faculty/student interests. PSY-CHIATRY

170.18. Psychotherapy Research. (3) Sp. Prerequisite: Course in statistics and consent of Department of Psychiatry. M. Horowitz

Participation in research activities at the Cen-

ter for the Study of Neuroses. Lectures, labo-

ratory, individual guidance to readings, and

170.19. Cultural Considerations in

Health Care. (1) Sp. Lecture: 1 hour.

TRY

Lee

patient observation are included. PSYCHIA-

Introduction to the values and beliefs of vari-

ous minority cultures regarding health and

illness, with an emphasis on practical clinical

skills in working with a diverse patient popu-

lation, understanding particular psychosocial

stressors relevant to minority patients, and an

understanding of the historical factors which

impact on the health of minority popula-

170.20. Topics in the Psychology of

nursing students. Seminar: 1 hour.

Women: Feminist Persp. (1) W. Prerequi-

site: Open to medical students and graduate

In this seminar, there are small-group discus-

sions based on readings from feminist per-

spectives on the following topics: women's

moral development; dominance/subordina-

tion; eating disorders/body image; multiple

discriminations against women. PSYCHIA-

170.22. Life-Threatening Illness. (1) § W.

Seminar presents an effective clinical model

Prerequisite: Seminar 4 hours.

tions. PSYCHIATRY

Gartrell, Johnson

TRY

Garfield

110. Integrative & Nutritive Systems. (6) § Sp. Prerequisite: College-level biology, physics, and chemistry, or consent of instructor. Lecture 4 hours. Lab 1 hour. Conference 1 hour.

A. Miller

To provide understanding of the mechanisms and processes in various organ systems. Provide necessary background for learning about human disease and its treatment. Enhance understanding of the function of organs and cells. Provide knowledge for realization that oral functions and disease involve exactly the same processes as other human functions and disease. Help prepare skills necessary to understand and evaluate clinical literature. PHYSIOLOGY

120. Mammalian Physiology. (2.5) §W. Prerequisite: Physiology 125 required for students in School of Pharmacy; may be taken separately by graduate students with consent of instructor only. Lecture 2 hours. Conference 0.5 hour.

Reid and Staff

Study of the integrative systems of the mammalian organism, particularly the gastrointestinal and endocrine systems. PHYSIOLOGY **204. Topics in Physiology.** (2-3) § Sp. Prerequisite: A minimum of six units of introductory physiology. Seminar 2 hours. Optional term paper for additional unit. **Rothman**

This seminar discusses selected topics in cellular and integrative physiology. Readings are drawn from primary and secondary sources. PHYSIOLOGY

221. Molecular & Cellular Approaches to Cardiovascular Disease. (1.5) §W, Sp. Prerequisite: Physiology 100 or equivalent. Lecture 1 hour. Conference 0.5 hour.

Gold, Williams

Lectures will emphasize approaches to understanding mechanisms of disease at the molecular level. Focus will be on vascular biology and pathophysiology, and on molecular targets for therapeutics. PHYSIOLOGY

Psychiatry

First-Year Coordinated Instruction-This course provides a first opportunity to interview medical patients in small group settings, guided by experienced clinicians. Useful medical information is gathered in a comfortable, professional interchange, and one's identity as a physician also begins emerging in the process.

PGY I Courses—The Department of Psychiatry is currently developing new courses for PGY I residents. Please refer to the quarterly Schedule of Classes for a listing of those courses in the 400 series.

100A. Psychological Foundations of Medical Practice I. (2) E Lecture 2 hours. Seminar 1 hour.

Cohen, Sharp

Introduction to psychological principles influencing health behaviors and the physician-patient relationship. The life cycle and cross-cultural factors are explored. PSY-CHIATRY ties include teaching rounds, consultation seminar, biopsychosocial rounds, and consultation syllabus. PSYCHIATRY

140.09 Combined Family Practice/ Psychiatry Elective-VAF (1.5/wk) F.W, Sp. Prerequisite: Psychiatry 110. Blossom, Leigh

Integrated hands-on Family Practice and Psychiatric evaluation and treatment of patients in both Family Practice and Psychiatric Services. Geared to a comprehensive evaluation and treatment of patients. PSYCHIATRY

140.15 Longitudinal Elective. (1) Su, F,W, Sp. Prerequisite: Fourth-year standing. Clinic 4 hours.

Martin

Students work in clinics/residential treatment centers 4 hours/week for 3-9 months. The specialty areas include outpatient psychotherapy, geriatrics, adolescence, substance abuse treatment, trauma, psychopharmacology. Please contact Dr. Martin for arrangements. PSYCHIATRY for professionals caring for patients and families facing life-threatening illness. The format is interactive; the focus is on the sequence of events generally encountered by professional and patient from diagnosis through death. PSYCHIATRY

180. Sexual Issues in Medical Practice.

(2) W. Lecture 2 hours. Prerequisite: Psychiatry 100 A/B. Medical students only. Bullard, Alperstein

Introduces sexual health as an integral part of general medical care. Course (22 hours) mandated by California legislature. Interdepartmental teaching. PSYCHIATRY

198. Supervised Study. (1-5) F,W, Sp. Prerequisite: Consent of Department of Psychiatry.

N. Kaltreider and Staff

Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. PSYCHIATRY

214. Practice of Clinical Social Work.

(1.5) § F,W, Sp. Prerequisite: 1 year of clinical social work. Restricted to interns in clinical social work. Lecture 1.5 hours.

H. Roth

This course aims at integrating developmental and clinical theories with clinical social work practice toward enhancing clinical, concentual and consultative knowledge and

Psychiatry

400. Com Mental Health System. (1) Su, W. Required for first-year residents in Psychiatry. Seminar 1 hour.

Surber

Focus is on special treatment issues involved in the care of the chronically disabled patient and of patients of various ethnic and minority backgrounds. PSYCHIATRY

401. Intro to Clinical Interviewing. (1) Su, W. Prerequisite: Required for first-year residents in Psychiatry. Seminar 1 hour. Jacobs, Goldfinger

Course teaches the rudiments of interviewing psychiatric inpatients. PSYCHIATRY

402. Introduction to Psychopathology. (1) Su, W. Required for first-year residents in Psychiatry. Seminar 1 hour. Lu

Course provides a grounding in phenomenology and descriptive diagnostic features of the major psychopathologies, including the following types of disorders: schizophrenic, affective, organic mental, severe personality, and substance abuse. PSYCHIATRY

403. Intro to Psychopharmacology. (1) Su, W. Required for first-year residents in Psychiatry. Seminar 1 hour.

Batki Course addresses basic issues in prescribing, including patient compliance, the placebo effect, and the dynamic significance of medications. Also includes a review of basic neurochemical processes. PSYCHIATRY

404. Intro to Child Development. (1) Su, W. Required for first-year residents in Psychiatry. Seminar 1 hour.

Hanson

a Charles of the second state

An introduction to developmental framework, with emphasis on ages 0-3 years. PSY-CHIATRY

411. Forensic Psychiatry. (1.5) W. Required for second-year residents in Psychiatry. Seminar 1.5 hours. Terr

An elective seminar discussing the major aspects of forensic psychiatry relevant to the practice of the clinician. Topics covered include competency, commitment, and criminal responsibility. PSYCHIATRY

413. Psychol Aspects of Psychr. (1) F.W. Prerequisite: Required for second-year residents in Psychiatry. Seminar 1 hour. Marmar

Examination of neurotic and character disorders from a psychodynamic perspective. PSY-CHIATRY

415. Intro to Clinical Research. (1) W. Prerequisite: Psychiatry Resident II standing. Seminar 1 hour.

Zegans, Temoshok

Course will introduce residents to clinical research as an essential body of knowledge and skills which can be integrated into present and future clinical work. Consideration of research within four broad paradigms: intrapsychic, sociocultural, behavioral psychological, and psychobiological. PSY-CHIATRY

417. Child Psychopath/Psychotherapy. (1) Su, F. Prerequisite: Required for secondyear residents in Psychiatry. Seminar 1 hour. **Binger**, I. Philips

Seminar covers the theory and implementation of the technique of psychotherapy with children. Emphasis is placed on play therapy. The seminar will also cover psychopathology as manifested in children, including descriptions and possible ideologies. PSYCHIATRY

421. Psychoanalytic Psychotherapy. (1) F,W, Sp. Required for third-year residents in Psychiatry. Seminar 1 hour. Amini, Baumbacher

Course explores the application of psychoanalytic theory to psychotherapy. PSY-CHIATRY

422. Social Psychiatry. (1.5) F,W, Sp. Prerequisite: Required for third-year residents in Psychiatry, or consent of instructor. Seminar 1.5 hours.

F.A. Johnson, Pearlin

Course introduces residents to various aspects of social and community psychiatry. Topics

458. Research on Mental Processes. (1.5) Su, F, W, Sp. Prerequisite: Graduate standing in Psychology, or PGY 2-5 in Psychiatric Residency. Minimum commitment of one year, exception to some medical students for a one-quarter commitment. Seminar 1.5 hours.

Horowitz, Marmar, Weiss

Guided research using an apprenticeship model involving recorded information from psychotherapy, research interviews, and experimental procedures using cognitive science methods. Systematic readings in the literature on meaning structures and defensive processes, including issues of motivation, attention, learning, and emotion. PSY-CHIATRY

459. Evaluation of Psychotherapies. (1.5) F, W, Sp. Prerequisite: Resident in Department of Psychiatry or consent of instructor. Seminar 1.5 hours.

Marmar

Course provides framework for residents which will enable them to take a systematic and rational approach in evaluation of various psychotherapies, including a method of assessing the conceptual consistency and validity of a given approach. PSYCHIATRY

460. Theories of Personality. (1) F,W. Prerequisite: Resident standing in Department of Psychiatry or consent of instructor. Seminar 1 hour. E. Burke

Focus is on personality theories other than Freudian, such as Piaget, Skinner, and Rogers. Course includes an examination, study, and discussion of contemporary personality theories, their concepts, systematic application to the behavioral sciences, and research potentials. Parallel reading is required. PSYCHIATRY

462. Psychol Aspects Medication Usage. (1) F.W. Prerequisite: Consent of instructor. Seminar 1 hour. Nevins

Course explores the psychological implications of prescribing medications. PSYCHIA-TRY

465. Psychobiography & Creativity. (2-5) F, W, Sp. Prerequisite: Consent of instructor. Lecture 2-5 hours.

Ostwald

Course emphasizes the effects of mental illness on the lives of artists, scientists, statesmen, and other public figures. Biographical, autobiographical, and clinical studies of exceptional people will be compared. Students will be encouraged to select individual subjects for research. PSYCHIATRY

466. Behavioral Sciences Research. (1.5) Su, F, W, Sp. Prerequisite: Consent of instructor. Lab 4.5 hours

Callaway, Halliday, and Staff Course consists of supervised clinical and basic research in behavioral abnormalities, psychopathology, and experimental psychiatry. Specific subjects for research are chosen in conjunction with members of the staff. PSYCHIATRY

481. Child Observation. (1) Su. Prerequisite: Required for first-year child and adolescent residents, or consent of instructor. Seminar 1 hour. Child observation 2 hours Hanson

Provides knowledge and experience in systemic child observation. Observe child behavior/development at Child Care/Study Center. Seminar presentation of observation and experiences. PSYCHIATRY

482. Growth & Development Seminar. (1) F,W, Sp. Prerequisite: Required for firstyear child psychiatry fellows, or consent of instructor. Seminar 1 hour. Siegel, Lieberman

Provides theoretical understanding of normal growth and development. Format is primarily presentations and group discussions. PSYCHIATRY

483. Interviewing Techniques and Psychotherapy of Children. (1) Su, F, W, Sp. Prerequisite: Required for first-year child and

adolescent psychiatry residents, or consent of instructor. Seminar 1 hour.

486. Devel Disabilities Seminar. (2) Su. Prerequisite: Required for first-year child psychiatry fellows, or consent of instructor. Seminar 2 hours

Hanson

Lectures focus on mental retardation, deafness, blindness, and cerebral palsy, with emphasis on the developmental, family, and social aspects. PSYCHIATRY

487. Adolescent Continuous Case Seminar. (1.5) F,W, Sp. Prerequisite: Required for second-year child psychiatry fellows, or consent of instructor for others. Seminar 1.5 hours.

Gelber Participation with senior staff member to discuss ongoing dynamics of psychotherapeutic work with adolescents. PSY-

CHIATRY 488. Child Psychiatry Clinical Conf.

(1.5) F, W, Sp. Prerequisite: Required for first- and second-year child psychiatry fellows, or consent of instructor for others. Conference 1.5 hours. Sikorski

The Child and Adolescent Service has developed a continuing education program of distinguished speakers in the field of child psychiatry and related disciplines. Clinical problems and mini-courses are presented. PSYCHIATRY

489. Social & Legal Issues: Their Impact

on Clinical Practice. (1) W, Sp. Prerequisite: Required for first-year child psychiatry fellows; others with the consent of the instructor. Seminar 1 hour.

Hanson, Simpson

Covers current social and legal issues, policy questions, mental health legislation, and major court decisions which have impact on clinical practice and services. Areas included: divorce and child custody/support, domestic violence, day care, juvenile justice, schools, and cross-cultural psychiatry. PSYCHIATRY

490. Psychological & Educational Evaluation. (0.5) Su. Prerequisite: Required

for first-year child psychiatry fellows or consent of instructor for others. D. Morrison

Seminar is focused on the most common and prevalently used methods of assessing intelligence, educational achievement, perceptualmotor integration, and personality in children. Actual testing materials as well as supporting research are covered. Participation is required. PSYCHIATRY

491. Res Methodology in Child Psychr. (1) F, W, Sp. Prerequisite: Required for second-year child psychiatry fellows, or consent of instructor. Seminar 1 hour. **D.** Morrison

Review of basics of experimental design and methodology such as reliability and validity of measuring techniques, statistical inference, control group designs, and pre- and post-test designs. Clinical research with children provides a focus for discussion of relevant issues. PSYCHIATRY

492. Ped Consultation Orientation. (1.5) Su. Prerequisite: Required for second-year child psychiatry fellows, or consent of instructor. Seminar 1.5 hours. Shatkin

Discussion of goals, attitudes, and skills required in child psychiatry consultation/liaison work. PSYCHIATRY

493. Pediatric Consultation Seminar.

(1.5) F. Prerequisite: Required for secondyear child psychiatry fellows, or consent of instructor. Seminar 1.5 hours. Shatkin

Discussion of formal consultations of cases requested by the Pediatric Inpatient Service. Child Study Center, Family Medicine Clinic, etc. PSYCHIATRY

494. Com Consultation Literature Sem.

(1) Su. Prerequisite: Required for secondyear child psychiatry fellows, or consent of instructor. Seminar 1 hour. Reece, Sikorski

Review of literature and discussions on community consultation. PSYCHIATRY

498. Biological Basis of Child & Adolescent Psychiatry. (1) SS2. Prerequisite: Required for first-year child psychiatry fellows. Seminar 1 hour. Binger, Lowe

Review of biological bases and psychopharmacological approaches to child and adolescent psychiatry. PSYCHIATRY

499. Child and Adolescent Forensic

Seminar. (0.75) Su. Prerequisite: Required for second-year child psychiatry fellows. Seminar 2 hours. Terr

A seminar discussing the major aspects of forensic child and adolescent psychiatry relevant to the practice of the clinician. Topics covered include childhood sexual abuse, trauma, court evaluations, and custody issues Required for Child Psychiatry Fellows. PSY-CHIATRY

Psychology

180.05. Stress among HIth Professionals. (2) § F. Seminar 2 hours. Garfield

Course will focus on a theoretical understanding of the origins of job stress and the nature of burnout, and on practical and programmatic methods of reducing the stress overload incurred by physicians, nurses, and other health care professionals. PSYCHIA-TRY

180.08. Brain-Behavior Research Methods. (3) § W. Prerequisite: Survey of physiological psychology, or equivalent. Requires prior consent of instructor. Lecture 2 hours. Seminar 1 hour. Galin and Staff

An extensive survey of techniques and strategies emphasizing critical appreciation of principles and range of appropriateness rather than how-to-do-it. Topics include clinical lesion studies, microscopic anatomy, neuroradiology, neurochemistry, psychopharmacology, autonomic psychophysiology, scalp electrophysiology, behavioral genetics, neuropsychological assessment. PSYCHIA-TRY

180.09. Neuropsychology of Dissociation. (3) § F. Prerequisite: Prior consent of instructor. Seminar 3 hours. Galin

Topics in Neurological Disconnection and Psychological Dissociation: an advanced seminar considering cognitive and neuropsychological aspects of integration and fragmentation of the whole person. Topics will vary from year to year. Examples are splitbrain syndromes, hypnosis, and multiple personality disorder. PSYCHIATRY

181.02. Cerebral Hemispheric Specialization. (2) § Sp. Prerequisite: Background in neurophysiology, anatomy, cognitive psychology; intended for advanced students. Requires prior consent of instructor. Seminar 2 hours. Galin

Group discussions of readings in seminar format of neuropsychology of hemispheric specialization and integration; developmental, psychiatric, and educational implications; evaluation of data from study of brain lesions, electrophysiological recordings, and behavioral testing. PSYCHIATRY

181.07. Coping with Stress in Med School. (1) § F,W, Sp. Seminar 1 hour. Enrollment limited. Priority given to medical students. Blackwell

Consideration of psychological processes utilized under stress and of alternative constructive methods for coping, with practice in using these techniques. Course is designed to help students handle stress and apply such principles to management of patients. PSY-CHIATRY

198. Supervised Study. (1-5) § F,W, Sp. Staff

Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. PSYCHIATRY

222. Practicum in Program Evaluation.

(2-4) § F, W, Sp. Prerequisite: Graduate standing and some experience in interviewing. Lab 3 hours. Seminar 6 hours during first 4-6 weeks.

Blackwell

After an intensive seminar introduction to basic concepts of evaluation, students will carry out various evaluations on clinical clerkships in the School of Medicine. The length of the introductory period will depend on previous experience of students. PSYCHIATRY

230. Physiology for Health Psycholo-

gists. (4) § F. Prerequisite: Graduate standing in Health Psychology program or consent of instructor. Lecture 4 hours. Offered in alternate years. Offered 1994-95. Naifeh

human body stressing psychological impacts

on their functioning and psychological con-

sequences of abnormality. Course will pre-

pare student for reading medical literature

and interacting effectively with health profes-

sionals in planning research. PSYCHIATRY

236A-B-C. Human Neurophysiology.

(1-1-1) § F, W, Sp. Prerequisite: Consent of

A journal club format seminar course which

will examine the current literature in human

on identification of cerebral sources. Students

237. Neurophysiological Mech of EEG.

physiological psychology or neurobiology, or

consent of instructor. Lecture 1 hour. Semi-

Course will examine the neuroanatomical

and neurophysiological mechanisms underly-

ing the generation and regulation of EEG and

Event-related Potentials, their measurement

and clinical uses. Emphasis on the nature and

limitations of inferences concerning brain

248. Independent Study. (1-6) § F,W, Sp.

Independent study under the supervision of a

254A. Research Methods. (4) § Sp. Pretty

requisite: Consent of instructor. Lecture 4

hours. Offered in alternate years. Offered

An overview of research strategies and their

associated strengths and weaknesses, experi-

mental and quasi-experimental designs, cor-

relational approaches, interview techniques,

survey and questionnaire construction, uses

254B. Research Methods. (4) § Sp. Prereq-

uisite: Consent of instructor. Lecture 4 hours.

Offered in alternate years. Offered 1994-95.

An in-depth study of the research process

ethics of research and grant writing. PSY-

260. The Health System. (4) § W. Prereq-

uisite: Graduate standing in Health Psychol-

ogy Program, or consent of instructor. Lec-

Function and tasks of the health system with

emphasis on the study of health service orga-

nizations and health services delivery from

the perspective of living systems theory and

organizational psychology. PSYCHIATRY

Prerequisite: Consent of instructor. Seminar

4 hours. Offered in alternate years. Not of-

265. Stress & Bodily Disease. (4) § Sp.

ture 2 hours. Seminar 2 hours. Offered in

alternate years. Not offered 1994-95.

with emphasis on quasi-experimental design,

of archival data, and observational tech-

niques. PSYCHIATRY

member of the faculty. PSYCHIATRY

Prerequisite: Consent of instructor.

250. Research. (1-8) § F, W, Sp.

activity obtainable from scalp recordings.

(3) § W. Prerequisite: At least one course in

EEG and evoked potentials, with emphasis

will make oral class presentations. PSY-

instructor. Seminar 1 hour.

An overview of major organ systems of the

Yingling

CHIATRY

nar 2 hours.

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PSYCHIATRY

Staff

Staff

1994-95

N. Adler

N. Adler

CHIATRY

Attkisson

include social psychiatry prior to 1950, development of community mental health programs in the U.S., related social sciences, and current developments in the field. PSY-CHIATRY

423. Group Therapy. (1) F,W. Required for third-year residents in Psychiatry. Seminar 1 hour.

Zeitlin

Course provides a didactic introduction to the practice of outpatient group psychotherapy. PSYCHIATRY

431. Neurology. (1) W. Prerequisite: Required for fourth-year residents in Psychiatry. Lecture 1 hour.

Palatucci

Review of clinical neurology with emphasis on neurological disorders that may have psychiatric implications. PSYCHIATRY

451. Psychiatric Grand Rounds. (1.5) F, W, Sp. Lecture 1.5 hours. Freimer

Members of the Department of Psychiatry and distinguished guests make clinically centered presentations reflecting diverse areas of the field. PSYCHIATRY

Hanson

This course will consist of observation of interviews of children with instructor's comments; pertinent readings will be discussed. Presentations on specific topics will be made by faculty and trainees. PSYCHIATRY

484. Family Therapy Techniques. (1) SS1, SS2, Su, F, W, Sp. Prerequisite: Required for first-year child and adolescent psychiatry residents, or consent of instructor. Lecture 1.5 hour.

Hanson, Epstein

Family therapy seminar focuses on teaching the history, theory, and practice of family therapy. The course includes didactic material, videotape of past and current cases and teaching with families using the one-way mirror. PSYCHIATRY

485. Psychopathology Literature Sem. (1) F,W, Sp. Prerequisite: Required for firstyear child psychiatry fellows, or consent of instructor for others. Seminar 1 hour. **Rubenstein and Staff**

Extensive review of pertinent readings in child and adolescent psychiatry. PSYCHIA-TRY

495. Child Continuous Case Seminar.

(1.5) F, W, Sp. Prerequisite: Required for second-year child psychiatry fellows, or consent of instructor for others. Seminar 1.5 hours.

Amini

Participation with senior staff member to discuss ongoing dynamics of psychotherapeutic work with a preschool or latency-aged child. PSYCHIATRY

496. Teaching & Supervision Seminar.

(1) Su, F, W, Sp. Prerequisite: Required for second-year child psychiatry fellows, or consent of instructor. Seminar 1 hour.

O'Byrne

Discussion of supervision of general psychiatry residents and medical students. PSY-CHIATRY

497. Adolescent Psychiatry. (1) F,W, Sp. Prerequisite: Required for second-year child psychiatry fellows, or consent of instructor. Seminar 1 hour.

M. Schwartz

Discussion of clinical problems of adolescents. PSYCHIATRY

202A-B. Computer Simulation of Hu-

man Interaction. (3-3) § W, Sp. Prerequisite: Psychology 257 or equivalent. Lecture 1 hour. Lab 6 hours.

Starkweather

The development and testing of theoretical models of personality are explored by means of computer programs. Students program the computer for simulation and symbol manipulation. PSYCHIATRY

205. Child Development. (3) § Sp. Prerequisite: Consent of instructor. Lecture 3 hours. C. Lewis

Course will focus on major issues, theories, and findings in child development. Topics covered will include attachment; Piagetian and other theories of cognitive development; language development; moral development and pro-social behavior; aggression; and selfesteem and competence. PSYCHIATRY

212. Psychological Stress & Coping. (4) § Sp. Prerequisite: Consent of instructor

Seminar 4 hours. Offered in alternate years. Offered 1994-95.

F. Cohen

Course examines stress and coping theory and research from clinical, field, and laboratory settings: measures of stress: issues in stress research; the nature of coping and coping processes. PSYCHIATRY

fered 1994-95.

F. Cohen

Examination of the psychological and physiological models and empirical research linking stress and other psychological factors to the development of bodily disease. PSY-CHIATRY

266. Reproductive Behavior. (3) § Sp. Prerequisite: Consent of instructor. Seminar 3 hours. Offered in alternate years. Not offered 1994-95.

N. Adler

Examination of the role that psychological and social factors can play in a variety of reproductive behaviors: pregnancy, obstetrical complications, postpartum reactions, infertility, contraceptive use and nonuse, spontaneous and induced abortion. PSYCHIATRY

281A-B-C-D. Clinical Research Semi-

nar. (1.5-1.5-1.5-1.5) § Su, F, W, Sp. Prerequisite: Consent of instructor. Seminar 1.5 hours.

Attkisson

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 tudente DEVCUTATOV

285A-B-C-D. Intermediate Family

Therapy. (1.5-3-3-3) § SS2, F, W, Sp. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours. Four-quarter course. Hatcher

Stages in family development, communications 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: Advancement to candidacy and permission of the graduate adviser. Staff

For graduate students engaged in writing the dissertation for the Ph.D. degree. PSYCHIA-TRY

300. Teaching Practicum. (0) § F,W, or Sp. Prerequisite: Consent of instructor. Lecture and lab variable.

Staff

Supervised classroom or tutorial teaching experience. PSYCHIATRY

Radiation Oncology

140.01. Radiation Oncology Clerkship-UC. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 131A-B-C.

Larson

Participation in examination of cancer patients under treatment in radiation oncology. Students participate in rounds, conferences, and clinics, and see demonstrations on the use of newer radiotherapeutic techniques. RADIOLOGY

140.06. Radiation Oncology Clerkship-MZ. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 131A-B-C.

Margolis, Meyler

Participation in examination of cancer patients under treatment in the Claire Zellerbach Saroni Tumor Institute at MZ. Students participate in rounds, conferences, and clinies, and see demonstrations on the use of newer radiotherapeutic techniques. RADIOLOGY

403. Radiation Oncology Grand Rounds. (1) Su, F, W, Sp. Lecture 1 hour. **T.** Phillips

Rounds include presentation of problem cases with discussions of diagnosis and treatment as well as biologic implications. Frequent guest lectures are used to cover important aspects of oncology. RADIOLOGY

404. Cancer Specialty Seminar. (3) Su, F, W, Sp. Seminar 3 hours.

T. Phillips

Seminars include discussions of the diagnosis, treatment, and results of specialty oncology problems, including head and neck, gynecologic, otolaryngologic, pediatric, dermatologic, lymphomatous, and general malignancies. RADIOLOGY

423. Therapeutic Treatment Planning.

(10) Su, F, W, Sp. Prerequisite: Residents assigned to therapeutic radiology. Onemonth workshop course. V. Smith

A workshop course to provide residents in therapeutic radiology with the elements of treatment planning and dose calculations. RADIOLOGY

424. Therapeutic Radiology Physics. (1) F, W, Sp. Prerequisite: Residents assigned to therapeutic radiology. Lecture-seminar 1 hour.

Weaver

A lecture-seminar course with practical sessions to provide the resident with a basic knowledge of radiological physics with special reference to those aspects relating to therapeutic radiology. RADIOLOGY

454. Clinical Therapeutic Radiology. (1.5 per week) Su, F, W, Sp. T. Phillips

Residents, under supervision, are responsible

140.02. Off-Campus Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 131A-B-C.

J. LaBerge

Clinical clerkship in approved hospital by special arrangement and approval of the chairperson of the department and the dean. RADIOLOGY

140.03. Diagnostic Radiology. (1.5 per week) Su, F, W, Sp. Prerequisite: Third-year Medicine 131A-B-C. Fourth-year Medicine 110 and Surgery 110.

J. LaBerge

Clerkship in radiology for third- and fourthyear students. Observation of procedures, review of pathology, pathophysiology, diagnosis, and natural history of selected diseases through study of roentgenograms with case histories. Potentials and limitations of radiologic method included. RADIOLOGY.

140.04. Nuclear Medicine. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 131A-B-C.

Hattner

Observation of basic nuclear medicine procedures and participation in diagnostic tests employing radioisotopic tracers. RADIOL-OGY

140.09. Diagnostic Radiology-SFGH. (1.5 per week) Su, F, W, Sp. Prerequisite: Fourth-year standing or consent of instructor.

Minagi

Students serve a clerkship in the Diagnostic Section of the Department of Radiology. They observe performance of radiologic procedures and interpretation of films, attend conferences, and learn basic philosophy of conducting radiologic examinations and the basic rules of interpretation. RADIOLOGY

140.14. Diagnostic Radiology-VAF & VMC. (1.5 per week) Su, F, W, Sp. Prerequisite: Fourth-year standing, or third-year standing with consent of instructor.

M. Anderson, J.L. Williams, and Staff Acquaints students with available techniques in diagnostic radiology, including nuclear medicine, ultrasound, computed tomographic scanning, angiography, other special procedures, conventional X-ray examination, fluoroscopy, and provides an introduction to "routine" film interpretation. Students have assignments at VAF, VMC, community hospitals. RADIOLOGY

140.16. Basic Nuclear Medicine-STA. (1.5 per week) Su, F, W, Sp. Prerequisite: Fourth-year standing.

Touya

Imaging techniques including nuclear cardiology, single photo emission tomography, and computerized processing at St. Agnes Medical Center, Fresno. RADIOLOGY

140.17. Clinical Radiology. (1.5 per week) Su, F, W, Sp. Prerequisite: Consent of instructor.

Gooding

Students may be involved in clinical diagnostic procedures such as body and neuro computed tomography, ultrasound, fluoroscope, chest, bone, and interventional radiography, with concentration on any one of these areas Clinical or research projects may be undertaken with permission of the instructor. RA-DIOLOGY

150.01. Research in Radiology. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and approval of instructor. For students seriously interested in a career in academic medicine.

J. LaBerge

A research project under the direction of a member of the faculty. RADIOLOGY

170.01. Clinical Application of Anatomy & Pathology. (1-2) F,W, Sp. First-year standing. Lecture 1-2 hours.

S. Ross, Colangelo Course demonstrates anatomy in the living through the use of radiographs. Objectives are to show the usefulness of knowing anatomy, to begin acquiring a medical vo--abulary the elements of clinical thinking

170.10. Radiologic Aspects of Surgery. (1) Su, F, W, Sp. Prerequisite: Third-year surgery. Seminar 1 hour.

Minagi, Laing

Weekly seminar covering the radiologic studies of surgical cases emphasizing indications, risks, and information derived from procedures. Active participation in X-ray interpretation is included. RADIOLOGY

170.11. Emergency Radiology. (1) Su. Lecture 1 hour.

Minagi

An elective course for fourth-year medical students. Consideration of the role of the radiologist as a consultant in the emergency room. Topics covered include head injuries, fractures, dislocations, chest, abdominal and genito-urinary trauma, and management of contrast reactions. RADIOLOGY

198. Supervised Study. (1-5) F,W, Sp. J. LaBerge

Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. RADIOLOGY

199. Laboratory Project. (1-5) F,W, Sp. J. LaBerge

A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. RA-DIOLOGY

220. Radiol Physics for Physicists. (2) § F, W, Sp. Prerequisite: Bachelor's or higher

degree in the physical sciences. Staff Seminars provide physicists with an in-depth

knowledge of radiological physics. RADI-OLOGY

400. Diagnostic Radiology Seminar. (1) Su, F, W, Sp. Lecture 1 hour. Thoeni

Faculty from radiology and other departments lecture and discuss various diseases of all systems of the body. Residents prepare case histories stressing roentgen findings and correlative surgical and laboratory work, special studies, library and film research. RA-DIOLOGY

401. Diagnostic Case Rounds. (2) Su, F, W, Sp.

Thoeni

Films of interesting cases from the daily work are presented and reviewed. Roentgenograms of surgically and pathologically proved cases are correlated with the gross and microscopic pathologic findings. RADIOLOGY

402. Diagnostic Specialty Seminar. (3) F, W, Sp. Required for UC residents in diagnostic radiology. Thoeni

Seminars require preparation and presentation of roentgen findings on patients under discussion at medical, surgical, pediatric, obstetric and gynecologic departmental conferences and seminars on congenital heart disease, disease of the gastrointestinal tract, and orthopaedics. RADIOLOGY

403. Emergency Radiology. (1) F.W. Prerequisite: Required for first-year residents in radiology. Lecture 1 hour.

Minagi

Role of radiologist as consultant in the emergency room; head injuries, fractures, dislocations, blunt and penetrating chest trauma, blunt and penetrating abdominal trauma, trauma to genito-urinary system; management of contrast reactions; indications for. conduction of, interpretation of special radiologic procedures. RADIOLOGY

405. Radiological Research. (1-8) Su, F, W, Sp. Elective. J. LaBerge

Numerous research projects are conducted in the department and facilities are available for new ones. Residents are encouraged to take advantage of these opportunities. RADIOL-OGY

408. Radiology Specialty Seminar-SFGH. (3) Su, F, W, Sp.

412. Pathology. (1) Su, F, W, Sp. VA Hinchcliffe

Course includes review of surgical pathology material and attendance at autopsy rounds. RADIOLOGY

Restorative Dentistry

112C Procedures in Operative Den-

tistry. (1) Sp. Prerequisite: RD 112B &

115.10C. Lecture 1 hour.

D. Graham

C. McNeill

C. McNeill

Marshall

winter.

Hamaguchi

Lab 3 hours.

Hamaguchi

RESTOR DENT

(1) Sp. Lab 3 hours.

RESTOR DENT

for 10 weeks F.

Lecture 1 hour.

ture 1 hour.

Kahl, Mendoza

Kahl, Mendoza

tures. RESTOR DENT

Graham, Yip

113B. Lecture 1 hour.

RESTOR DENT

(1) Sp. Lecture 1 hour.

DENT

115.10B, and concurrent enrollment in RD

Lectures on the fundamentals of preparing

teeth to receive analgam and gold inlay res-

torations with emphases on the placement of

113B. Occlusion. (1) W Prerequence RD

Introductory lecture course. Topses include

the application of individual tooth and arch

forms to interarch relationships. RESTOR

113C. Occlusion. (1) Sp. Prerequisite: RD

Continuation of introductory lectures on the

topic of the application of individual tooth

114 Introductory Biomaterials Science.

Lectures focus on characteristics of the oral

environment, basic properties of materials

to restore intracoronal defects in teeth to

function. RESTOR DENT

and teeth, and study of simple materials used

115A-B. Dental Morphology. (0-4) F,W.

Laboratory course to study tooth morphol-

ogy, occlusion, and the relationship of tooth

form and function. Students will complete a

series of wax-ups on casts mounted on the

115C. Dental Morphology. (1) Sp. Con-

current enrollment in RD 113C required.

Continuation of RD115A/B to include

to appropriate anatomical relationships.

laboratory experience in mounting dental

casts, centric relation, and adjustments of cast

115.10. Operative Dentistry laboratory.

Laboratory course provides the fundamentals

of preparing teeth to receive restorations and

the basic principles of cavity design and

120A. Procedures in General Restor

Dent. (4) F. Prerequisite: RD 111C, RD

Davis, Braly, Kahl, Graham

restorations. RESTOR DENT

112C, RD 113C, RD115.10C. Concurrent

enrollment in RD 125A required. Lecture 6

hours/week for 4 weeks Pre-F, 2 hours/week

Lecture course on the materials and proce-

dures used in the dental casting process and

how to use the casting process to fabricate

high-quality cast restorations. Additional

lectures will provide information on the

120B. Procedures in General Restor

Dent. (1) W. Prerequisite: RD 120A, RD

125A. Concurrent enrollment in RD 125B.

Lectures on the indications for and consider-

ations in the use of partial veneer crowns as

single restorations. Lectures will also be pre-

sented on the design, material selection, and

construction of pontics for fixed partial den-

Dent. (1) Sp. Prerequisite: RD 120B, 125B.

Concurrent enrollment in RD 125C. Lec-

Lectures on the composition, physical prop-

120C. Procedures in General Restor

retainers for fixed partial dentures and as

materials and procedures for tooth-colored

preparation for amalgam restorations.

Denar articulator. RESTOR DENT

Concurrent enrollment in RD 110A and

110B required. Lab 3 hours fall, 9 hours

and arch forms to interarch relationships.

amalgam restorations. RESTOR DENT

110A, RD 115A. Lecture 1 hour.

414. Physics of Diagnostic Radiology. (2) W, Sp. Lecture 1.5 hours. Lab 2 hours. R. Gould

Course is designed to acquaint residents with the physical principles of diagnostic radiology. Topics include generation and extraction of radiologic information, image conversion, recording methods, and special-purpose equipment. CT and ultrasound physics are discussed. RADIOLOGY

419. Growth Kinetics-Cells & Tumors. (2) Sp. Prerequisite: Consent of instructor. Lecture 2 hours.

Cleaver, Patt

An analysis of cell population growth in tissues, tumors, and cultures. Emphasis is given to radioactive tracers such as thymidine and its biochemistry, and experimental methods for studying cell proliferation in vivo and in vitro. RADIOLOGY

420. Nuclear Medicine Seminar. (1) F,W,

Hattner and Staff

Rotating assignments of topics for discussion by residents in nuclear medicine training programs in all affiliated hospitals. Critical reviews of available information in limited areas are used to provide a broad review of nuclear medicine for all trainees. RADIOL-

450. Clinical Nuclear Medicine. (1.5 per week) Su, F, W, Sp Hattner and Staff

Clinical experience in diagnostic and therapeutic nuclear medicine to satisfy requirements of American Board of Radiology for certification in diagnostic radiology and radiation therapy. RADIOLOGY

451. Clinical Diagnostic Radiology. (1.5 per week) Su, F, W, Sp. Prerequisite: Radiol-

ogy 450. J. LaBerge

Residents, under supervision, carry out radiological examination and interpretation of X-rays of patients referred from wards and outpatient clinics. The chief resident has certain administrative duties relative to the resident training program. RADIOLOGY

452. Clinical Diagnostic Radiology. (1.5

per week) Su, F, W, Sp. Prerequisite: Radiology 450.

VA Akin

SFGH Minagi

Removable

Sharma

Sharma

Prosthodontics

(1) F,W, Sp. Lecture 1 hour.

oral biology. RESTOR DENT

(1-6) F, W, Sp. Lab variable.

Residents, under supervision, are responsible for the diagnostic activities of the department, including diagnostic consultations and reports, history-taking, and physical examinations. In addition, the chief resident has certain administrative duties relative to the resident training program. RADIOLOGY

453. Clinical Radiology. (1.5 per week)

Su, F, W, Sp. Prerequisite: Radiology 450.

Residents are responsible for the diagnostic

activities of the department under the direc-

tion of staff radiologists including diagnostic

400. Approaches to Maxofac Prosthod.

Course is designed to acquaint residents with

prosthetics. Lectures will be given on maxil-

lofacial prosthetic techniques, oncology, head

and neck surgery, plastic surgery, oral surgery,

therapeutic radiology, psychology and related

489.01. Clinical Maxillofacial Prosthod.

multidisciplinary aspects of maxillofacial

physical examinations. RADIOLOGY

consultations and reports, history-taking, and

for diagnosis, treatment, and follow-up of

patients referred to radiation therapy from the wards and outpatient clinics. Radiation therapy rounds include discussion of newly referred patients; chart rounds include the discussion of patients under treatment. RADIOLOGY

Radiology

100. Intro to Clinical Radiology. (2) W. Prerequisite: Anatomy 100, 100B, 103, and Pathology 102, Concurrent enrollment in Medicine 131A-B-C. Lecture 2 hours. Lab 1 hour.

I. LaBerge

Course provides instruction in basic aspects of therapeutic and diagnostic radiology and nuclear medicine. Illustration of diagnostic and therapeutic modalities in specific disease states provides instruction in use of radiologic resources. RADIOLOGY

140.01. Advanced Roentgen Diagnosis. (1.5 per week) Su, F, W, Sp. Prerequisite: Radiology 140.03 or 140.09 or 140.17. Consent of instructor.

J. LaBerge

Advanced clinical clerkship for students interested in a career in academic radiology. Students observe clinical work, observe or participate in research, and write a term paand useful habits in learning. RADIOLOGY

170.02. Clinical Application of Anatomy & Pathology. (1-3) F,W, Sp. Second-year standing. Lecture 1-3 hours.

S. Ross, Colangelo

A lecture course limited to small groups, with active participation on selected aspects of pathological anatomy and its usefulness in understanding disease, its origins, development, and clinical manifestations. RADIOL-OGY

170.08. Nuclear Medicine Physics &

Imaging. (2) F, W. Prerequisite: B.A. or M.D. degree. Given concurrently with Radiology 170.09. Lecture 2 hours a week for 6 weeks. Independent study 10 hours. Perez-Mendez

Introduction to the physics of radioactivity, nuclear instrumentation and gamma-ray imaging techniques. RADIOLOGY

170.09. Introduction to Nuclear Medicine. (3.5) Su, F, W, Sp. Prerequisite: Given concurrently with Radiology 170.08. Lecture 5 hours a week for 6 weeks. Independent study 10 hours.

D. Price

Introduction to basic nuclear medicine diagnostic procedures, both in vivo and in vitro, and therapy with radiopharmaceuticals. RA-DIOLOCV

Interdepartmental seminars in which the radiological picture of problem cases either of diagnostic or therapeutic nature is presented. This course includes surgical and medical radiological rounds, consultative tumor board, clinicopathological conferences, and other department grand rounds. RADIOL-OGY

409. Radiology Specialty Seminar-VA. (3) Su, F, W, Sp. Seminar 3 hours Akin

Interdepartmental seminars in which the radiological picture of problem cases either of diagnostic or therapeutic nature is presented. These include medical-surgical, clinicopathological, chest, medical X-ray, rheumatology, neurology, and neurological surgery conferences; consultative tumor board; and surgical and orthopaedic grand rounds. RA-DIOLOGY

410. Radiat Effects on Genes & Chrom.

(2) W. Prerequisite: Consent of instructor. Lecture 2 hours.

S. Wolff

Concepts and mathematics of target theory related to damage of genetic apparatus. Biophysical and biochemical studies on induction of intragenic and intergenic mutations that give insight into the structure of chromosomes and interaction of radiation with

nd advanced prosthodon dents will observe and perform maxillofacial prosthodontic services for patients in the Maxillofacial Clinic. A detailed case history will be required each quarter. Attendance at related tumor board conferences and field trips to other therapy centers. RESTOR DENT

Restorative Dentistry

110A. Introduction to Dental Morphol-

ogy. (1) F. Prerequisite: Concurrent enrollment in RD 115A. Lecture 1 hour. Douglass

Introductory lecture topics include tooth morphology, development and form of primary and permanent dentition. RESTOR DENT

110B. Diseases Affecting Tooth Morphology. (1) W. Lecture 10 hours per quarter.

Hume

The morphological consequences of dental caries on tooth structure, risk factors in dental caries related to tooth morphology, and general concepts of restoration of carious defects in teeth. RESTOR DENT

erties, and appropriate selection of porcelains used in PBM restorations, the basis for shade selection and control when using PBM porcelains, and esthetic alternatives to PBM restorations. RESTOR DENT

121B. Introduction to Removable

Prosthodontics. (1) W. Lecture 10 hours per quarter. Traweek

Lectures introduce the second-year dental student to the theory and clinical rationale of complete dental prosthodontics and prepare the student for the clinical practice phase of dentistry. RESTOR DENT

121C. Introduction to Removable

Prosthodontics. (2) Sp. Prerequisite: RD 121B. Concurrent enrollment in RD 125.10C required. Lecture 2 hours. Traweek

Continuation of introductory lectures on the theory and clinical rationale of complete denture prosthodontics. RESTOR DENT

123. Occlusion. (1) Sp. Prerequisite: RD 120B, RD 122B. Concurrent enrollment in RD 125C required. Lecture 1 hour. McNeill

Course goal is to gain knowledge of the field of temporomandibular disorders, and the current state of the art of occlusion and TMJ. RESTOR DENT

124.01 Biomaterials Science. (1) F.Lecture 1 hour. Prerequisite: RD 114. Marshall

Lectures on adhesion and bonding to tooth structure, enamel and dentin bonding, glass ionomer materials, and porcelain fused to metal bonding. Introduction to metal alloys for intracoronal and extracoronal castings; discussion of methods for hardening and manipulation of properties. RESTOR DENT

124.02 Biomaterials Science. (1) W. Lecture 1 hour. Prerequisite: RD 124.01. Marshall

Lectures focus on failure mechanisms of restorative materials and biocompatibility. Polymerization reactions and polymer properties will be discussed as related to impression materials and acrylic systems cement and materials used in removable partial and full dentures. RESTOR DENT

125A. Techniques in General Restorative Dentistry. (5) F.

Braly, Kahl, Davis, Graham Laboratory instruction on preparing teeth to receive restorations, the basic principles of cavity design and preparation for amalgam, tooth-colored, and cast gold inlay and onlay restorations, preparing teeth for single unit partial and full metal crowns, design and fabrication of metal pontics, techniques in assembly and soldering of components of fixed partial dentures. RESTOR DENT

125B-C. Fixed Prosthodontics Labora-

tory. (3) W, Sp. Prerequisite: Concurrent enrollment in RD 120B and 120C (Sp). Lab 3 hours spring, 6 hours winter. Kahl, Mendoza

Laboratory instruction on preparation for and construction of maxillary posterior fixed partial denture and a provisional bridge; preparing anterior teeth for partial crowns; casting metal copings for porcelain bonding; applying porcelain to metal copings. RESTOR DENT

125.10B. Introduction to Removable Prosthodontics. (2) W. Lab 60 hours per

quarter. Traweek

Mr. M

語いのためで

Laboratory course introduces second-year dental students to the clinical rationale and laboratory procedures of complete denture prosthodontics and prepares the student for the clinical practice of this phase of dentistry. RESTOR DENT

125.10C. Removable Prostbodontics

Lab, Complete Dentures. (2) Sp. Prerequisite: RD 121B, 125.10B. Concurrent enrollment in RD 121C required. Lab 6 hours. Traweek

Continuation of introductory laboratory instruction on the fabrication and repair of complete dentures. RESTOR DENT

126.01. Introduction to Endodontics. (2) F. Lecture 1 hour. Lab 3 hours. Goodis

Introductory lectures and laboratory in endodontics. Lectures discuss nonsurgical endodontics and the rationale of endodontic treatment. Laboratory introduces students to the armamentarium and clinical techniques of nonsurgical endodontics. RESTOR DENI

126.02.Introduction to Endodontics. (2) W. Lecture 1 hour. Lab 3 hours.

Braly, Goodis Lectures discuss selection of appropriate treatment for the build-up of missing tooth structures in vital and pulpless teeth, identification and removal of caries from infected teeth, and selection of appropriate bases, liners, and interim restorations. Laboratory provides experience with the armamentarium and clinical techniques. RESTOR DENT

127. Tooth-Colored Restorations. (1.5) Sp. Lecture 10 hours, lab 15 hours per quarter. Braly

Lectures describe esthetic alternatives in dentistry including indications and contraindications for various materials and procedures, emphasizing porcelain veneers 130.03. Clin Procedures in General Restor Dent. (1) W. Prerequisite: RD 130.02. Lecture 1 hour.

Eakle Lecture series covering the basic procedures and materials used for single-tooth restorations using direct filling gold and cast gold. RESTOR DENT

130.04. Clin Procedures in General Restor Dent. (1) Sp. Lecture 1 hour. Prerequisite: RD 130.03.

Lacy Survey of new dental materials and clinical techniques in esthetic restorative dentistry, i.e. esthetic posterior restorations, anterior veneers, bonded bridges, and intraoral porcelain repair. Discussion includes advantages, disadvantages, indications, and contraindications of treatment options presented. RESTOR DENT

131. Biomaterials Science. (1) F. Prerequisite: RD 130.01. Lecture 1 hour. Lacy

Lectures will emphasize clinical application and behavior of dental materials presented in first and second years. Students are expected to develop a working knowledge of specific products by name, type, and application. RESTOR DENT

131.01 Clinical Procedures in Removable Prosthodontics. (2) Su. Prerequisite: RD 121C and 125.10C. Lecture 20 hours per quarter.

Finzen This course introduces clinical procedures of complete denture diagnosis, treatment planning, and fabrication. It draws background information from concepts presented in the second-year preclinical prosthodontics courses, but the emphasis is on the clinical management of edentulous patients.

131.02. Clin Procedures in Removable Prosthodontics. (1) F. Prerequisite: RD 131.01. Lecture 1 hour.

RESTOR DENT

Finzen Course continues topics pertinent to complete denture fabrication that were started in RD 131.01. It also begins exposure to the clinical procedures for the diagnosis, treatment planning, and design of removable partial dentures. RESTOR DENT

131.03. Clin Procedures in Removable Prosthodontics. (1) W. Prerequisite: RD 131.02. Lecture 1 hour. Yonemura

Course describes the clinical procedures involved in removable partial denture fabrication. It reviews and reinforces design concepts previously given during the second and third years. RESTOR DENT

131.04. Clin Procedures in Removable Prosthodontics. (1) Sp. Prerequisite: RD 131.03. Lecture 1 hour.

Curtis Course presents various topics in the field of prosthodontics. Areas pertinent to removable partial dentures are covered along with the subjects of dental implants, maxillofacial, and geriatric prosthodontics. RESTOR DENT

132.01. Endodontics: Theory. (1) F. Prerequisite: RD 130.01. Lecture 1 hour. Goodis

Course is designed to teach the third-year dental student proper diagnostic procedures for non-surgical endodontic cases and to instruct in proper methods of emergency treatment. Course includes pulpal and periapical pathological entities, and correlates those entities with diagnostic methods. RESTOR DENT

132.02. Endodontics: Theory. (1) Sp. Prerequisite: RD 132.01. Lecture 1 hour. Goodis

Course is designed to expose third-year dental students to adjunctive endodontic procedures necessary to supplement their knowledge of endodontic procedures. RESTOR DENT

133.01. Clin Procedures in Fixed Prosthodontics. (1) F. Prerequisite: RD 130.01,

135. Removable Partial Dentures Laboratory. (2) Su. Lab 60 hours per quarter. Dellinges

Laboratory course introduces third-year dental students to the clinical rationale and laboratory procedures of removable partial denture prosthodontics and prepares the student for the clinical practice of this phase of dentistry. RESTOR DENT

137. Endodontics Clinic. (0-4) Su, F, W, Sp. Prerequisite: RD 126.01 and 126.02. Clinic 120 hours per quarter. Goodis

Clinical instruction and practice in the discipline of endodontics. Students will provide endodontic diagnosis, emergency care, and treatment of teeth with single and multiple root canal systems. RESTOR DENT

138. Prosthodontics Clinic. (0-7) Su. F.W. Sp. Prerequisite: RD 120C. 125C. 126C. Concurrent enrollment in RD 130 lecture series required. Clinic 210 hours per quarter. Finzen

Clinical instruction and practice in the discipline of prosthodontics. RESTOR DENT

147. Clinical Endodontics. (0-2) Su, F, W, Sp. Prerequisite: Completion of RD 130.04, 137, 138, 139. Must be taken concurrently with RD 149. Clinic variable. Goodis

Continuation of clinical instruction and practice in the discipline of endodontics. Students are expected to pass a clinical qualifying examination by the end of spring quarter of the fourth year. RESTOR DENT

148. Clinical Prosthodontics. (0-5) Su, F, W, Sp. Prerequisite: Concurrent enrollment in RD 149. Clinic 9 hours. Finzen

Continuation of clinical instruction and practice in the discipline of prosthodontics Students are expected to pass a clinical qualifying examination by the end of spring quarter of the fourth year. RESTOR DENT

149. Clinical Restorative Dentistry. (0-12) Su, F, W, Sp.

Pelzner

Clinical instruction and practice in the discipline of general restorative dentistry. RESTOR DENT

170A-B-C-D-E-F-G-H. Prosthodontics Literature Review. (0-4) A, E: Su. B, F: F. C, G: W. D, H: Sp. Prerequisite: Enrollment in Postgraduate Prosthodontics Program Seminar 1-4 hours. Two-year course. Finzen

Current and past prosthodontic literature will be studied and discussed. Students will learn to distinguish between appropriate, controversial, and inappropriate prosthodontics literature. RESTOR DENT

171A-B-C-D-E-F-G-H. Prosthodontic Treatment Planning. (0-2) A, E: Su. B, F: F. C, G: W. D, H: Sp. Prerequisite: Enrollment in Postgraduate Prosthodontics Program. Lecture 1 hour. Seminar 1 hour. Twoyear course.

Finzen

A treatment plan will be discussed and developed for each patient after all diagnostic aids have been gathered. Students will be responsible for establishing an initial treatment plan prior to the seminar and for justifying it before the group. RESTOR DENT

172A-B-C-D-E-F-G-H. Prosthodontic Procedures. (0-2) A, E: Su. B, F: E C, G: W. D, H: Sp. Prerequisite: Enrollment in Postgraduate Prosthodontics Program. Lecture 1 hour. Seminar 1 hour. Two-year course.

Finzen

Staff and program consultants will present lectures on various aspects of fixed and removable prosthodontics and related subjects on a graduate level. RESTOR DENT

174. Nutrition. (1) SS1. Prerequisite: D.D.S., D.M.D. or equivalent degree. Enrollment in a postdoctoral specialty program. Seminar 1 hour. M. Wilkins

Course will emphasize the dietary require-

179.03. Temporomandibular Joint

Clinic. (0-4) Su, F, W, Sp. Prerequisite: D.D.S. degree. With consent of instructor, fourth-year students may take this course as an elective. Clinic 3 hours per week. McNeill

Participation in the Temporomandibular Joint Clinic applying knowledge of history-taking and differential diagnosis and utilizing such diagnostic techniques. RESTOR DENT

180. New Applic in Restor Dent: Materials & Techniques. (1) F,W, Sp. Prerequisite: Fourth-year standing. Lecture 1 hour. Lacy

Survey of new materials and clinical techniques used in contemporary dental practice with particular emphasis on cosmetic dentistry. Topics may include, but are not limited to, dentin-bonding systems, etched porcelain restorations, methods of intraoral repair of fixed restorations, esthetic posterior restorations, alternative designs for fixed bridgework, and newly introduced products. RESTOR DENT

180.05. Prosthodontic Procedures. (1) W, Sp. Lecture 1 hour.

Brigante An elective course offering instruction in procedures and materials other than those normally used in the clinic. RESTOR DENT

181. Scientific Writing in Dentistry. (2) W. Prerequisite: Registered dental student in good standing. Limited to 20 students. Conerence 2 hours. White, Goodis

Students will produce student research journal containing literature reviews and overviews of research done by dental and dental hygiene students. Topics include writing review articles, word processing techniques, communication skills, and the steps involved in the production of a journal. RESTOR DENT

181.02. Advanced Endodontics Concepts. (1) W. Lecture 1 hour. Barkhordar

Diagnosis, case selection, and management of pain and infection in endodontically-involved teeth; advanced techniques for treating difficult root canal system anatomy; refinements in obturation of the root canal system. RESTOR DENT

182. Implant Prosthodontics. (1) F,W, Sp. Prerequisite: Third- or fourth-year standing. Lecture 1 hour. Finzen, Smith

An elective lecture course on the restorative

aspects of dental implantology. Topics include the types of dental implants, diagnostic evaluation, placement techniques, and the treatments applicable to the various types of den-, tal implants. RESTOR DENT

182.03. Senior Restorative Elective. (1) F. Prerequisite: Fourth-year standing. Lecture 1 hour.

Meli

Advanced clinical restorative elective. Lectures describe the restorative general practice. Topics include office layout, laboratory relations, treatment limitations, financial arrangements, scheduling, and treatment failures. RESTOR DENT

182.05. Advanced Partial Denture Design. (1) Sp. Prerequisite: Completion of

three removable partial dentures. Consent of instructor. Enrollment limited to 5 students. Seminar 1 hour. **Finzen and Staff**

Seminar to discuss current concepts of removable partial denture design. The emphasis will be on designing RPDs for routine situations, but more complex designs will also be presented. Students will be assigned casts to design and articles to review. RESTOR DENT

183. Lasers in Dentistry. (1) SS1. SS2. Prerequisite: Third- or fourth-year standing and satisfactory progress in all required Restorative Dentistry courses. Lecture 1 hour or lab 3 hours. J. White, Goodis

186.04. Restorative Materials Proce-

dures. (1) F, W, Sp. Prerequisite: Open to fourth-year students with the approval of the chairperson of the division. Enrollment limited. Clinic 3 hours

Birtcil

Techniques and procedures for Class II, III, and V gold foil restorations using 24-karat direct filling gold. Students learn to use various direct filling gold materials such as fibrous gold foil, goldent, and electroloy. RESTOR DENT

187. Implant Prosthodontics Clinic.

(0.5-3) Su, F, W, Sp. Prerequisite: Fourth-year standing. Must be taken concurrently with RD 182 and the Oral & Maxillofacial Surgery Clerkship (O&MS 189.04). Lab 1-3 hours, Clinic 1-6 hours.

Finzen, R. Smith

RESTOR DENT

hours per quarter.

pain. RESTOR DENT

Clinic variable.

RESTOR DENT

RESTOR DENT

Tueller, Davis

White, Lacy

RESTOR DENT

Finzen, Hutton

Barkhordar

Plesh

An elective course that provides clinical and laboratory experience in the restorative aspects of dental implantology. RESTOR DENT

187.04. Adv Clinical Operative Den-

tistry. (0-4) Su, F, W, Sp. Prerequisite: Fourth-year standing and permission of instructor. Clinic 3-12 hours. Birtcil

Advanced instruction in clinical operative

dentistry with emphasis on quadrant den-

tistry and complex restorative procedures.

188. Orofacial Pain. (1) Sp. Prerequisite:

Third and fourth-year standing. Seminar 10

Discussion of various clinical problems asso-

ciated with the differential diagnosis of

orofacial pain. The course will also review

new scientific information on trigeminal

188.02. Advanced Clinical Endodontics.

(0-4) Sp. Prerequisite: Fourth-year standing.

Advanced instruction in the field of clinical

Project. (1-5) F, W, Sp. Prerequisite: Con-

sent of instructor and approval of the chair-

person of the department. Lab 3-15 hours.

A laboratory research project under direction

of a member of the faculty with the approval

Project. (1-5) F, W, Sp. Prerequisite: Con-

sent of instructor and approval of the chair-

person of the department. Lab 3-15 hours.

A laboratory research project under direction

of a member of the faculty with the approval

199.03. Fixed Pros Laboratory Project.

(1-5) F, W, Sp. Prerequisite: Consent of in-

structor and approval of the chairperson of

A laboratory research project under the di-

rection of a member of the faculty with the

199.04. Oper Dent Laboratory Project.

(1-5) F, W, Sp. Prerequisite: Consent of in-

structor and approval of the chairperson of

A laboratory research project under direction

of a member of the faculty with the approval

Project. (1-5) F, W, Sp. Prerequisite: Con-

sent of instructor and approval of the chair-

person of the department. Lab 3-15 hours.

A laboratory research project under direction

of a member of the faculty with the approval

of the chairperson of the department.

199.05. Remov Pros Laboratory

the department. Lab 3-15 hours.

approval of the chairperson of the depart-

endodontics. RESTOR DENT

199.01. Biomaterials Laboratory

G.W. Marshall, S. Marshall, Lacy

of the chairperson of the department.

199.02. Endodontics Laboratory

Goodis, Barkhordar, Srinivasan

of the chairperson of the department.

the department. Lab 3-15 hours.

ment. RESTOR DENT

and conservative posterior restorations. Laboratory instruction demonstrates tooth preparation for esthetic restorations and familiarizes students with various materials and clinical techniques. RESTOR DENT

130.01. Clinical Procedures in General Restor Dent. (2) SuS1, SS2. Prerequisite: RD 120C, 121C, 123, and 126C. Lecture 1 hour.

Pelzner

Lecture taken concurrently with RD 139 intended to supplement the beginning clinician's knowledge of materials, techniques, and management of the situations most frequently encountered early in the student's clinical experience. RESTOR DENT

130.02. Clin Procedures in General Restor Dent. (1) F. Prerequisite: RD 130.01, 130.02. Lecture 1 hour. I. White

Course is designed to provide clinically relevant material in conjunction with clinical practice. Major topics include the biological and mechanical basis of operative dentistry, preparation design, clinical considerations in using composite resin, recurrent caries and bonding to tooth structure, and clinical considerations in using dental amalgam. RESTOR DENT

ecture 1 nour. Giblin

Lecture series designed to assist the student in the clinical management of patients undergoing fixed partial denture construction. The lectures will amplify, extend, and update the theoretical and laboratory experience and provide clinical relevance to the material covered in the previous two years. RESTOR DENT

133.02. Clin Procedures in Fixed Prosthodontics. (1) W. Prerequisite: RD 133.01. Lecture 1 hour.

Giblin

Lecture series designed to assist the student in the clinical management of patients undergoing fixed prosthodontic treatment. Topics will include technical and biologic considerations for completing the clinical and laboratory steps of shade selection, impressions, fabricating provisional restorations, and cast articulation, RESTOR DENT

133.03. Clin Procedures in Fixed Prosthodontics. (1) Sp. Prerequisite: RD 133.02. Lecture 1 hour.

Giblin

Continuation of lecture series to assist the student in the clinical management of newer and more complex fixed prosthodontic techniques. The traditional will be compared to the contemporary and the rationale for spe-

ments for the geriatric prosthodontic patient A dietary analysis of the student and a prosthetic patient currently under treatment will be required. RESTOR DENT

175B-C. Biomaterials Science. (2-2) W, Sp. Prerequisite: D.D.S. degree. Open to dental residents, postdoctoral and postgraduate students only. Seminar 2 hours. Tendresen

Course covers biomaterials science as applied to clinical restorative dentistry with emphasis on restorative material selection and use, based on acceptable physical and biological properties. Current research and new restorative materials will be discussed. RESTOR DENT

176. Craniofacial Pain-TMJ Seminar.

(0-8) Su, F, W, Sp. Prerequisite: Enrolled postdoctoral specialty students. Fourth-year dental students may take this course as an elective with permission of the instructor. Seminar 2 hours.

McNeill

Allows residents to finish their training with a basic ability to recognize, diagnose, and treat craniofacial pain and TMJ dysfunction in an interdisciplinary environment. The treatment team will include medical and dental specialties. RESTOR DENT

Course will provide an understanding of laser physics, tissue interaction, safety considerations, clinical research methodology, and applications of the Nd: YAG laser for intraoral hard and soft tissue. Laboratory exercises provide hands-on experience. RESTOR DENT

183.05. Advanced Complete Prostho-

dontics. (1) F. Prerequisite: Fourth-year standing. Seminar 1 hour.

Finzen

Seminar to discuss concepts of complete denture fabrication and maintenance reviewing the rationale for procedures normally used in the clinic, and the selection of the appropriate alternate procedures where indicated. RESTOR DENT

186. CAD/CAM: Application to Den-

tistry. (1) Sp. Prerequisite: Second-, third-, or fourth-year dental student Limit 20 students. Lecture 2 hours for 4 weeks. Lab 1 hour for 3 weeks.

Fett, Setcos

Course will concentrate on adhesive bonded ceramic inlays in posterior teeth. Topics include indications for bonded restorations. tooth preparation, operation of a CAD/ CAM system, bonding procedures, finishing and polishing techniques. A literature review will give the students a perspective of the

RESTOR DENT

210. Advanced Concepts in Bio-

of the chairperson of the department.

materials. (1) § Sp. Prerequisite: DDS, DMD, or equivalent degree. Must be enrolled in a postdoctoral specialty program. Lecture 1 hour.

Marshall

This graduate core course in biomaterials science introduces the student to the broad scope of the biomaterials field. A basic knowledge of dental materials is assumed and biomaterials principles are emphasized during discussion of current methods and problems in the field as related to dentistry. RESTOR DENT

401. Concepts of Occlusion. (2.5) Su. Must be enrolled in postdoctoral prosthodontics program. Lecture 2 hours. Clinic 2 hours.

Hong

A review of various concepts of occlusion. Clinical diagnostic procedures and treatment modalities will be reviewed and demonstrated. RESTOR DENT

410. Advanced Fixed Prosthodontics. (1) E Lecture 1 hour.

Kinsel

The lectures will present the rationale and methodology in the use of fixed appliances to restore the dentition of patients with missing

411. Advanced Endodontics Seminar. (1) F. Lecture 1 hour.

Barkhordar, Casanova

The lecture series will focus on the diagnosis and management of complex endodontic problems. RESTOR DENT

412. Advanced Removable Prosthodontics. (0-2) Su, F, W, Sp. Green

The series will cover the rationale and methodology in using removable prosthetics in the care of patients with complex oral problems. RESTOR DENT

416. Emergency Dental Care. (0-2) Su, F, W, Sp. Must be first-year student in the **AEGD** program

Nakahara, Kirkland

A seminar series will provide information on the diagnosis and management of dental and medical emergencies. The trainee will provide consultations and care for patients presenting at the Emergency Room in the Dental Clinics Building. RESTOR DENT

418. Prosthodontics Clinic. (0-40) Su, F, W, Sp. Prerequisite: Must be 1st-year student in the postgraduate prosthodontics program. Clinic rotation 300-1200 hours. Finzen

Advanced prosthodontic clinical treatment utilizing a variety of treatment philosophies, articulating instruments, and techniques. RESTOR DENT

419. Advanced Comprehensive Dental Care. (0-41) Su, F, W, Sp. Must be enrolled in the AEGD program. Clinic 24 hours/week

for 50 weeks. Kirkland, Nakahara, Chin

Residents will provide advanced comprehensive dental care. RESTOR DENT

426. Advanced Endodontics for the

Generalist. (2.5) Su. F. Must be second-year student in the AEGD program. Seminar 1.5 hours, Clinic 4 hours.

Casanova

This seminar and clinical course will focus on the diagnosis and management of advanced endodontic problems, RESTOR DENT

427. Advanced Restorative Dentistry for the Generalist. (0-5) F,W, Sp. Must be second-year student in the AEGD program. Seminar 1 hour. Clinic 2 hours.

Lacy This seminar and clinical demonstration course will provide instruction and supervision in the most recent advances in the management of restorative dental problems: RESTOR DENT

428. Prosthodontics Clinic. (0-40) Su, F, W, Sp. Prerequisite: Must be 2nd-year student in the postgraduate prosthodontics program. Clinic 300-1200 hours.

Finzen Advanced prosthodontic clinical treatment utilizing a variety of treatment philosophies, articulating instruments, and techniques. RESTOR DENT

429. Complex Comprehensive Dental Care. (0-16.5) Su, F,W, Sp. Must be secondyear student in the AEGD program. Clinic 10 hours.

Nakahara, Kirkland

Provision of comprehensive dental care for patients with complex medical and dental needs. RESTOR DENT

438. Prosthodontics Clinic. (0-40) Su, F, W, Sp. Prerequisite: Must be 3rd-year student in the postgraduate prosthodontics program. Clinic 300-1200 hours.

Finzen

Advanced prosthodontic clinical treatment utilizing a variety of treatment philosophies, articulating instruments, and techniques. RESTOR DENT

486. TMD & Facial Pain. (0-11.5) Su, F,W, Sp. Must be first-year student in the AEGD program or by permission of instructor. McNeill, Becker

The seminar will focus on the rationale and techniques used in the diagnosis and treatment of patients with TMD or facial pain. This will include history-taking, imaging techniques, and behavioral modification. RESTOR DENT

205. Health Professions, Occupations, and Work. (3) SW. Lecture 2 hours. Lab 3 hours.

C. Harrington

Course examines the nature of occupations and professions; their constellation in hospitals and clinics, the medical division of labor. specialties and specialization, professional and occupational ideologies, the sociology of work relationships, careers. SOC BEH SC

207. Sociology of Health & Medicine. (3) § Sp. Seminar 2 hours. Lab 3 hours. C. Estes

Course introduces the student to classical perspectives in medical sociology and development of a critical perspective in the field to serve as a foundation for independent and advanced study in medical sociology. SOC BEH SC

208. Social Psychol of Hith & Illness. (3) § F. Prerequisite: Required for doctoral students in sociology. Restriction: Doctorallevel students in nursing or sociology. Lecture 2 hours. Lab 3 hours.

Staff

Course examines the relationship of social class, ethnic identification, group membership, family structure, occupation, and life style to health and illness, and therapeutic interaction of lay persons and health professionals. SOC BEH SC

209. Sociology of Power. (2-4) § F,W, Sp. Prerequisite: A graduate-level sociological theory course. Restrictions: Doctoral students only. Lecture 2-4 hours.

C. Estes

Course surveys the classical and contemporary sociological issues in theoretical and empirical work on power: explores underlying assumptions and paradigms emerging and reflecting a sociopolitical milieu. The student will analyze literature and debates on power structure research and theory. SOC BEH SC

212A. Sociological Theory: Classical. (5) § F. Prerequisites: Doctoral students only. Lecture 2 hours. Lab 9 hours.

B. Powers

Course examines and evaluates classical and recent contributions to sociological theory. The main objective is the generation of a critical capacity with respect to received theory in both its formal and substantive varieties. SOC BEH SC

212B. Sociological Theory: Contemporary. (5) § W. Prerequisites: S212A and must be a doctoral student. Lecture 2 hours. Research 9 hours.

C. Estes

Course examines and evaluates contemporary contributions to sociological theory. The main objective is the generation of a critical capacity with respect to received theory in both its formal and substantive varieties. SOC BEH SC

212C. Sociological Theory: Symbolic Interactionism. (5) § Sp. Prerequisites: S212AB or permission of instructor. Doctoral students only. Lecture 2 hours. Research 9 hours.

A. Clarke

Course consists of readings and discussions on interactionist theory in sociology, with emphasis on the origins and development of the Chicago School of Sociology, as well as an examination of the link between philosophy of pragmatism and interactionism. SOC BEH SC

214A. Field Research. (5) § F, Sp. Prerequisite: Doctoral level. Lecture 2 hours. Field work 9 hours.

V. Olesen, J. Kayser-Jones Course offers sociological perspectives on the dimensions and properties of research in natural, social settings. Focus is upon developing skills in negotiating entree, watching, listening, and recording of data. Emphasis is upon developing conceptual schemata in preparation for analysis, SOC BEH SC

214B. Qualitative Analysis. (5) § W. Prerequisite: Doctoral level; Sociology 214A. Lecture 2 hours. Field work 9 hours.

216. Comparative Organizations: Intl Perspec. (3) § Sp. Prerequisite: S225. Seminar 2 hours. Independent study 3 hours. R. Newcomer

Course is a comparative review of contributions to the sociology of formal organizations of health care. A variety of organizational forms will be considered with special emphasis on international health care comparisons. SOC BEH SC

217. Future of the Family Seminar. (3) § F, W, Sp. Lecture 2 hours. Lab 3 hours. **R.** Staples

Course explores changing dating, sexual, sex-role, marital, and familial patterns in the United States. Discussion of futuristic models of family life as affected by sociocultural forces. Special emphasis given to changing sex-role behavior as affecting male-female relationships. SOC BEH SC

218. Adv Topics in the Socio-Analysis of Aging. (2-4) § W. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 0-6 hours. C. Estes

Course is designed for doctoral students investigating advanced research issues preparatory to qualifying examinations. Topics to be analyzed will vary each year, but will be focused upon a specific area. Laboratory assignments are for research activities on special topics in the area of aging. SOC BEH SC

219. Social Policy & Aging. (2-4) § W, Sp. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 0-6 hours. C. Estes

Course will provide a critical analysis of major social, economic and political issues of growing old in America: will examine social policy in the public and private sectors including health, income, and social services; and consider prospects for social change and political movements. SOC BEH SC

220. Sociology Seminar. (2-4) § F,W, Sp. Prerequisite: Consent of instructor. Required for graduate students in Sociology. Seminar 2 hours. Lab 0-6 hours. C. Estes

Doctoral students discuss methods and problems in current research. Course may be repeated for credit. SOC BEH SC

221. Qualifying Examination. (1-8) § F, W, Sp. Prerequisite: Completion of preliminary examinations. Open to Sociology students only.

C. Harrington, C. Estes, A. Clarke, R. Newcomer, V. Olesen

Course will offer preparation for the specialty area qualifying examination. SOC BEH SC

223. Perspectives on Public Policy. (3) § W, Sp. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours. **R.** Newcomer

Course offers systematic overview of health policy in American government-its scope, dynamics, and conceptual and practical dilemmas. Students will become acquainted with major issues involved in formulating, financing, implementing, and assessing patterns of decision (i.e., policy) established by government. SOC BEH SC

225. Health Care Institutions. (2-5) § F, W. Sp. Lab 0-9 hours. Seminar 2 hours. R. Newcomer, P. Fox

Course examines formal organizational theory, structure, and processes for health care organizations. The focus is on how organizations function within the socioeconomic and political environment in the United States, SOC BEH SC

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 Africans and Afro-Americans, Asians, Native Americans, and Latinos. Emphasis is on continuities in the family life of these groups in their native land and in the United States. SOC BEH SC

230. Socio-cultural Issues in AIDS. (3) §

235. Health Factors in Marriage & Family Behavior. (3) § F, W, Sp. Prerequisite: Consent of instructor. Graduate standing. Lecture 2 hours. Lab 3 hours. **R.** Staples

Course will explore how marital and family behavior generates mental and physical health problems. Topics are family violence, child abuse, sexually transmitted diseases, suicide, psychological problems, and the relationship of marital status to morbidity and mortality. SOC BEH SC

236. Race/Class Factors in Hith Care Delivery. (3) § W. Prerequisite: Consent of instructor. Graduate standing. Lecture 2 hours. Lab 3 hours. **R.** Staples

Course examines racial and class membership impact on access to health care services, variations in the quality of those services, and how professional and subprofessional roles in the health care system are organized along racial and class lines. SOC BEH SC

237. History of Sociological Thought. (3) § F.W. Restriction: Doctoral-level students. Lecture 2 hours. Field work 3 hours. Staff

Graduate introduction to history of sociological thought. Provides perspective and vocabulary for examining major schools of thought which constitute sociological tradition. Discussion of conceptual paradigms and their relationship to theory will provide understanding of sociological work. SOC BEH SC

238. Feminist Theory. (2-4) § F,W, Sp. Prerequisite: Some background in social theory. Doctoral students only. Lecture 2 hours. Field work 0-6 hours. A. Clarke

Course provides in-depth overview and examination of 20th-century feminist theories from sociology, anthropology, and interdisciplinary perspectives. Emphasis is on current contributions and debates, with attention to relations between feminist theories and issues for research in women's health and healing. SOC BEH SC

239. Evaluation Research Methods. (3) § F, W, Sp. Prerequisite: Sociology 214A and 214B. Non-doctoral students may enroll upon approval of instructor. Lecture 2 hours. Lab 3 hours.

R. Newcomer, L. Schatzman

Course analyzes field work as evaluation method, as applied to health care settings and programs, contrasting this approach with quantitative methods predicated on analysis of outcomes. Conduct of such evaluative research, and relationship with audiences, such as policymakers, analyzed. SOC BEH SC

240. Older Women's Issues. (2-4) § F.W. Lab 0-6 hours. Seminar 2 hours. C. Estes

Course analyzes postmenopausal women's socioeconomic status and changing social roles. Topics include demographic issues, economic trends, individual social and health status, policy implications for individuals and society. SOC BEH SC

241. Women, Work & Health. (2-4) § F. Seminar 2 hours. Optional project for additional units. Staff

How sociocultural systems place women in work roles, the implications for their health, their part in illness prevention and care of the sick. Analyzes "hidden careers," work and health in developing societies, relationship between work and morbidity-mortality patterns. SOC BEH SC

242. Women's Health: Res. (2-4) § Sp. 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. Staff

An advanced survey of quantitative research methods in analysis of women's health issues. Will focus on data sources, design type evaluation methods, data analysis, and proposal and report writing. Exploration of current research controversies. SOC BEH SC

247. Policy Issues & Political Processes. (3) § Sp. Prerequisite: S219, or S260, or equivalent and/or consent of instructor. Lecture 2 hours. Field work 3 hours. C. Harrington, C. Estes Course analyzes issues and trends in legislation and politics of health and examines health professionals' roles in developing strategies to influence legislative and political processes that affect planning and delivery of care. SOC BEH SC

Sociology

248. Group Independent Study. (1-4) § F, W, Sp. Prerequisite: Consent of instructor. Seminar 1-4 hours. Staff

Groups of two or more students select special problems to investigate on a collaborative basis. These studies may be conducted through readings, the collection or analysis of empirical data, or the development of conceptual analysis or of methodologies. SOC BEH SC

249. Special Studies. (1-8) § F.W. Sp. Prerequisite: Consent of instructor. Staff

Students select special problems to investigate on an individual or collaborative basis. These studies may be conducted through readings, the collection or analysis of empirical data, or the development of conceptual analysis or of methodologies. SOC BEH SC

251. Women's Health: Socio-Cultural. (2-4) § Sp. Prerequisite: Consent of instructor. Lab 0-6 hours. Seminar 2 hours. Staff

Exploration of relationship between culture and health for women in non-Western societies. Effects of modernization and migration on utilization of traditional and cosmopolitan health care and on women's roles as providers will be discussed, and contemporary controversies will be analyzed. SOC BEH SC

252. Women's Health: Socio-Historical.

(2-4) §W. Prerequisite: Consent of instruc+ tor. Lab 0-6 hours. Seminar 2 hours. A. Clarke

Sociological analysis of women's health status, roles as providers and patients, and the development of medical ideas about women from a historical perspective. Emphasis on 19th- and 20th-century developments in industrialized societies. SOC BEH SC

253. Sociology of Reproduction. (2-4) § Sp in alternate years. Offered 1994-95. Lab 0-6 hours. Seminar 2 hours.

Course focuses on recent theoretical and

substantive developments concerning female

sexuality, birth control, population control,

abortion, reproductive technologies, and

pregnancy/childbirth. Examines race and

class relations and concerns of the state, sci-

254. Women's Health: Policy Issues. (2-

Consideration of factors in the emergence of

issues in women's health and related policy.

the implementation of policy on women's

health, participation in care and healing sys-

tems and access to training. SOC BEH SC

256. Introduction to Survey Research.

(3) § Sp. Prerequisite: Biostatistics 183 and

185AB or equivalent. Restriction: Doctoral

level; non-doctoral students may enroll upon

consent of instructor. Lecture 2 hours. Lab 3

Course introduces sample theory, sample

search. Course provides rudimentary skills for

257. Minority Health and Aging. (2-3) §

F, Sp (offered once yearly). Lecture 2 hours.

Course explores the diversity of racial and

development, and methods of survey re-

those conducting their own research and

large field surveys. SOC BEH SC

Field work 0-3 hours.

Perspectives on women as policymakers and

4) § W. Prerequisite: Consent of instructor

ence, and medicine. SOC BEH SC

Lab 0-6 hours. Seminar 2 hours.

A. Clarke

Staff

hours.

V. Jones

R. Newcomer

489. Advanced TMD for the Generalist. (0-12) Su, F, W, Sp. Must be second-year student in the AEGD program. McNeill

This experience will allow the second-year AEGD trainee to provide direct services to patients with temporomandibular dysfunction (TMD). RESTOR DENT

Sociology

203. Social Psychology of Chronic Illness. (2-3) § Sp. Prerequisite: Consent of instructor. Seminar 2 hours. Field work 0-3 hours.

G. Becker

Course provides discussion of problems faced by chronically ill persons and their families including crisis management, handling symptoms, managing regimens, social isolation, phases of disease, temporal difficulties, normalization, dying, as well as policy issues confronting health care personnel and the general public. SOC BEH SC

V. Olesen, J. Kayser-Jones

Course examines modes of analysis applicable to qualitative data; emphasis on dimensions and properties exhibited in student-presented data. SOC BEH SC

214C. Qualitative Analysis. (3) § F,W, Sp. Prerequisite: Doctoral level; Sociology 214A and 214B. Lecture 2 hours. Lab 3 hours.

A. Strauss

Course provides qualitative analysis and the development of substantive and formal sociological theory. Emphasis is on student-presented data and their conceptualization. SOC BEH SC

215. Organizational Research. (2-4) § F, W, Sp. Prerequisite: Sociology 216 encouraged but not required and consent of instructor. Lab 3-9 hours. Conference 1 hour.

E. Lurie

Course will place students in organizations to provide opportunities to conduct research; apply and develop organizational theory; develop applied sociological, practical, and administrative skills and experience for students; and make sociologists attractive and salient to organizations outside academic settings. SOC BEH SC

C. Harrington

Course examines the history and social psychology of AIDS in relation to health, illness, disease, and death. Includes demographic trends, the cost burden, and special problems of minorities, women, and caregivers, along with policy issues. SOC BEH SC

233. Sociology of Aging. (3) § W, Sp. Lecture 2 hours. Lab 3 hours. P. Fox, S. Kaufman

Course reviews theories of aging including a review of theories of aging, current and historical trends in aging, factors related to aging, effects of aging on individuals and families, and formal and informal service systems for an aging population. SOC BEH SC

234. Introduction to Geriatrics and Ag-

ing. (2-3) § F,W, Sp. Lab 3 hours. Seminar 1-2 hours.

G. Becker, S. Kaufman

Course examines health status of the aged in . the United States in light of relevant biological, behavioral, sociocultural, and political factors. Topics relevant to health care professionals working with the elderly will be discussed. SOC BEH SC

243. Qualitative Research in Women's Health. (2-4) § W. Prerequisite: One or more women's health courses and one course in qualitative methods. Doctoral students only. Seminar 2 hours. Optional project for additional units.

V. Olesen

An advanced survey of qualitative research methods in analysis of women's participation in health and healing systems. Will review epistemological assumptions, analytic strategies, design and modes to assure credibility, plausibility. Will focus on data sources and analysis of data. SOC BEH SC

245. Gender and Science. (3) § Sp. Seminar 3 hours. A. Clarke

Course is a study of historical and contemporary issues in the social construction of biological and medical sciences, epistemological problems, and feminist perspectives. Focus is on impact of gender on scientific work and includes scientific constructions of gender and women's careers in science. SOC BEH SC

ethnic variation and examines the health and aging experience of minority elderly within the context of families, communities, and the nation. SOC BEH SC

269. Policy and Politics of Health. (2-5) §W, Sp. Lecture 2 hours. Field work 0-9 hours.

C. Harrington, C. Estes

Course examines health care policy and politics in terms of historical and contemporary issues related to access, quality, and cost. Organizational, financing, and labor market issues are included, along with strategies for social change. SOC BEH SC

262. Health Care Economics. (3) § F. Lecture 2 hours. Lab 3 hours. C. Harrington

Course is a critical analysis of economic theories and public and private financing of health care. Focuses on the effects of financing and reimbursement on health care delivery systems, professional practice, and individuals and families. SOC BEH SC

266. Leadership in Long-Term Care. (3) § W, Sp. Prerequisite: Consent of instructor. Seminar 2 hours, Lab 3 hours.

C. Harrington

Seminar examines leadership and administration in long-term care settings. Focuses on organization, budgeting, program planning, management, educational programs, and

Sociology

270A. Quantitative Methods I. (3) § F. Restriction: Doctoral students in Sociology or consent of instructor. Lecture 2 hours. Lab 3 hours.

R. Newcomer, E. Froelicher

Course examines quantitative research methods used in sociological inquiry. The focus is on scientific models, problem formulation, use of theoretical frameworks, levels of analysis, settings and strategies, specification of constructs, and selection of indices. SOC BEH SC

270B. Quantitative Methods II. (3) § W.

Prerequisite: S270A (Quantitative Methods I). Restriction: Doctoral students in Sociology or consent of instructor. Lecture 2 hours Lab 3 hours.

R. Newcomer, E. Froelicher

Course examines quantitative research methods including issues of sampling, reliability and validity, data collection, analysis, and inference. The course examines experimental, quasi-experimental, ex-post-facto, and correlational research, as well as survey and evaluation methods. SOC BEH SC

270C. Advanced Quantitative Methods.

(3) § Sp. Prerequisites: S270A and S270B or equivalent course in quantitative methods. Restriction: Doctoral students. Seminar 2 hours. Lab 3 hours.

Staff

Advanced seminar in research methods. Students will be able to appreciate the complexity of issues and challenges of advanced quantitative research in measurement models, complex survey analysis, longitudinal design and analysis, and meta-analysis. SOC BEH SC

271. Professional Issues Seminar. (1) § F, W, Sp. Restriction; Doctoral students in Sociology or consent of instructor. Seminar 1 hour.

R. Newcomer

Seminar addresses professional and career issues for sociologists, including teaching, research, writing for publication, and presentation of papers at professional meetings. Focuses on career and educational planning, resume development, internships, mentorships, and job interviews. SOC BEH SC

272. Dimertation Research Seminar. (3) § F.W. Sp. Restriction: Doctoral students in Sociology or consent of instructor. Seminar 2 hours Lab 3 hours. Staff

Course addresses logic of research design and execution for students. Clarification of research question, delineation of work plan, and so relevant theoretical literaoure or emperical data available. SOC BEH SC

273. Demography of Health and Aging. (3) § W, Sp. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours. M. LaPlante

Course provides an overview of demographic studies of morbidity, disability, and mortality, Sociodemographic variations and changes over time in health and mortality profiles of populations and the relationship of morbidity, disability, and mortality trends will be covered SOC BEH SC

275. Mental Illness and the Elderly. (2-3) § W, Sp. Prerequisite: Consent of instructors. Lab 3 hours. Seminar 2 hours. E. Lurie

Course considers current research, policy, and funding issues with regard to the mentally ill aged, within the context of the epidemiology, treatment options, utilization patterns, formal and informal treatment systems, and special issues of the mentally ill elderly. SOC BEH SC

276. Multidisciplinary Geriatric Assessment. (1-3) § F,W, Sp. Lab 3-9 hours. G. Becker, S. Kaufman

Course provides clinical experience in multidisciplinary assessment for sociologists, nurses, physicians, and other clinicians. Course involves application of social, psychological, economic, and other factors in assessment. SOC BEH SC

280. Meta-Analysis in Health Research. (3) § F. Offered in alternate years. Offered 1994-95. Prerequisite: Basic research statistics and Research Methods (S270AB or N295). Lab 3 hours. Seminar 2 hours. K. Fillmore

Course introduces meta-analysis techniques and applications in health research, including research design, sampling and data collection, and analytical techniques and software. Uses examples from drug and alcohol studies, and other health care evaluation studies, SOC BEH SC

281. Justice, Equity, and Health Care. (2-3) § F. Offered in alternate years. Offered 1994-95. Lab 0-3 hours. Seminar 2 hours Staff

Course examines how health care, a scarce resource, is divided among members of society, including theories from philosophy, medical ethics, economics, political science, sociology, and psychology. Examines justice and equity issues for different groups and among different health policies. SOC BEH SC

282. Sociology of Science/Technology. (2-4) § W. Offered in alternate years. Offered 1994-95. Lab 0-6 hours. Seminar 2 hours. A. Clarke

Course examines early functionalist and Marxist theories, Kuhn's work, social constructionist, ethnomethodolical, interactionist, neo-functionalist, critical, and neo-Marxist perspectives. Focuses on laboratory, controversy, technological, and representational studies and organization and funding. Links history and philosophy. SOC BEH SC

283. Selected Topics/Health Economics. (2-3) § W. Prerequisite: S262 (Health Care Economics). Lab 0-3 hours. Seminar 2 hours

R. Miller

Course examines selected topics in health care economics, with attention to basic economic theory of supply and demand for health care services and health insurance. Includes national health insurance proposals and the Canadian health care system. SOC BEH SC

284. Research on AIDS/HIV Illnesses. (3) § Sp. Offered in alternate years. Offered 1994-95. Prerequisite: S230 (Socio-cultural Issues in AIDS). Lab 3 hours. Seminar 2 hours.

C. Harrington, W. Holzemer

Course examines research in social and behavioral aspects of AIDS/HIV related illnesses and critiques methods, data collection, and analyses aspects of the research as well as the theoretical bases for the work. SOC BEH SC

285. Sociocultural Variations in Health. (3) § F. Lecture 2 hours. Field work 3 hours **R.** Staples

Course addresses variations in health attitudes and practices among diverse groups in the United States, with implications for nursing

practice. SOC BEH SC 285A. Qualitative Methods I. (5) § F.

Prerequisite: Second-year doctoral students. Seminar 3 hours. Field work 6 hours. A. Clarke, V. Olesen

Course reviews many of the types of qualitative research methods, emphasizing assumptions, approaches. Focus on design, entree, ethics, data-gathering techniques (interviewing, observing), data recording and management. Introduction to data analysis.

285B. Qualitative Methods II. (5) § W. Prerequisite: N285A/S285A and second-year doctoral students. Seminar 3 hours. Field work 6 hours.

A. Clarke, V. Olesen

Course compares and contrasts modes of qualitative analysis. Examines issues in establishing plausibility, credibility, adequacy. Intensive data analysis and examination of the problems of presentation of findings with focus on questions of authority and preparation of text.

286. Diversities in Women's Health. (2-4) § F,W, Sp. Lecture 2 hours. Field work 0-6 hours.

289A. Advanced Quantitative Research Methods I. (3) § F. Prerequisites: N209 and N212 or equivalent, B187 and Doctoral students only. Lecture 2 hours. Lab 3 hours. R. Newcomer, E. Froelicher Course addresses theoretical basis of advanced quantitative methods. Fundamental issues of causality, and design issues pertinent to causality, are addressed using randomized clinical trials as models for experimental designs. Methods of sampling and issues in data collection and measurement are ex-

289B. Advanced Quantitative Research Methods II. (3) § W. Prerequisite: S289A and Doctoral students only. Lecture 2 hours.

Lab 3 hours. E. Froelicher, R. Newcomer

plored, SOC BEH SC

Course covers continuing analysis of quantitative research methods including selected survey, longitudinal study designs. Focus compares and contrasts research designs, proposes strategies for maximizing strengths of various designs. Explores fit of research questions, methods, and statistical approaches. Examples of methods include questions answered by time series analysis, lifetable and survival analysis.

299. Dissertation. (0) § F, W, Sp. Prerequisite: Advancement to candidacy and permission of the graduate adviser. Staff

For graduate students engaged in writing the dissertation for the Ph.D. degree. SOC BEH SC

Speech and Hearing Science

201. Basic Hearing Mechanisms. (4) § F. Prerequisite: Consent of instructor. Lecture 3 hours. Lab 1 hour. Offered in alternate years. Not offered 1994-95. Staff

Lectures and laboratory demonstrations reviewing surgical and comparative anatomy of the ear: cochlear development and mechanics; hair cell transduction; comparative physiology of hearing; bases of hearing loss; and strategies for objective evaluation of inner ear function in animals and man. OTOLARYN

202. Auditory Coding. (4) § W. Prerequisite: Consent of instructor. Lecture 3 hours. Lab 1 hour. Offered in alternate years. Not offered 1994-95.

Staff Lectures and laboratory demonstrations cov-

ering such topics as physiology and psychoacoustics of sound and speech coding; cochlear prostheses; central auditory system organization; physiology of binaural hearing in avians and mammals; and evaluation of auditory brainstem function in animals and

man. OTOLARYN 203. Forebrain Mechanisms. (4) § Sp.

Prerequisite: Consent of instructor. Lecture 3 hours. Lab 1 hour. Offered in alternate years. Not offered 1994-95. Staff

Topics include forebrain representation of complex spectra (including speech) and of sound localization (including echolocation in bats and whales); cognitive development related to hearing; auditory consequences of such pathologies as brain lesions and autism; and objective assessment of forebrain mechanisms. OTOLARYN

204. Speech Production and Perception. (4) §F. Lab 2 hours. Seminar 3 hours. Turner

This course is part of a two-year core curriculum covering the communicative neurosciences. It is the first course in the sequence which considers speech and language. It will cover basic acoustics, acoustic phonetics, the anatomy and physiology of speech production, and theories of speech perception. OTOLARYN

205. Language Science. (3) § Sp. Lecture 2.5 hours. Lab 2 hours. Offered in alternate years. Offered 1994-95. Turner

215. Laboratory Rotation. (1-4) § F,W, Sp. Prerequisite: Consent of instructor. Lab 3-12 hours. Staff

For students who arrange a rotation in the research laboratory of a faculty member. Students will participate in an ongoing research project and review relevant literature. OTOLARYN

220. Speech and Hearing Science. (1) § F, W, Sp. Seminar 1 hour. Staff

This seminar series will consist of weekly presentations by the faculty, students, research personnel in the department, and visiting scientists. Topics will cover the range of speech and hearing sciences, including anatomy, physiology, psychophysics, speech, clinical diagnosis, and rehabilitation. OTOLARYN

221. Electrophysiology & Audiology. (4) § F. Prerequisite: Consent of instructor. Lecture 3 hours. Lab 3 hours. Gardi and Staff

Review of the development of electrophysiological approaches to studying auditory functions with particular emphasis on auditory-evoked response measurement. Lectures and laboratory exercises will stress equipment design and calibration, data collection, analysis, and interpretation. OTOLARYN

222. Auditory Psychophys & Physiol. (3) § Sp. Lecture 3 hours. Staff

A coordinated coverage of basic auditory function. The physiology of the peripheral auditory system and basic perceptual correlates. Physics of sound, cochlear mechanics and microphonics, VIII nerve physiology, thresholds, masking, pitch, loudness, temporal adaptation, frequency analysis, binaural perception, and processing are included. OTOLARYN

224. Animal Psychophysics. (3) § Sp. Seminar 3 hours.

Jenkins

Reading and discussion of selected papers on modern behavioral methods for obtaining information on the sensory capacities of animals. Students will have access to equipment and a microcomputer so that one or more behavioral methods can be implemented. OTOLARYN

225. Inner Ear Form and Function. (3) § F, Sp. Prerequisite: Consent of instructor. Lecture 2 hours. Lab 3 hours. Leake

This course will consider the gross morphology, histology, ultrastructure and function of the mammalian cochlea and vestibular sensory organs. Instruction will include lectures, demonstrations, dissections and student presentations. OTOLARYN

247. Special Studies. (1-5) § F,W, Sp. Prerequisite: Consent of instructor. Staff

Directed reading and laboratory work in the auditory process and its disorders. OTOLARYN

249. Independent Study. (1-5) § F,W, Sp. Prerequisite: Consent of instructor. Staff

Students and instructor develop jointly a study plan involving tutorials, reading, and laboratory work. Students engage in intensive exploration of specific topics related to the anatomic, physiologic, psychophysical, and behavioral aspects of the speech and hearing sciences. OTOLARYN

250. Research. (1-8) § F, W, Sp. Prerequisite: Consent of instructor. Staff

Students participate in ongoing research or initiate independent research project under guidance of supervising instructor. Assignments include literature review, design of research, execution of research, data reduction and analysis, and reporting. OTO-LARYN

299. Dissertation. (0) § F, W, Sp. Prerequisite: Advancement to candidacy and permisof the graduate adviser. Staff

Surgery

110. Clinical Clerkship in General Surgery. (1.5 per week) Su, F, W, Sp. Prerequisite: Core curriculum in basic sciences; thirdyear standing. Macho

A basic course in surgery designed to cover those aspects of surgery which should be familiar to all practitioners. Students are assigned to work with ward teams and also to participate in teaching seminars. SURGERY

111. Advanced Surgery Core Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 and Surgery 110.

Reilly

Students are senior clerks on wards, in operating rooms at UC, SFGH, and VA. Rounds, seminars focus on physiological approach to surgery. Clinical clerkships in surgical specialties may be taken with prior approval of specialty department and Department of Surgery. SURGERY

140.01A. Advanced Clerkship in Gen-

eral Surgery-UCSF Blue Service. (1.5 per week) Su, F, W, Sp. Prerequisite: Surgery 110, Medicine 110.

Reilly, Mulvihill

Senior clinical clerks participate in clinic, ward, and operating room with direct involvement in post- and pre-operative care. SURGERY

140.01B. Advanced Clerkship in General Surgery-UCSF Gold Service. (1.5 per

week) Su, F, W, Sp. Prerequisite: Surgery 110, Medicine 110. **Reilly, Schrock**

SURGERY

SURGERY

Schrock

Russell

Goldstone

Hanley

or Surgery 110 and 111.

Senior clinical clerks participate in clinic, ward, and operating room with direct involvement in post- and pre-operative care. SURGERY

140.01D. Advanced Clerkship in Gen-

eral Surgery-VAH General/Vascular Service. (1.5 per week) Su, F, W, Sp. Prerequisite: Surgery 110, Medicine 110. Reilly

Senior clinical clerks participate in clinic,

ward, and operating room with direct in-

volvement in post- and pre-operative care.

140.01E. General Surgery. (1.5 per week)

Su, F, W, Sp. Prerequisite: Surgery 110.

Senior clinical clerks participate in clinic,

ward, and operating room with direct in-

volvement in post- and pre-operative care.

140.02. Off-Campus Clerkship. (1.5 per

week) Su, F, W, Sp. Prerequisite: Core cur-

riculum in basic sciences and Medicine 110

Clinical clerkship in approved hospitals in

other universities by special arrangement and

approval of the chairperson of the depart-

140.03. General Surgery-PMC. (1.5 per

Students serve as acting interns on general

surgical service; participate in preoperative

assessment, interoperative management and

postoperative care of patients; participate in

cians' offices; participate in daily ward rounds

140.04. Vascular Surgery Clerkship. (1.5

Students serve as acting interns on the vascu-

preoperative, intraoperative, and postopera-

clinics, rounds, and conferences. SURGERY

140.05. Operable Heart Disease. (1.5 per

week) Su, F, W, Sp. Prerequisite: Core cur-

riculum in basic sciences and Medicine 110

Ward rounds and conferences on patients

tive management of patients, as well as in

per week) Su, F, W, Sp. Prerequisite: Medi-

outpatient clinics as well as selected physi-

and teaching conferences. SURGERY

cine 110, Surgery 110 and 111.

lar surgery team, participating in

week) Su, F, W, Sp. Prerequisite: Surgery 110.

ment and the dean. SURGERY

Siperstein, O. Clark, R. Allen

277. Seminar on Disability. (1-3) § F.W. Sp. Prerequisite: Doctoral students. Lab 3 hours. Seminar 1-2 hours.

M. LaPlante

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Course covers social and medical models and theories of disability and handicap. Areas covered include definitions, utility of role theory, models of identification and causation, and social perspectives on disability policy. SOC BEH SC

278. Sociology of Alcohol and Drugs. (2-3) § F. Offered in alternate years. Offered 1994-95. Lab 0-3 hours. Seminar 2 hours. K. Fillmore

Course examines alcohol and drug use from multiple theoretical perspectives in various historical and cultural contexts. Examines the distribution of alcohol and drug use across and within societies and various policies and their consequences for the control and management. SOC BEH SC

A. Clarke

Course examines women's participation in formal and informal health and healing systems, with emphasis on health problems, recruitment to health professions, images of women in health and illness, and women as providers. Health issues of women of color in the U.S. are highlighted. SOC BEH SC

287. Black Families in America. (2-3) § W, Sp. Lecture 2 hours. Lab 0-3 hours. **R.** Staples

Course provides a sociological interpretation of the black family institution in the United States of America. It examines black family culture, values, roles, socialization processes and class and gender variations. Emphasis is on changes in the last thirty years. SOC BEH SC

288. Advanced Seminar on HIV/AIDS.

(1) § F,W, Sp. Prerequisites: Doctoral students in HIV/AIDS. Seminar 1 hour. C. Harrington, R. Stall, W. Holzemer Doctoral seminar for presentations and critiques of student work in progress on HIV/ AIDS. SOC BEH SC

This is the final course in a 2-year sequence (201, 202, 203, 205). The objective of the core curriculum is to provide students with a fundamental knowledge of the speech and hearing sciences. This course covers basic language science with emphasis on the cortical processing of language. OTOLARYN

210. Fundmntl of Auditory Neurobiol.

(1) § F, W, Sp. Prerequisite: Consent of instructor. Lecture 1-3 hours. Schreiner

Reading and critical discussion of selected original research papers on the anatomy and physiology of the auditory system. Each level of the auditory nervous system from the periphery to the cortex will be considered in turn. OTOLARYN

211. Sound and Sound Analysis. (4) § F. Prerequisite: Consent of instructor, Lecture 3 hours. Lab 2 hours. Offered in alternate years. Not offered 1994-95. Staff

Review of the physics of sound as it applies to the study of speech and hearing. Theoretical and practical approaches to the analysis of signals and the fundamentals of system analysis. Practical application of acoustic research equipment. OTOLARYN

For graduate students engaged in writing the dissertation for the Ph.D. degree. OTOLARYN

Stomatology

100. HIV/AIDS: A Current Review. (2) W. Prerequisite: Dental I, Dental Hygiene I. Lecture 2 hours.

Bartnof, D. Greenspan, Levy

An overview of the HIV/AIDS pandemic, with a selected focus on basic and clinical sciences, and

social/psychosocial aspects. Sixteen hours are presented in lecture format, two hours as panel presentations, and two hours as emphasized review sessions. STOMATOL

disease. Details of selection, differential diagnosis, and results of surgery are discussed. SURGERY

140.06. Emergency Medicine-SFGH. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110 or Surgery 110 and 111.

Neighbor

or Surgery 110 and 111.

with operable, congenital, or

Students care for patients in the Emergency Department at SFGH as acting interns, and care for all medical and surgical problems. The rotation focuses on wound-care techniques (including suturing), didactic conferences, and bedside one-to-one instruction by senior residents and faculty. SURGERY

140.07. Shock & Trauma Research. (1.5 per week) Su, F,W, Sp. Prerequisite: Core curriculum in basic sciences and Medicine 110 or Surgery 110 and 111. **Schecter**

Course involves clinical and laboratory investigation and a detailed study of specific patients with trauma and shock. SUR GERY

140.08. General Surgery-C. (1.5 per

week) Su, F, W, Sp. Prerequisite: Surgery 110 & Medicine 110.

V. Richards

Students work as interns on Surgical Service; they evaluate general surgical patients preoperatively; work with patients in operating room; assume graduated, increasing responsibility in postoperative management. Rounds and conferences enhance clinical experience; interaction with staff in patient care emphasized. SURGERY

140.10. Cardiothoracic Surgery. (1.5 per week) Su, F, W, Sp. Prerequisite: Surgery 110 and 111.

Keith

As an integral member of the cardiothoracic team, the student directly and actively shares in preoperative evaluation, operative procedures, and postoperative care. Cardiac and thoracic conferences and daily ward rounds provide the didactic teaching. SURGERY

140.11. Burn Care-SFGH. (1.5 per week) Su, F, W, Sp. Prerequisite: Surgery 110.

J. Horn

Clinical rotation on a large Burn Center Service. Pathophysiology of thermal injury including pulmonary aspects will be stressed. Students act as integral members of the team and participate directly in patient care. SUR-GERY

140.12A. Adv Clerkship in Plastic/

Reconstr Surgery–UC. (1.5 per week) Su, F,W, Sp. Prerequisite: Surgery 110, Medicine 110.

Mathes

Students act as advanced clerks, taking part in operative procedures as well as postoperative management of the patient. Students will be exposed to patients with general reconstructive problems; trauma to the head and neck, hand surgery, and congenital anomalies. SURGERY

140.12B. Adv Clerkship in Plastic/

Reconstr Surgery-SFGH. (1.5 per week) Su, F, W, Sp. Prerequisite: Surgery 110, Medicine 110.

Mathes

Students act as advanced clerks, taking part in operative procedures as well as postoperative management of the patient. Students will be exposed to patients with general reconstructive problems; trauma to the head and neck, hand surgery, and congenital anomalies. **SURGERY**

140.13. General Surgery–VAF (1.5 per week) Su, F, W, Sp. Prerequisite: Surgery 110 and 111.

O'Hara

Students receive broad clinical experience in general surgery atVAF and with practicing surgeons in selected community settings in the central San Joaquin Valley. Balance betweenVAF and community assignments is individually arranged according to students' interests. SURGERY

140.14. Surgical Intensive Care Clerkship–VMC. (1.5 per week) Su, F, W, Sp. Prerequisite: Surgery 110 and 111. Fourthyear students only.

Davis, Gladen

Clerkship offers an "organ systems" approach to critical surgical illness with experience in invasive and noninvasive monitoring and appropriate therapeutic interventions. Course is aimed at providing patient management experience and familiarity with basic science concepts and literature upon which surgical intensive care is based. SURGERY

140.15. Burn Center Clerkship–VMC. (1.5 per week) Su, F,W, Sp. Prerequisite: Surgery 110 and 111. Fourth-year students only.

140.17. Pediatric Surgery. (1.5 per week) Su, F,W, Sp. Prerequisite: Surgery 110 and 111. Clinic 40.

Harrison

The student works as acting intern on a busy pediatric surgical service assisting in pre- and postoperative management and in the operation. An interesting, wide variety of problems is encountered. SURGERY

140.18. Liver Transplantation. (1.5 per week) Su, F, W, Sp. Prerequisite: Medicine 110, Surgery 110.

Ascher and Staff

Students will participate in evaluation of potential liver recipient (including HLAtyping, crossmatch, immune monitoring), observe the liver transplant procedure, participate in postoperative care (including immunosuppressive management and mechanisms of graft rejection). Student will attend pertinent conferences, clinics, and daily rounds. SURGERY

140.19. Advanced Clinical Surgery-

VMC. (1.5 per week) Su, F,W, Sp. Prerequisite: Surgery 110 and 111. 4th-year standing. Parks

Senior clerkship responsibilities include participation as member of busy patient care team, with emphasis on pre- and postoperative care, supervised clinic and operating room assignments, and participation in departmental conferences. The aim is to provide exposure to a spectrum of elective and emergency surgical problems. SURGERY

140.21. Clinical Trauma Surgery–VMC. (1.5 per week). Su, F,W, Sp, SS1, SS2. Pre-requisite: Surgery 110.

S. Parks, J. Davis

Subinternship responsibilities are to participate on a busy patient care trauma service emphasizing resuscitation, evaluation of injury, operating room participation, postoperative followup. There is also experience with non-operative management of trauma. The student will participate in departmental conferences. SURGERY

140.22. Trauma and General Surgery-

SFGH. (1.5 per week). Su, F, W, Sp. Prerequisite: Surgery 110 and Medicine 110. Lecture 4 hours. Clinic 4 hours. Patient contact 24 hours.

Schecter

Senior clinical clerks participate in the clinic, ward, and operating room with direct involvement in pre- and postoperative care. There is also work at the intern-clerk level as an integral part of the Trauma Service. SUR-GERY

150.01. Research in Surgery. (1.5 per week) Su, F,W, Sp. Prerequisite: Consent of instructor. **Hunt**

Opportunities for research in one of the de-

partmental laboratories by arrangement with the instructor, SURGERY

160.05. Advanced Surgery Reading. (2) F, Sp.

F. Lewis

A weekly seminar where previously assigned papers are discussed and critiqued. Papers representing the classical and current concepts in general surgery are covered. SUR-GERY

160.06. Total Parenteral Nutrition. (5) Su, F, W, Sp. Prerequisite: Surgery 110 and consent of instructor. Lecture 3 hours. Lab 6 hours.

Hickey

Course emphasizes nutritional and metabolic requirements of injured, ill, and malnourished patients. Clinical rotation involves methods of preparation, administration, and assessment of patients receiving calorie protein or amino acid support as part of specific therapy. SURGERY

198. Supervised Study. (1-5) F,W, Sp. Prerequisite: Consent of instructor. **Schrock and Staff**

Library research and directed reading under supervision of a member of the faculty with the approval of the chairperson of the department. SURGERY 402. General Surgery Pathology Sem.(1) F,W, Sp. Interns and residents.McKerrow

Seminars include case reports and demonstrations of the currently available gross and microscopic surgical pathological material from the operating rooms and pathology laboratories. SURGERY

403. General Surgery Seminar. (2) Su, F, W, Sp. Interns and residents. DMC **Heer**, SFGH **Lewis**, UC **Debas**, VA

L. Way Seminar is held in the surgical wards with discussion of current problems concerning the diagnosis and management of general surgical patients. SURGERY

450. Clinical Surgery. (1.5 per week) Su, F, W, Sp.

UC **Debas**, SFGH Lewis, VA L. Way, DMC Heer, C V. Richards, PMC Russell Residents, under supervision, are responsible for the preparation of case records, laboratory work, preoperative patient preparation, assistance at operations, postoperative care, and attendance at follow-up clinic. Senior residents have certain additional administrative, teaching, and clinical responsibilities. SUR-GERY

452. Experimental Surgery Laboratory. (1.5 per week) Su, F.W. Sp. Restriction: Sur-

(1.5 per week) Su, F,W, Sp. Restriction: Surgery 450 and 452 may not be taken concurrently.

Debas and Staff

Course includes experimental investigations of general surgical problems and the development of technical and laboratory methods to be applied in general surgery. SURGERY

453. Clinical Experimental Surgery. (10) Su, F, W, Sp. Schrock

Assistant residents in off-campus hospitals approved by the chairperson of the department and the dean. Course includes clinical and experimental investigations of general surgical problems and the development of technical and laboratory methods to be applied in surgery. SUR GERY

490. Clinical Surgery–SFGH. (1.5 per week) Su, F,W, Sp. Lewis

Interns rotate through the general surgical service, including the intensive care unit. Under the direction of the attending staff, experience is provided in vascular, chest, hand and plastic surgery, and surgery of maxillofacial injuries. SURGERY

495. Clinical Surgery. (1.5 per week) Su, F, W, Sp. **Schrock**

Interns, under supervision, are responsible for the preparation of case records, laboratory work, preoperative patient preparation, assistance at operations, postoperative care, and attendance at follow-up clinic. SURGERY

Teaching Methodology

170. Educational Technology. (1) F,W, Sp. Prerequisite: D.D.S. degree. Seminar 2 hours. **Staff**

Course provides resource information in the form of a systematic overview of educational technology. This information is introduced in conjunction with the development by the individual student of an actual microcourse, teaching a single skill. GEN DENT

186.01A-B-C. Practice Teaching. (0-3) F, W, Sp. Lab 3 hours. Staff

Practical teaching experience in selected courses under the supervision of senior members of the staff. GEN DENT

Toxicology

200A. Introduction to Biochemical Toxicology. (4) § Sp. Prerequisite: Pharmaceutical Chemistry 203 or co-requisite. Lecture 4 hours. Mehan

The metabolism and bioactivation of drugs, carcinogens, and other toxicants will be presented, and these examples will serve to illustrate how toxic substances alter and disrupt normal cellular processes at the molecular level. PHARM

Urology

Core Clerkship–Surgery 110 includes clinical clerkships in the outpatient clinics and hospitals, assistance at operations, and participation in residents' seminars.

140.01. Advanced Urology Clerkship–UC. (1.5 per week) Su, F, W, Sp. Prerequisite: Surgery 110. **Tanagho**

Students work as interns on the Urology Service at UC. They also attend rounds and scheduled seminars with residents and visiting staff. UROLOGY

140.02. Off-Campus Clerkship. (1.5 per week) Su, F, W, Sp. Prerequisite: Surgery 110. **Tanagho**

for Nursing.

Education.

Association.

tion procedures.

and Kaz Tsuruta.

Clinical clerkship in off-campus hospitals approved by the chairperson of the department and the dean. UROLOGY

140.03. Advanced Urology Clerkship– VA. (1.5 per week) Su, F, W, Sp. Prerequisite: Surgery 110.

Urology

R. D. Williams

Students work as interns on the Urology Service atVA. They also attend rounds and scheduled seminars with residents and visiting staff. UROLOGY

140.04. Advanced Urology Clerkship– SFGH. (1.5 per week) Su, F,W, Sp. Prerequi-

site: Surgery 110. McAninch

Students work as interns on the Urology Service at SFGH. They also attend rounds and scheduled seminars with residents and visiting staff. UROLOGY

150.01. Research in Urology. (1.5 per week) Su, F, W, Sp. Prerequisite: Must be third- or fourth-year medical student. Must have approval of chair, dean, and involved. research faculty.

Carroll

Research project under the direction of a member of the Department of Urology. UROLOGY

170.01. Fundamentals of Urology. (2) F, W/Sp. Prerequisite: Concern of Simon Science and Science and

W, Sp. Prerequisite: Consent of instructor. **Tanagho and Staff** Seminar and library research. UROLOGY

199. Laboratory Project. (1-5) F,W, Sp.

Prerequisite: Consent of instructor. Tanagho and Staff

A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. UROLOGY

400. Urology Seminar. (1.5) Su, F, W, Sp. Tanagho

Seminar includes study of the basic sciences and urologic roentgenology with members of the attending staff. UROLOGY

402. Urologic Clinical Seminar. (2) Su, F,

Seminar includes discussion of diagnosis and

treatment of patients in the urology wards

490. Clinical Urology-SFGH. (1.5 per

Interns rotate through urological wards. Un-

cluding history-taking, physical examination,

der the direction of the attending staff they

are responsible for the care of patients, in-

laboratory tests, and consultation. UROL-

with the attending staff. UROLOGY

W, Sp. Tanagho

week) Su, F, W, Sp.

McAninch

OGY

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Pharmacy: American Council on Pharmaceutical

Physical Therapy: Commission on Accreditation

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in Education of the American Physical Therapy

Dominic, Parks

Presents a clinical spectrum in critical-care medicine: burn wound infection control, resuscitative management, hemodynamic monitoring, with emphasis on appropriate nutritional and metabolic support. Also stressed are psychological and emotional needs of patients. Students participate as full members of the Burn Team. SURGERY

140.16. Nutritional Support Service-SFGH. (1.5 per week) Su, F, W, Sp. Prerequisite: Surgery 110.

Hickey, Weaver

Students will be instructed in the formulation and administration of parenteral and enteral feedings; the insertion of subclavian catheters; the management of metabolic/nutritional problems. Students will perform nutritional assignments and activity, and participate in daily rounds at San Francisco General Hospital. SURGERY **199. Laboratory Project.** (1-5) F,W, Sp. Prerequisite: Consent of instructor. **Schrock and Staff**

A laboratory research project under direction of a member of the faculty with the approval of the chairperson of the department. SUR-GERY

400. General Surgery Staff Conf. (1.5) F, W, Sp.

W, Sp. UC Schrock, SFGH Lewis, VA L. Way Conferences include presentation of case studies with reference to the literature, case records, laboratory tests, and special studies. Faculty and occasional guest lecturers discuss surgical problems. Death and complications are reviewed weekly. SURGERY UC San Francisco is accredited by the Western Association of Schools and Colleges. In addition, the professional curricula are accredited by the following specialized accrediting agencies: *Dentistry:* Commission on Dental Accreditation of the American Dental Association. *Medicine:* Liaison Committee on Medical Education representing the Council on Medical Education of the American Medical Association and the Executive Council of the Association of American Medical Colleges.

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