

Summer 2009 Course Offerings

Biochemistry and Molecular Biology

- Course Number:** **BIOCH 207**, 1-9 credits
Course Title: Introduction to Special Methods of Research
Course Dir./Instructor: Dr. Kim Pedersen
Course Description: Theoretical discussions and laboratory work during the first two years of laboratory rotations and effort. Students should register for this course *prior* to passing the Qualifying Examination. Note that only a total of 12 credits can be applied toward graduation.
Course Dates: 5/20/2009 – 8/8/2009
Location & Time of Class: Arranged with major professor
Required Text: N/A
- Course Number:** **BIOCH 300**, 1-6 credits
Course Title: Thesis Research
Course Dir./Instructor: Dr. Sunyoung Kim
Course Description: Research credit for MS students working on thesis efforts, or for PhD students *after* passing the Qualifying Examination and *prior* to passing the Preliminary Exam. Registration only by permission of the major professor. The number of credit hours must be stated at the time of registration. Although students generally receive more credits, only 6 hours may be used toward graduation with either a MS or PhD degree.
Course Dates: 5/20/2009 – 8/8/2009
Location & Time of Class: Arranged with major professor
Required Text: N/A
- Course Number:** **BIOCH 400**, 1-9 credits
Course Title: Dissertation Research
Course Dir./Instructor: Dr. Sunyoung Kim
Course Description: Research credit for doctoral students *after* passing the Preliminary Examination. Registration only by permission of the major professor. The number of credit hours must be stated at the time of registration. Although students generally receive more credits, only 9 hours may be used toward graduation in the PhD program.
Course Dates: 5/20/2009 – 8/8/2009
Location & Time of Class: Arranged with major professor
Required Text: N/A

Biostatistics

Course Number: BIOS 6221, 3 Credits
Course Title: Survey Design
Course Dir./Instructor: Donald Mercante, PhD
Course Description: Students gain the knowledge necessary to develop and execute a survey and analyze the collected data. Students will gain knowledge essential to design, create, and conduct a survey project.
Course Dates: The academic term is 5/20/2009 – 8/8/2009
Location & Times of Class: Tuesdays and Thursdays from 10am to noon. Lectures will be broadcast over the access grid from the School of Public Health.
Required Text: N/A

Cell Biology and Anatomy

Course Number: ANAT 220
Course Title: Advanced Special Dissection
Course Dir./Instructor: Swartz / Whitworth
Course Description: Students perform detailed dissections of specific selected regions of the body
Course Dates: Academic Term is 5/20/2009 – 8/8/2009
Location & Times of Class: Variable

Course Number: ANAT 270
Course Title: Laboratory Rotation
Course Dir./Instructor: Department Faculty
Course Description: Students will work in one or more faculty laboratories to become acquainted with the various types of research conducted in the Department and with techniques used in these labs.
Course Dates: Academic Term is 5/20/2009 – 8/8/2009
Location & Times of Class: Variable

Course Number: ANAT 280
Course Title: Special Topics in Cell Biology and Anatomy
Course Dir./Instructor: Department Faculty
Course Description: Lectures, discussions, research and/or laboratories will be arranged on areas not adequately covered in other scheduled courses. This course is designed to permit graduate students to explore one or more areas of particular interest in detail. Emphasis will be placed on those areas of special interest to faculty members of the Department of Cell Biology and Anatomy
Course Dates: Academic Term is 5/20/2009 – 8/8/2009
Location & Times of Class: Variable

Course Number: **ANAT 300**
Course Title: Thesis Research
Course Dir./Instructor: Department Faculty
Course Description: Laboratory research conducted by MS students working on their thesis or PhD degree students conducting research prior to passing the Preliminary Exam.
Course Dates: Academic Term is 5/20/2009 – 8/8/2009
Location & Times of Class: Variable

Course Number: **ANAT 400**
Course Title: Dissertation Research
Course Dir./Instructor: Department Faculty
Course Description: Laboratory research conducted by PhD. degree students who have passed the Preliminary Exam and been admitted to candidacy. This research is typically part of the students' PhD dissertation.
Course Dates: Academic Term is 5/20/2009 – 8/8/2009
Location & Times of Class: Variable

Human Genetics

Students planning to register in any of these courses must contact the instructor before registering.

Course Number: **GENET 253**
Course Title: Laboratory Rotation in Molecular Genetics, 3 Credits
Course Dir./Instructor: Diptasri Mandal, PhD
Course Description: Student works in faculty laboratory to become acquainted with research projects and techniques.
Course Dates: May 20, 2009 - August 8, 2009
Location & Times of Class: CSRB

Course Number: **GENET 271**
Course Title: Medical Genetics Clinic, 3 Credits.
Course Dir./Instructor: Diptasri Mandal, PhD
Course Description: Three hours of clinic per week. Patient contact in a clinical setting provides experience in interviewing and counseling techniques, risk assessment, medical and genetic aspects of inherited disease, an understanding of the limitations, interpretations and significance of specialized laboratory and genetic procedures, and a knowledge of available health care resources for appropriate referral. Up to four semesters may be taken for credit.
Course Dates: May 20, 2009 - August 8, 2009
Location & Times of Class: Children's Hospital. Time to be determined.

Course Number: INT 260, 1 Credit
Course Title: Responsible Conduct of Research
Course Dir./Instructor: Paula Gregory, PhD
Course Description: Misconduct in research undermines public trust in the results and methods of research and threatens public support and funding. The emphasis in this course will be on policy, regulations and issues faced in day-to-day research in a laboratory.
Course Dates: May 27, 2009- July 29, 2009, Wednesdays
Location & Times of Class: CSRB 665 (conference room), 4:00-5:30pm

Course Number: GENET 400
Course Title: Dissertation Research, 1-9 Credits
Course Dir./Instructor: Diptasri Mandal, PhD
Course Description: Registration by permission of the Head of the Department. Amount of credit to be stated at the time of registration.
Course Dates: May 20, 2009 - August 8, 2009
Location & Times of Class: CSRB

Microbiology, Immunology and Parasitology

Course Number: MICRO 281
Course Title: Selected Topics in Microbiology
Course Dir./Instructor: Ronald Luftig, PhD
Course Description: 1 Credit; Special Topics in Cancer. The course will include lecture and journal article discussion on current topics in cancer research.
Course Dates: 5/20/09 - 8/8/09
Location & Times of Class: TBA, Class will meet weekly for 1 hour.
Required Text: None

Course Number: MICRO 299, 3 credits
Course Title: Research Proposal in Microbiology
Course Dir.: Dr. Angela Amedee
Course Description: A required course for all doctoral candidates in which the student prepares, in National Institutes of Health grant format, a written proposal on the candidate's dissertation research. The student presents and defends his proposal to his/her research committee as a basis for the Preliminary Examination.
Course Dates: 5/20/09 - 8/8/09
Location & Times of Class: TBA
Required Text: None

Course Number: **MICRO 300**, 1-9 credits
Course Title: Thesis Research
Course Dir.: Dr. Angela Amedee
Course Description: Registration by permission of the major professor. Amount of credit must be stated at the time of registration.
Course Dates: 5/20/09 - 8/8/09
Location & Times of Class: TBA
Required Text: None

Course Number: **Micro 400**, 1-9 credits
Course Title: Dissertation Research
Course Dir.: Dr. Angela Amedee
Course Description: Registration by permission of the major professor. Amount of credit must be stated at the time of registration.
Course Dates: 5/20/09 - 8/8/09
Location & Times of Class: TBA
Required Text: None

Neuroscience

Course Number **NEURO 270**
Course Title Laboratory Rotation 3-4 credits, pass/fail
Course Description Students will spend 8-10 weeks in a laboratory to familiarize themselves with specific laboratory techniques, use of laboratory equipment and data analysis and presentation. With the help of the laboratory supervisor, the student will initially write a paragraph on the project to be undertaken, and at the end will be expected to write a two-page paper on the project, comprising an Introduction, Materials and Methods, Results and Conclusions section. The student will be expected to contact the investigator well ahead of time to obtain permission and to make all necessary arrangements. Scheduling of times will of necessity be highly flexible and will be arranged by mutual agreement between the student and the investigator.

Course Number **NEURO 400**
Course Title Dissertation Research 1- 9 credits, pass/fail
Course Description Registration by permission of the Director of the Interdisciplinary Neuroscience Training Program.

Oral Biology

Course Number: **OBIOL 300**
Course Title: Thesis Research
Course Dir./Instructor: Dr. Lallier
Course Description: [1-6 credits] Registration for thesis research is by permission of the School. The amount of credit must be stated at the time of registration.
Course Dates: The academic term is 5/20/2009 – 8/8/2009
Location & Times of Class: N/A
Required Text: N/A

Pathology

Course Number: **PATH 202, 1-6 Credits**
Course Title: Introduction to Methods in Pathology II
Course Dir. : W.D. Scheer; Permission of the Dir. required
Course Description: Laboratory work in an area of the Department's research or service laboratories designed to introduce the student to the research and service activities under the direction of an expert in the use of the methodology.
Course Dates: The academic term is 5/20/2009 – 8/8/2009
Location/Times: M-F; time TBA

Course Number: **PATH 210, 2-6 Credits**
Course Title: Topics in Pathology
Course Dir. : W.D. Scheer; Permission of the Director required
Course Description: The course is intended to permit students to explore in detail, primarily through laboratory work, some areas of particular interest in pathology, for example clinical chemistry, medical informatics, molecular pathology, toxicology, research in atherosclerosis and cardiovascular disease or cancer epidemiology. The specialty area studied will be indicated on the student transcript in addition to the course title.
Course Dates: The academic term is 5/20/2009 – 8/8/2009
Location/Times: M-F; time TBA

Course Number **PATH 300**
Course Title Thesis Research, 1-6 Credits

Course Number **PATH 400**
Course Title Dissertation Research, 1-9 Credits

Pharmacology

Course Number: **PHARM 253**, 1-6 credits
Course Title: Research in Pharmacology
Course Dir./Instructor: Dr. E. Songu-Mize
Course Description: This course offers an in-depth experience in research development and design. Projects are limited in scope. Students develop their findings under the guidance and Dir. of faculty preceptors.
Course Dates: The academic term is 5/20/09-8/8/09
Location & Times of class: TBA

Course Number: **PHARM 300**, 1-6 credits
Course Title: Thesis Research
Course Dir./Instructor: Dr. E. Songu-Mize
Course Description: Laboratory work towards the completion of thesis or dissertation work before the completion of preliminary examination. Credits must be stated at time of registration.
Course Dates: The academic term is 5/20/09-8/8/09
Location & Times of class: TBA

Course Number: **PHARM 400**, 1-9 credits
Course Title: Dissertation Research, Registration by permission of Instructor
Number of credits must be stated at registration
Course Dir./Instructor: Dr. E. Songu-Mize
Course Description: Laboratory work towards the completion of dissertation work
Course Dates: The academic term is 5/20/09 – 8/8/09
Location & Times of Class: TBA

Physiology

Course Number: PHYSIO 281

Course Title: Journal Club
 Number of Credits: MS: 1 credit. PhD: 2 credits
 Course Dir./Instructor: Raymond E. Shepherd, PhD
 Course Description: A weekly course designed to for graduate students in the reading and application of current scientific literature to systems Physiology
 Course Dates: 5/21/2009 – 8/8/2009
 Location & Times of Class: Thursday A.M. – location TBA

Course Number: PHYSIO 280

Course Title: Special Topics in Physiology: Theory and Application of Cutting-edge Technology for Biomedical Research
 Course Dir./Instructor: Ping Zhang/Chau-Wen Chou
 Course Description: [2 credits] In this course students will discuss physiological mechanisms responsible for adaptation to extreme conditions. Topics will include, but not be limited to space flight, diving, starvation, altitude, suspended animation, hibernation. Discussions will be led by faculty members from the Department of Physiology. Students will be responsible for the literature search on the selected topic. Weekly sessions will be 2 hours in length and involve active participation through discussion of the literature or of the written assignment. Each student will be asked to develop a testable hypothesis, design a specific aim to test the hypothesis, and prepare a background and significance sections following published guidelines for an F31 NIH grant application. This proposal will be peer-reviewed by the students participating in the course, who will then prepare a critique following NIH review guidelines. Final grade will be based on class participation and on the written assignment.
 Course Dates: 5/21/2009 – 8/8/2009
 Location & Times of Class: TBA

Course Number: PHYSIO 300

Course Title: Thesis Research (S\U)
 Number of Credits: 1-6 Credits. Amount of credit to be stated at time of registration
 Course Dir./Instructor: TBA
 Course Description: Research related work on thesis for MS degree
 Course Dates: 5/21 – 8/8/2009
 Location & Times of Class: Mentor's laboratory, time TBA

Course Number: **PHYSIO 400**
Course Title: Dissertation Research
Number of Credits: 1-9 Credits. Amount of credit to be stated at time of registration (S\U)
Course Dir./Instructor: TBA
Course Description: Research related work on dissertation for PhD degree
Course Dates: 5/21 – 8/8/2009
Location & Times of Class: Mentor's laboratory, time TBA