

R e l a t e d C o u r s e s

**This is the Related Courses section of the 1996-1999
University of Minnesota Graduate School Catalog**

Graduate degree programs do not exist in the following fields. However, students may earn graduate credit in courses related to their program in these fields.

American Indian Studies (Amln)

Amln 5251. American Indians and the Cinema.

(4 cr, §AmSt 5251) Libertus
Images and stereotypes of tribal people in selected motion pictures, from silent documentaries to contemporary films.

Amln 5461. North American Indian

Architecture. (4 cr, §Anth 5461, §Arch 5461; prereq arch or grad arch major or Amln studies major)
Historic and contemporary overview; principles and theories.

Contemporary Issues

Amln 5341. Contemporary Indian Movements.

(4 cr)
Indian organizations and social movements during the 20th century.

Amln 5422. Change and Development in Indian Communities.

(4 cr; prereq 3112 or #)
Sources, nature, and consequences of social and economic development and change in Indian communities.

Tribal Development

Amln 5411. Urban Indian Communities.

(4 cr)
Social science and historical analysis of the rapid cityward Indian migration since World War II.

Special Topics

Amln 5920. Seminar in American Indian Studies.

(Cr ar; prereq in *Class Schedule*)
Topics in American Indian history; varies yearly.

Amln 5960. Topics in American Indian Studies.

(Cr ar)
Topics listed in *Class Schedule*.

Tutorial

Amln 5970. Directed Studies.

(1-15 cr; prereq #, Δ or □)

Amln 5990. Directed Research.

(1-15 cr; prereq by petition only, #, Δ, CLA approval)
Independent research under the guidance of a faculty member.

Anesthesiology (Anes)

Associate Professor: Ji-Chia Liao

Assistant Professor: Josephine Lo

Anes 5186. Clinical Practice in Anesthesia.

(15 cr; prereq CRNA, regis BS in nurs anes, 5086, #)

Anes 5386. Education in Nurse Anesthesia.

(1 cr; prereq CRNA, regis BS in nurs anes, #)

Anes 8265f,w,s,su. General Anesthesia.

(12 cr)
Instruction and experience in general anesthesia.

Anes 8266f,w,s,su. Regional Anesthesia.

(4 cr)
Observation, instruction, and administration of all types of local, regional, and spinal anesthesia.

Anes 8267f,w,s,su. Pre- and Postanesthetic Evaluation.

(2 cr)
Selection of proper anesthetic agent and technique, premedication, and observation of recovery from anesthesia.

Anes 8268f,w,s,su. Seminar: Anesthesiology.

(2 cr)
Review of literature, report of case problems, and discussion of research work in progress within the department.

It is recommended that fellows in anesthesiology also select from MdBc 5053, 5100, and PubH 5450.

Biology (Biol)

Biol 5003f,w,s. Genetics.

(4 cr, §GCB 3022, §GCB 5022; prereq 5001 or BioC 3021 or BioC 5331)
Introduction to nature of genetic information, its transmission from parents to offspring, its expression in cells and organisms, and its course in populations.

Biol 5004f,w,s. Cell Biology.

(4 cr; prereq 5001 or BioC 3021 or BioC 5331, Biol 5003 or BioC 5333)
Structures and functions of membranes, organelles, and other macromolecular aggregates found in plant, animal, and bacterial cells. Cell form and movement, intercellular communication, transport, and secretion.

Biol 5013. Microbiology.

(5 cr, §MicB 3103, §MicB 5105, §VPB 3103; prereq 5001 or BioC 3021 or BioC 5331)
Taxonomy, anatomy, physiology, biochemistry, and ecology of microbes. Emphasis on molecular structure in relation to bacterial function.

Biol 5125. Recombinant DNA Laboratory.

(4 cr, §5825, §MicB 5125, §MicB 5425; prereq application, Δ)
Introduction to basic recombinant DNA techniques. Methods for growing, isolating, and purifying recombinant DNAs and cloning vectors.

Biol 5816. Field Biology Photography.

(5 cr; prereq beginning biol course, Δ; limited to 20 students; A-F only)
Techniques for documenting insects, vertebrates, aquatic organisms, and habitats of the Itasca area. Photographic principles and applied advanced techniques using flash, reversed lenses, and infra-red photoelectric tripping devices. On-site processing of color slides and black and white film. No previous processing experience required.

RELATED COURSES

Biol 5841. Ecology. (5 cr, \$3008, \$5041; prereq 1103 or 1106 or 1806 or 3011 or 3012 or 3812, Math 1142 or Math 1251, Δ)
Growth, structure, and evolution of populations. Pairwise biotic interactions between species and their effect on the diversity and structure of natural communities. Nutrient dynamics, function, productivity, and temporal stability of ecosystems. More field experience than in 5041.

Biol 5890su. Research Problems at Itasca. (Cr ar; prereq #, Δ)
Undergraduate and graduate students develop short-term research project during one or both summer terms.

Biol 5951. Social Uses of Biology. (3 cr; prereq 10 cr sciences)
Influence of biological science on quality of human life; agriculture, medicine, occupational health, environmental science, and theories of human nature. Responsibilities and roles of biologists in policy formulation in scientific and political world.

Chicano Studies (Chic)

Associate Professor: Guillermo Rojas, *chair*; Dennis N. Valdes

Chic 5901. Chicano Studies: Theory and Methodology. (4 cr; prereq grad student or sr, #)
Chicano studies scholarship in social sciences and humanities.

Chic 5920. Topics in Chicano Studies. (1-4 cr; prereq grad student or sr or #)
Multidisciplinary themes. Topics vary quarterly.

Chic 5970. Directed Studies. (Cr ar; prereq #, Δ, CLA approval)

Cultural Studies and Comparative Literature (CSCL)¹

Professor: Richard D. Leppert; Harvey Sarles; Jochen Schulte-Sasse

Associate Professor: John Archer; John W. Mowitz; Gianna Pomata; Gary C. Thomas

Assistant Professor: Prabhakara Jha

CSCL 5102. Cultural Politics. (4 cr, \$Hum 5102; prereq jr or sr or grad student or #) Mowitz
Examination of transformation of traditional domain of politics once legitimation and contestation of social power is conducted primarily within cultural sphere. How dynamics of marginalization, resistance, and reappropriation come to characterize cultural politics.

CSCL 5154. Theoretical Constructions of Space. (4 cr, \$Hum 5154; prereq jr or sr or grad student or #) Archer
Theories of space drawn from such disciplines as anthropology, architecture, geography, history, landscape design, philosophy, planning, and sociology. Areas of intersection and difference; new and developing areas of inquiry. Theoretical integration of social and aesthetic concerns.

CSCL 5178. The Political Discourse of Social Change. (4 cr, \$Anth 5157, \$Hum 5178; prereq jr or sr or grad student or #) Josephides
Tension between tradition and innovation (of ideas, techniques, material development) in contexts of rapid social change, especially when local cultures come into contact with outside, politically more forceful ones. Tradition as an already politicized discourse.

CSCL 5256. Suburbia. (4 cr, \$Hum 5256; prereq jr or sr or grad student or #) Archer
Ideology and practice of suburbia, from origins in mid-18th-century Britain to present-day America; characteristic architectural and spatial forms in relation to social and political relations.

CSCL 5301. Society, Ideology, and the Production of Art. (4 cr, \$CSDS 5301, \$Hum 5301; prereq jr or sr or grad student) Leppert
Recent critical theories on relation of arts to social and ideological forces; selected artifacts from Western culture (Renaissance to 20th century; high, popular, and mass culture). Music, visual art, literature.

CSCL 5302. Aesthetics, Ideology, Valuation of Art. (4 cr, \$CSDS 5302, \$Hum 5302; prereq jr or sr or grad student) Leppert
Society, ideology, and aesthetic value in light of recent critical theories of visual art, music, and literature. Mediations of place, social class, gender, and ideology on aesthetic judgment in post-Renaissance Western culture.

CSCL 5398. Phenomenology and Ethnography. (4 cr, \$Anth 5394, \$Hum 5398; prereq jr or sr or grad student or #) Josephides
Phenomenological/existentialist thought conceived as "the end of ideology"; its politicization during World War II; its use in reflexive anthropology conscious of its own colonial foundations; its use in attempts to understand The Other and in concepts of the person.

CSCL 5711. Interpretation of Myth. (4 cr, \$CSDS 5711, \$Hum 5711, \$ReIS 5111; prereq jr or sr or grad student) Josephides
Structures and functions of myths. Myth as social charter, ideological system, and literary form. Readings in classic theories of myth and primary sources from India, Iran, Mesopotamia, Greece, Africa, North and South America.

CSCL 5751. Basic Concepts of Cinema. (4 cr, \$CLit 5221, \$Hum 5751) Mowitz
Film, as a mass cultural phenomenon, in historical context; positions in current film theory; fundamentals of film analysis. Comparative perspective on mass culture employed throughout.

¹ See *Comparative Literature and Comparative Studies in Discourse and Society in the Graduate Programs* section of this bulletin for other graduate-level courses offered by the Cultural Studies and Comparative Literature Department.

CSCL 5910. Topics in Cultural Studies and Comparative Literature. (4 cr per qtr [max 15 cr]; prereq jr or sr or grad student or #)
Topics specified in *Class Schedule*.

CSCL 5910H. Topics in Cultural Studies and Comparative Literature: Honors. (4 cr; prereq jr or sr or grad student, #)

CSCL 5970. Directed Studies. (Cr ar; prereq jr or sr or grad student, #, Δ, CLA approval)
Guided individual reading or study.

CSCL 5970H. Directed Studies: Honors. (Cr ar; prereq jr or sr or grad student, #, Δ, CLA approval)

Dermatology (Derm)

Professor: Mark V. Dahl

Assistant Professor: J. Corwin Vance

Derm 8225f,w,s,su. Clinical Dermatology. (Cr ar) Dahl, Lynch, Vance, staff
Wards and outpatient departments of University Hospital, Veterans Administration Medical Center, Hennepin County Medical Center, and St. Paul-Ramsey Medical Center.

Derm 8226f,w,s,su. Clinical Seminar: Dermatology. (Cr ar) Dahl, Lynch, staff
Conference twice weekly on diagnosis and treatment of skin conditions.

Derm 8227f,w,s,su. Histology of the Skin. (Cr ar) Kaye, Orkin, Peterson
Histopathology, histochemistry, and fluorescent microscopy.

Derm 8230f,w,s,su. Functional Biology of the Skin. (Cr ar) Dahl, Lynch, staff

Humanities (Hum)¹

Assistant Professor: George Kliger

Hum 5101. Foundations of Modern Education. (4 cr, §3101, §EdPA 3101, §EdPA 5101)
Analysis and interpretation of important elements in modern education derived from the Greeks, Romans, Middle Ages, Renaissance, Reformation, Enlightenment, and Industrial Revolution. Background course for all other courses in history and philosophy of education.

Hum 5155. History of Western Educational Thought. (4 cr, §3155, §EdPA 3155, §EdPA 5155)
Major educational classics of Western civilization: Plato, Aristotle, Cicero, Quintilian, Montaigne, Milton, Locke, Rousseau, and others.

Hum 5304. Theories of Ideology: Philosophical Views. (4 cr; prereq jr or sr or grad student or #) Kliger
Nature and function of ideology, including theories of Marx, Nietzsche, Freud, Mannheim, Althusser, Foucault, Habermas, and feminists.

Hum 5545. Islamic Mysticism. (4 cr, §3545, §Arab 3545, §Arab 5545)
Rise of Sufism, from asceticism to theosophical mysticism; leading personalities, their beliefs and preachings; relationship to Orthodox Islam and non-Muslim mystical movements; concepts and organizations; place of Sufism in modern religious trends.

Hum 5837. Nietzsche as Cultural Critic. (4 cr; prereq jr or sr or grad student or #)
Nietzsche's contributions to philosophy, psychology, and criticism of religion, culture, and society.

International Relations (IntR)

IntR 5701. Theories of International Development. (4 cr; prereq IntR major or #)
Interdisciplinary approaches to understanding contemporary development theory and practice. Selected theoretical framework and case studies illustrating complexities of development planning and implementation.

IntR 5900. Topics in International Relations. (1-4 cr; prereq 12 cr social science; offered when feasible)

IntR 5970. Directed Studies. (1-15 cr per qtr; prereq #, Δ, □)
Tutorial for qualified seniors and graduate students.

IntR 5990. Directed Research. (1-15 cr per qtr; prereq #, Δ, □)
Tutorial for qualified seniors and graduate students.

Jewish Studies (JwSt)

Professor: Bernard Bachrach; Hyman Berman; David Cooperman; Jack Zipes

Associate Professor: Jonathan Paradise; Riv-Ellen Prell; Daniel Reisman; Philip Sellow

JwSt 5900. Topics in Jewish Studies. (4 cr, §RelS 3900)
Historical, religious, sociological, anthropological, humanistic study of Judaism and the Jewish people. Approach and method of study vary with topic.

JwSt 5970. Directed Readings. (1-12 cr; prereq #, Δ, CLA approval)
Guided individual reading or study.

¹ See *Cultural Studies and Comparative Literature above and Comparative Studies in Discourse and Society in the Graduate Programs section of this bulletin for other graduate-level courses formerly offered by the Humanities Department.*

Language, Teaching, and Technology (LgTT)

LgTT 5101. Technology in the Language Classroom. (3 cr; prereq Δ)

Theoretical background, application, and demonstration.

Latin American Studies (LAS)

LAS 5132. South America. (4 cr, §Geog 5132)

Weil

Physical resources, population, agriculture, manufacturing, and transportation in South America.

LAS 5465. Housing in World Perspective I.

(4 cr, §DHA 5865; prereq 3463 or 3863 or #)

Social analysis of housing around the world; population, environment, and social organization of nations as contexts for national policy and for housing choices of households.

LAS 5479. Latin American Government and Politics.

(5 cr, §Pol 5479) Sikkink

Latin American political heritage, political processes, and contemporary public policy issues; problems of social, economic, and political change in selected countries.

LAS 5820. The Multinational Corporation.

(3 cr, §PA 5820; prereq intermediate microecon, adult spec or grad student or Δ) Kudrle

Economic, political, social, and legal significance of multinational corporation; major policy options open to both individual and international bodies.

Area Studies (Area)

Area 5930. Topics in Latin American Studies.

(2-4 cr)

Area 5970. Directed Studies. (1-15 cr per qtr;

prereq #, Δ, □)

Tutorial for qualified seniors and graduate students.

Area 5990. Directed Research. (1-15 cr per qtr;

prereq #, Δ, □)

Tutorial for qualified seniors and graduate students.

Middle Eastern Languages and Cultures

For courses on the medieval and modern Middle East, see Middle Eastern Languages and Cultures (MELC) courses under South Asian and Middle Eastern Languages and Cultures in the Graduate Programs section.

Neurosurgery (NSu)

Professor: Timothy J. Ebner; Donald L. Erickson; Stephen J. Haines; Walter C. Low; Robert E. Maxwell; Setti S. Rengachary; Gaylan L. Rockswold

Associate Professor: Walter A. Hall

NSu 8305. Neurosurgical Diagnosis. (4 cr)

Maxwell, staff

The neurosurgical fellow assists in instruction of clinical clerks and interns, and studies problems in diagnosis at University and affiliated hospitals.

NSu 8308. Neurosurgical Problems and Management. (4 cr)

Maxwell, staff

The neurosurgical fellow acts as house surgeon at University and affiliated hospitals.

NSu 8311. Operative Neurosurgery. (4 cr)

Maxwell, staff

The neurosurgical fellow acts as first assistant at operations in University and affiliated hospitals, and later may be permitted to operate.

NSu 8316. Neurosurgical Research. (6 cr)

Ebner, Hall, Low, staff

Problems in experimental or clinical neurosurgical sciences.

NSu 8318. Neuroradiological Conference.

(1 cr) Maxwell, staff

Review of X-rays and case histories on neurosurgical service.

NSu 8320. Neurosurgical Conference. (2 cr)

Haines, Maxwell, staff

In-depth review of selected topics in basic or clinical neurosurgery.

NSu 8330. Neurosurgery Literature Seminar.

(2 cr) Maxwell, staff

Review and discussion of current literature relating to neurosurgery and the neurosciences.

Ophthalmology (Oph)

Professor: Donald J. Doughman; Edward J. Holland; William Knobloch; Jonathan D. Wirtschafter

Associate Professor: J. Douglas Cameron; Robert D. Letson; J. Daniel Nelson; William B. Rathbun; C. Gail Summers

Assistant Professor: Agnes S. Huang; Martha M. Wright

Oph 8101f,w,s,su. Clinical Ophthalmology.

(8 cr) Krachmer, staff

Oph 8103. Pediatric Ophthalmology,

Strabismus, and Hereditary Disorders. (3 cr;

prereq grad physician or vet med grad student)

Summers

Oph 8106. Strabismus Management. (1 cr;

prereq MD or vet med grad student) Summers

Oph 8110. Optics, Refraction, and Contact Lens. (3 cr)

Oph 8111. Intraocular Inflammation, Uveitis, Ocular Tumors. (3 cr; prereq MD or vet med grad student; offered alt yrs) Neely

Oph 8112. Retina and Vitreous. (3 cr; prereq MD or vet med grad student; offered alt yrs) Knobloch

Oph 8113. Basic and Clinical Neuro-Ophthalmology. (3 cr; prereq MD or vet med grad student; offered alt yrs) Wirtschafter

Oph 8116. Glaucoma, Lens, and Anterior Segment Trauma. (3 cr; prereq MD or vet med grad student; offered alt yrs) Wright

Oph 8117. Orbit, Plastics, and Trauma. (3 cr; prereq MD or vet med grad student; offered alt yrs) Wirtschafter

Oph 8118. General Medical Problems. (3 cr; prereq MD or vet med grad student; offered alt yrs) Krachmer

Oph 8119. Clinical Pathological Correlations in Ophthalmology. (1 cr; prereq MD or vet med grad student) Cameron

Oph 8120. Scope of Ophthalmic Pathology. (2 cr; prereq MD or vet med grad student) Cameron

Oph 8125, 8126. Diseases of the Cornea and External Eye. (3 cr; prereq MD or vet med grad student; offered alt yrs) Holland

Oph 8131f,w,s,су. Practical Ocular Surgery. (3 cr) Krachmer, staff

Oph 8142f,w,s,су. Ophthalmic Pathology Laboratory. (2 cr) Cameron

Oph 8152. Ophthalmology Laboratory. (15 cr)

Oph 8153. Research in Ophthalmology. (Cr ar)

Oph 8155. Special Topics in Ophthalmology. (Cr ar)

Oph 8701. Neuro-Ophthalmology. (1 cr) Wirtschafter

Pediatrics (Ped)

Regents' Professor: Alfred F. Michael, *head*; Paul G. Quie; James G. White

Professor: Bruce R. Blazar; David M. Brown; C. Carlyle Clawson; Patricia Ferrieri; Alfred J. Fish; G. Scott Giebink; Edward L. Kaplan; William Krivit; Russell V. Lucas, Jr.; S. Michael Mauer; James H. Moller; Mark E. Nesbit; Harvey L. Sharp; Kenneth F. Swaiman; Homer D. Venters; Warren J. Warwick

Associate Professor: Amos Deinard; Rolf R. Engel

Ped 8204f,w,s,су. Residency in Pediatrics. (Cr ar; prereq #) Michael, staff

One- to two-month rotations on the outpatient, inpatient, and special pediatric services of University Hospital and Clinic, Hennepin County Medical Center, Children's Hospital of St. Paul, St. Paul-Ramsey Medical Center, and Minneapolis Children's Health Center.

Ped 8206f,w,s,су. Pediatric Special Interest.

(Cr ar; for grads who have completed at least 1½ yrs general grad pediatric training; prereq #)

Advanced clinical and basic training in one or more of the following special fields: neurology, cardiology, pathology, endocrinology and metabolism, hematology, immunology, nephrology, infectious diseases, and community pediatrics. Clinical training is obtained in the inpatient and outpatient services of University and affiliated hospitals. Training in basic sciences related to these fields may be obtained in preclinical divisions of the Medical School.

Psychiatry

Professor: Paula J. Clayton, *head*; Marilyn E. Carroll; Elke D. Eckert; Judith M. Garrard; James A. Halikas; Dorothy K. Hatsukami; John T. Kelly; Jerome L. Kroll; David T. Lykken; Thomas B. MacKenzie; Michael K. Popkin

Clinical Professor: Faruk S. Abuzzahab

Associate Professor: Gerald J. August; Carrie M. Borchardt; George M. Realmuto

Assistant Professor: Scott J. Crow; William H. Frey; Matt G. Kushner

Adult Psychiatry (AdPy)

AdPy 5800. Case Conference: Psychiatry in Medicine. (1 cr; prereq MD or #) Colón

AdPy 5920. Adult Psychopathology I. (3 cr; prereq #)

Overview of major psychiatric illnesses, including affective, eating, and organic mental disorders; chemical dependency; schizophrenia; obsessive-compulsive disorder; dementia.

AdPy 5921. Physiological Treatments I. (3 cr; prereq #)

Overview, including ECT, psychotropic medication use, pharmacokinetics, and toxicity of psychopharmacological agents.

AdPy 5922. Psychiatric Interviewing Styles. (3 cr; prereq #)

Overview, emphasizing psychodynamic and psychoanalytic aspects of psychiatric interview; type of empirical interviewing stressed by DSM-III-R and necessary for completion of oral board examinations.

AdPy 5923. Physiological Treatments II. (3 cr; prereq 5921, #)

Pharmacological treatment of eating disorders, chemical dependency, organic mental disorder, schizophrenia, anxiety disorders, bipolar and schizoaffective disorders; drugs and memory; drug treatment of children and adolescents.

AdPy 5924. Practical Psychotherapy, Crisis Intervention, and Emergency Management.

(3 cr; prereq #)

Introduction to "dos and don'ts" of beginning therapy, supportive and confrontive short-term crisis intervention psychotherapy, and practical aspects of handling psychiatric crises in emergency room.

RELATED COURSES

AdPy 5925. Biological Psychiatry I. (3 cr; prereq #)
Concepts in neuroanatomy, neurophysiology, and neuropsychopharmacology that relate to biological psychiatry.

AdPy 5926. Psychoanalytic Psychotherapy. (3 cr; prereq #)
Basics of psychoanalytic theory and psychodynamic practice. Designed to provide foundation for future coursework and therapy supervision in practical psychodynamic therapy.

AdPy 5927. Biological Psychiatry II. (3 cr; prereq 5925, #)
Continuation of 5925.

AdPy 5940. Forensic Psychiatry. (6 cr; prereq #)
Current concepts in area of psychiatry and law, including civil commitment, patient rights, criminal responsibility, competency to stand trial, disability determination, potential fitness in custody determinations, and mentally disordered sex offenders.

AdPy 5942. Advanced Psychoanalytic Psychotherapy. (6 cr; prereq 5926, 5936, #)
Theory course taught by practicing psychoanalysts. Builds on previous psychoanalytic psychotherapy courses; advanced readings and psychoanalytic case presentations.

AdPy 5944. Administrative Psychiatry. (6 cr; prereq #)
Administration of psychiatric healthcare organizations, including accreditation, licensing and federal standards, medical staff organization, peer review, systems of reimbursement and third party payment, types of organizations, personnel issues, cost of healthcare.

AdPy 5946. Human Sexuality: Therapy and Counseling. (6 cr; prereq #)
Intensive seminar: normal sexual functioning, psychosexual disorders, and counseling and treatment options.

AdPy 8205. Special Assignments in Psychiatry. (1 cr; prereq MD, 8201, 8203)

AdPy 8221. Seminar: Current Literature. (1 cr; prereq #) Simon

AdPy 8239. Continuous Case Seminar: Psychoanalytically Oriented Psychotherapy. (1 cr; advanced psychiatric residents and psychology interns only; prereq #)

AdPy 8244. Comparative Theories of Psychotherapy. (3 cr; prereq #)

AdPy 8970. Directed Studies. (Cr ar [max 9 cr])

Child and Adolescent Psychiatry (CAPy)

CAPy 5201. Diagnostic Practicum in Child and Adolescent Psychiatry. (Cr ar; prereq #)
Experiences in psychiatric assessment of children, adolescents, and families in child and adolescent psychiatric care setting.

CAPy 5203. Child and Adolescent Psychiatry for Psychology Interns. (1-5 cr; prereq #)
Experience in assessment and therapeutic interventions with children, adolescents, and families in an outpatient child and adolescent psychiatric care setting.

CAPy 5204. Diagnostic Methods in Child and Adolescent Psychiatry. (1 cr; prereq med student, #)
Multidisciplinary evaluations of children, adolescents, and their families presented for discussion in an outpatient setting. Dynamic and diagnostic formulations, and disposition planning supervised in a clinical teaching conference setting. Knowledge base necessary to make clinical diagnosis. Major disorders of childhood; specific diagnostic criteria.

CAPy 5520. Outpatient Clinical Child and Adolescent Psychiatry for Primary Care Trainees. (4.5-9 cr; prereq med student, #)
Supervised diagnostic and therapeutic experiences in outpatient multispecialty clinics with emphasis on integration of biological, familial, social, and psychological aspects of behavior.

CAPy 5602. Introductory Readings in Child, Adolescent, and Family Psychiatry and Research Methods. (Cr ar; prereq med student)
Child development, diagnostic and therapeutic techniques, and psychopathology.

CAPy 5603. Inpatient Clinical Child Psychiatry for Primary Care Physicians. (9 cr for 6 wks full time; option: 18 cr for 12 wks full time; prereq med student, #)
Diagnosis and treatment of children referred to the inpatient child psychiatric unit. Broad range of childhood disorders. Students responsible for patient management. Emphasis on involvement of family.

CAPy 5608. Introduction to Family Therapy: Theory and Practice. (3 cr; prereq MD and/or #, satisfactory completion of course in basic psychopathology [or its equiv], current supervised involvement with treatment of cases)
Introduction to the ideas and treatment approaches of some of the major figures in the current clinical practice of psychotherapy with families: Carl Whitaker, Salvador Minuchin, Lyman Wynne, Jay Haley, Murray Bowen, Virginia Satir, David Olson, and others. Provides practice training experience in the problems and techniques for beginning family therapists through review and discussion of videotapes of current treatment cases of course participants.

CAPy 5609. Introduction to Child Psychiatry. (3 cr; prereq MD or #)
Seminar relating to practice of child and adolescent psychiatry.

CAPy 5620. Disruptive Behavior Disorders I: Attention Deficit Hyperactivity Disorder (ADHD) Throughout the Life Span. (1 cr)
Workshop reviews ADHD from beginnings in toddlerhood to manifestations during adult years. Diagnostic criteria for defining ADHD across the life span; disorders that frequently occur with ADHD; theories addressing biological, cognitive, and behavioral causes of ADHD.

CAPy 5623. Affective Disorders and Suicide in Children and Adolescents: Perspectives on Prevalence, Etiology, and Prevention. (1 cr)

Characteristics of depression and suicidal behavior in children and adolescents. Methods of crisis intervention, treatment, and prevention.

CAPy 5624. Eating Disorders in Children and Adolescents: Medical and Psychological Perspectives. (1 cr)

Clinical characteristics of obesity, anorexia, and bulimia nervosa in children and adolescents. Etiological factors and multidimensional-dimensional treatment approaches.

CAPy 5627. Disruptive Behavioral Disorders II: Conduct and Oppositional Defiant Disorders in Childhood and Adolescence. (1 cr)

Traditional definitions of conduct disorder; how conduct disorder affects home life, economic status, school performance, personality, and social behavior; factors that place children at risk for antisocial and aggressive behavior.

CAPy 5629. Disruptive Behavioral Disorders IV: Medication and Behavioral Therapies. (1 cr)

Workshop reviews evidence supporting biological bases of disruptive behavioral disorders; neuropharmacologic bases of drug actions on brain and neurotransmitter systems. Applying behavioral principles to manage disruptive behavior via classroom contingency management programs and behavioral family interventions.

CAPy 5630. Psychotherapy in Children and Adolescents. (1 cr)

Major schools of psychotherapeutic intervention. Short-term dynamic psychotherapy, behavioral therapy, cognitive-behavioral therapy, and family therapy; review of psychotherapy outcome research literature.

CAPy 5631. Developmental Neuropsychiatry: Implication for Assessment of Behavioral and Cognitive Disorders. (1 cr)

Workshop on major developmental, behavioral, and emotional childhood disorders from neuropsychiatric perspective, including infantile autism, attention deficit disorder, specific learning disabilities, language disorder, conduct disorder, and depression.

CAPy 5632. Competence-Enhancement Training Programs for Children With Disruptive Behavior. (1 cr)

Workshop focusing on skill-building approaches to treatment of behavioral, emotional, and academic problems in children. Such approaches teach children to "stop and think" and examine behavioral alternatives. Environmental engineering, contingency management, self-monitoring and self-instructional training, and problem-solving training. Application of comprehensive competence enhancement program to treatment of impulsivity in children with attention deficit disorder.

CAPy 5633. Anxiety Disorders in Childhood and Adolescence. (1 cr)

School phobia, panic attack, separation anxiety, obsessive-compulsive disorder. Strategies for prevention; biological, social, and psychodynamic influences; intervention approaches.

CAPy 5634. Developmental Dyslexia: Theory, Research, and Clinical Differentiation. (1 cr)

Dyslexia as major cause of educational failure in school children. Definition; neuropsychological and cognitive processes in relation to dyslexia. Interpreting deficits and assessing methods.

CAPy 5635. Disruptive Behavioral Disorders V: Cognitive-Behavioral Therapies for Children and Adolescents. (1 cr)

Theoretical basis and therapy outcome research literature. Problem-solving techniques, verbal self-instruction training, attributional retraining, and stress inoculation procedures applied to common problems, including anger/frustration management, conflict resolution, interpersonal problem solving, self-esteem enhancement, and negative thought/feeling management.

CAPy 5636. Disruptive Behavioral Disorders III: Assessment Methods for the Diagnosis and Evaluation of Treatment Response. (1 cr)

Workshop on assessment process for identifying and diagnosing children with disruptive behavioral disorders and for evaluating treatment response. Multistage diagnostic and functional assessment protocols.

CAPy 5638. Prevention Science II: Designing Programs for the Prevention of Delinquency, Criminal Offending, and Substance Abuse.

(1 cr)
Workshop on current crisis regarding prevalence of delinquency, criminal offending, and substance abuse; possible developmental pathways leading to these conditions; current theories and approaches for treatment.

CAPy 5639. Behavior Problems in Preschool Children. (1 cr)

Behavior and emotional characteristics of infants and preschool children. Problems discussed include disturbances in regulation, attachment, sleep, and social development. Various approaches to assessment and intervention.

CAPy 5640. Psychiatric Treatment of the Disruptive Disorders. (1 cr)

Primary and associated behaviors of conduct disorder, oppositional defiant disorder, and attention deficit hyperactivity disorder. Specific psychiatric, behavioral, and innovative treatment strategies described in detail.

CAPy 5641. Prevention Science I: Risk Factors, Protective Factors, and Models of Disorder. (1 cr)

Importance of model building with respect to development of a disorder; types of interventions needed in prevention trials; strategies for designing prevention trials in the community; resiliency.

CAPy 5642. Substance Abuse. (1 cr)

Historical perspectives, epidemiology, and differential diagnosis. Predictors of various types of substance abuse. Assessment and evaluative methods for diagnosis. Current treatment and prevention approaches, emphasizing management of coexisting medical and psychiatric conditions. Substances covered include alcohol, cocaine, amphetamines, opiates, nicotine, and caffeine. Special attention given to adolescent use.

CAPy 5643. Multicultural Issues in Assessment and Treatment of Children With Psychiatric Problems. (1 cr)

Sociopolitical issues related to “labeling” and “managing” children from different cultural backgrounds who exhibit emotional and behavioral problems. Child development, family relations, and community structure for different cultural groups. Multiculturally sensitive assessment and treatment practices.

CAPy 5644. Child Abuse/Neglect and Childhood Psychopathology: Implications for Assessment and Treatment. (1 cr)

Types of child abuse/neglect; effects on children’s psychological development. Child, parent/family, and social factors that place children at risk. Assessment and intervention approaches.

CAPy 5645. Innovative Methods in Psychotherapy. (1 cr)

Workshop focusing on methods for time-limited treatment for children, adolescents, and adults. Basic principles common to effective psychotherapy. Short-term psychodynamic therapy, imagery, solution-oriented therapy, experiential therapies (including gestalt therapy), and narrative therapies and their use in individual, group, and family therapy.

CAPy 5646. Methods of Measurement and Assessment in Psychopathology. (1 cr)

For mental health, social service, and educational practitioners who deal with diagnostic and evaluative data. Standardization, reliability, and validity. Principles of test development; item analysis, factor analysis, derived scores, and scaling. Screening, diagnosis, and evaluation of psychiatric disorders in adults, adolescents, and children. Global assessment scales, structured diagnostic interviews, and personality inventories.

CAPy 5647. Building Friendships and Peer Relationship Skills: Interventions for Socially Rejected Children. (1 cr)

Behaviors and mechanisms related to peer rejection; social skills interventions.

CAPy 5747. Prevention Science III: Building Friendships and Peer Relationship Skills—Interventions for Socially Rejected Children. (1 cr)

Behaviors and mechanisms related to peer rejection; social skills interventions.

CAPy 8100. Readings in Child, Adolescent, and Family Psychiatry. (1 cr; prereq MD, #)

Comprehensive review of classical and contemporary literature in the field of child, adolescent, and family psychiatry including growth and development, diagnostic and therapeutic techniques, and psychopathology with supplemental coursework in other departments and schools.

CAPy 8110. Diagnostic Methods in Child, Adolescent, and Family Psychiatry. (1 cr; prereq MD, #)

Multidisciplinary evaluations of children, adolescents, and their families presented for discussion, dynamic and diagnostic formulations, and disposition planning in a conference setting.

CAPy 8120. Therapeutic Methods in Child and Adolescent Psychiatry. (1 cr; prereq MD, #)

Therapeutic techniques used in child, adolescent, and family psychiatry reviewed through presentation and discussion of ongoing cases.

CAPy 8200. Outpatient Clinical Child and Adolescent Psychiatry. (3 cr; 15 hrs per wk; prereq MD, #)

Supervised diagnostic and therapeutic experiences in an outpatient setting.

CAPy 8212. Clinical Inpatient Child Psychiatry. (3 cr; 15 hrs per wk ar; prereq MD, #)

Supervised diagnostic and therapeutic experiences in an inpatient, multidisciplinary child psychiatry unit with emphasis on group and milieu therapies.

CAPy 8214. Inpatient Clinical Adolescent Psychiatry. (3 cr; prereq MD, #)

Supervised diagnostic and therapeutic experiences in an inpatient, multidisciplinary adolescent psychiatry unit with emphasis on group and milieu therapies.

CAPy 8216. Pediatric Psychiatry Liaison. (3 cr; prereq MD, #)

Supervised consultation, diagnostic, and short-term therapy experiences in pediatrics and pediatric neurology.

CAPy 8223. Family Therapy. (1 cr; prereq MD, #)

Readings and illustrative family therapy examples reviewed to complement the concurrent clinical experiences.

CAPy 8228. Research in Child and Adolescent Psychiatry. (1 cr; prereq MD, #)

Research design and methodology and current research projects reviewed with faculty and invited guests.

CAPy 8301. Seminar: Child, Adolescent, and Family Psychiatry. (1 cr; prereq MD, #)

Current diagnostic, therapeutic, and theoretical issues in child, adolescent, and family psychiatry reviewed through clinical and didactic presentations and discussions by students, faculty, and invited guests.

Radiology (Rad)

Professor: Kurt Amplatz; Robert J. Boudreau

Associate Professor: Marvin E. Goldberg; Donovan B. Reinke

Assistant Professor: Kent B. Remley

Diagnostic Roentgenology

Rad 5110. Research Problems in Radiology. (Cr ar)

Background and knowledge of radiologic research; in-depth study of one aspect of radiology. Research project (arrangements must be made with course director at least two weeks before course begins).

Rad 5174s. Physics of Diagnostic Radiology. (3 cr) Ritenour

Physics of diagnostic imaging; CAT scanning and ultrasound.

Nuclear Medicine

Rad 5170f. Basic Radiological Physics. (3 cr; prereq #) Khan

Theoretical and experimental aspects of radiological physics.

Rad 5171w. Physics of Nuclear Medicine. (3 cr; prereq 5170 or #) Ritenour

Theoretical and experimental applications of radionuclides in medicine and biology.

Rad 5172s. Radiation Biology. (3 cr; prereq 5170 or #) Song

Effects of ionizing radiations on cells.

For additional coursework in radiology, see Therapeutic Radiology.

Therapeutic Radiology (TRad)

Professor: John H. Kersey; Faiz M. Khan; Seymour H. Levitt; Mark E. Nesbit; Chang W. Song

TRad 5170f. Basic Radiological Physics. (3 cr; prereq #) Khan, staff

Theoretical and experimental aspects of radiological physics. Physical properties of various ionizing radiations; interactions of ionizing radiations with matter; methods of radiation dose measurement.

TRad 5171w. Medical Nuclear Physics. (3 cr; prereq 5170 or #) Loken, Morin

Theoretical and experimental applications of radionuclides in medicine and biology. Imaging devices and techniques, dynamic tracer analysis; internal emitter dosimetry. Radioimmunoassay and the statistics of counting.

TRad 5172s. Radiation Biology. (3 cr; prereq 5170 or #) Song, staff

Effects of ionizing radiations on cells, tissues, and organisms; biochemical and physiological basis of radiation effects, biological rationale for radiation therapy practices.

TRad 5173w. Physics of Radiation Therapy. (3 cr; prereq 5170 or #) Khan, staff

High energy and teletherapy machines. Measurements of radiation quality, output and depth dose distributions for clinical use. Calculation of treatment parameters. Beam modification and shaping. Treatment planning for fixed field and rotational therapy. Physics of intracavitary and interstitial therapy. Computer applications in treatment planning. Principles and criteria for radiation protection.

TRad 5340f,w,s,su. Special Problems in Radiation Therapy. (Cr ar) Kim, Lee, Levitt, Potish

TRad 5512f,w,s,su. Dosimetry of Internal and External Radiation. (1 cr) Khan

Basic principles of radiation dosimetry discussed in detail; clinical applications.

TRad 5540f,w,s,su. Special Problems in Radiological Physics. (Cr ar) Khan, staff

TRad 8300f,w,s,su. Radiation Therapy. (Cr ar) Kim, Lee, Levitt, Potish

In-service training in treatment and management of patients with malignant diseases.

TRad 8310f,w,s,su. Fundamentals of Radiation Therapy. (1 cr) Kim, Lee, Levitt, Potish

Lectures on physical and clinical aspects of radiation therapy. Techniques of radiation therapy including radium and other isotopic implants.

TRad 8315f,w,s,su. Radiation Therapy Pathology. (1 cr)

Weekly 1/2- to 2-hour seminar relating microscopic and gross anatomy of tumors to clinical findings, diagnostic workup, and therapy of patients receiving radiation therapy. Includes clinical descriptions of patients followed by comprehensive discussion of the microscopic, gross pathology, and overview of tumor pathology. Offered in conjunction with the Department of Laboratory Medicine and Pathology.

TRad 8320f,w,s,su. Radiation Therapy Treatment Planning Problems. (1 cr)

Weekly 1/2- to 2-hour seminar. Treatment planning, computer treatment planning, treatment fields of patients under treatment, and treatment planning programs discussed with staff of the clinical and physics sections.

TRad 8350f,w,s,su. Research in Radiation Therapy. (Cr ar)

TRad 8450f,w,s,su. Research in Radiation Biology. (Cr ar)