BISC 194 (Introduction to Research II), Spring 2019

Catalog Description
A series of lectures and discussions at which faculty of the department introduce their research activities to students entering biology and related majors. Co-requisite: BISC 220Lg or BISC 221Lg. Instruction Mode: Lecture. Grading Option: Credit/No Credit. 1 Unit.

Overview / Learning Objectives
One of the greatest advantages of studying at a research university is the opportunity to be taught, advised, and mentored by faculty members whose activities include creating new knowledge in their fields. This course will give students a chance to meet some of these faculty members, hear about their research, ask questions, and perhaps establish mentoring or advising relationships that will benefit students’ career development. It is also designed to facilitate students’ involvement in faculty-mentored research, i.e., finding positions in research laboratories. The course is intended for students at any level who are majoring in Biological Sciences, Human Biology, Neuroscience, Health and Human Sciences, Health and Humanity, Environmental Science and Health, Human Development and Aging, Health Promotion and Disease Prevention Studies, and other programs with a life science emphasis. It will be valuable for students interested in careers in the health professions.

Instructor
Professor Albert Herrera, Neurobiology Section, Department of Biological Sciences
Contact Information: Office HNB 116, email aherrera@usc.edu, telephone (213) 740-9177
Office hours: By appointment. Please email Dr. Herrera with times you would be available to meet.

Course Format
The course consists of thirteen 50-minute meetings, on Tuesdays, 11:00-11:50 am in Taper Hall of Humanities (THH) 118, from January 8 through April 23. We will not meet on Jan 8 to give students time to acclimate to the new semester, nor on April 23 to give students extra time to prepare for final exams and assignments in other classes. Each meeting will consist of a seminar given by a faculty member, with time reserved for students’ questions and comments.

Schedule (the schedule will be updated as necessary)

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<tr>
<th>Wk</th>
<th>Date</th>
<th>Speaker</th>
<th>Title (italicized titles are approximate)</th>
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<tr>
<td>1</td>
<td>Jan 8</td>
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<tr>
<td>2</td>
<td>Jan 15</td>
<td>Albert Herrera</td>
<td>Introduction to undergraduate research, part 1</td>
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<td>3</td>
<td>Jan 22</td>
<td>Albert Herrera</td>
<td>Introduction to undergraduate research, part 2</td>
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<td>4</td>
<td>Jan 29</td>
<td>Matthew Dean</td>
<td>Development and evolution of penis bones</td>
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<td>5</td>
<td>Feb 5</td>
<td>Caleb Finch</td>
<td>Aging is accelerated by air pollution</td>
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<td>6</td>
<td>Feb 12</td>
<td>Shirin Birjandi</td>
<td>Phosphodiesterase 10A inhibition leads to brain region-specific recovery</td>
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<td>based on stroke type</td>
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<td>7</td>
<td>Feb 19</td>
<td>Irene Chiolo</td>
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<td>8</td>
<td>Feb 26</td>
<td>Steve Finkel</td>
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<td>9</td>
<td>Mar 5</td>
<td>Steve Kay</td>
<td>Rhythm research: Our 24h biological clock in health and disease</td>
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<td>10</td>
<td>Mar 19</td>
<td>Radu Popa</td>
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<td>11</td>
<td>Mar 26</td>
<td>Remo Rohs</td>
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<td>12</td>
<td>Apr 2</td>
<td>Carly Kenkel</td>
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<td>13</td>
<td>Apr 9</td>
<td>Suzanne Edmands</td>
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<td>14</td>
<td>Apr 16</td>
<td>Myron Goodman</td>
<td>Better living through hypermutation</td>
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<td>15</td>
<td>Apr 23</td>
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Textbooks
- There is no assigned textbook. Supplemental material, the reading of which is recommended, will be posted on Blackboard.

Blackboard  https://blackboard.usc.edu/
- All course materials, information, and announcements will be posted on Blackboard until the end of the semester. Blackboard is to be used only for appropriate, course-related activities.

Grading
- Assigned grades will be Credit or No Credit. No letter grades will be assigned.
- Grading will be based on each student’s engagement with the lecture presentations, judged primarily by asking of pertinent questions, discussion, and attentiveness. While credit is not given for solely for attendance, attendance is obviously necessary for participation. There will be no exams.
- At about the midpoint of the semester, each student will receive a brief report on their standing in the class.
- Credit will only be given for the items listed above. No extra credit will be given.

Impairments Affecting Your Performance
- Students may encounter difficulties that affect their participation, such as illness, accidents, bereavement, depression, anxiety, learning disabilities, and other problems. If you encounter such difficulties, please bring them to the attention of Dr. Herrera as soon as possible, preferably in advance. I can refer you to sources of help and may be able to offer accommodations. All such discussions will be confidential. In general, accommodations will be offered in the event of a documented illness, emergency, or other serious problem beyond your control. Please seek help as soon as you feel your performance is being affected.

Academic Integrity
- Our university depends on honesty, integrity, and ethical behavior among its members. Among other things, students’ ethical behavior includes respecting the intellectual property of others, submitting individual work unless otherwise directed by the instructor, protecting one’s own academic work from misuse by others, and avoiding the use of another’s work as one’s own.
- Please note that sanctions for violations are severe. This is necessary to protect the integrity of grades and the academic process. The minimum sanction is usually an F for the course. Suspension or expulsion from the university is also possible in egregious cases or for repeat offenses.
- Resources on academic integrity standards, policies, and expectations:
  3. Overview of Academic Integrity:  http://www.usc.edu/student-affairs/SJACS/forms/AcademicIntegrityOverview.pdf
  4. Tutorial on Academic Integrity:  http://www.usc.edu/libraries/about/reference/tutorials/academic_integrity/index.php
  6. Scientific Misconduct:  http://policy.usc.edu/scientific-misconduct/

Other Conduct Issues
- Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to the Office of Equity and Diversity (http://equity.usc.edu/) or to the Department of Public Safety (http://capsnet.usc.edu/department/department-public-safety/online-forms/contact-us). Call DPS at 213-740-4321 if you need immediate assistance or to report a crime. Reporting such incidents is important for the safety
of the whole USC community. Another member of the university community – such as a friend, classmate, advisor, or faculty member – can help initiate the report, or can initiate the report on behalf of another person. The Center for Women and Men (http://www.usc.edu/student-affairs/cwm/) provides 24/7 confidential support, and the Sexual Assault Resource Center webpage (http://sarc.usc.edu) describes reporting options and other resources.

**Students with Disabilities**

Any student requesting academic accommodations based on a disability is required to register with the **Office of Disability Services and Programs** (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP and should be delivered to the Lab Manager early in the semester. For more information, you can visit the DSP office in GFS 120 (8:30-5:00, M-F), call at 213-740-0776, email at ability@usc.edu, or go to their website: http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.html.

**Policies Concerning Student-Athletes**

Student-athletes may not be penalized when University-sanctioned competitions conflict with course activities. When a class will be missed for a sanctioned competition, it is the student-athlete’s responsibility to approach the instructor in advance. The student-athlete must provide the instructor with a letter from Magdi El Shahawy, Director of Student-Athlete Academic Services (SAAS, https://saas.usc.edu/). The letter must certify that the competition is a University-sponsored event that deserves accommodation. Accommodations will not be made for other types of conflicting events. Details on the University’s policy can be found at http://www.usc.edu/admin/provostoffice/ocaaa/guidelines.html. Arrangements for the accommodation must be agreed upon in advance of the event. If multiple team members will be absent, each must make an individual arrangement with the instructor.

**Email Communication**

To ensure privacy, only students’ USC accounts (usc.edu domain name) can be used for email communications regarding confidential matters. Other email accounts cannot be used. Students are responsible for understanding the content of official messages that instructors send to their USC accounts. Therefore, each student must check their USC email regularly and make sure their account is not over quota, so new messages can be received.

**Emergency Preparedness / Course Continuity**

If an officially declared emergency makes travel to campus infeasible, USC Emergency Information (http://emergency.usc.edu/ or 213-740-9233) will provide information related to safety and course continuity. We expect that instruction will be continued by means of Blackboard, teleconferencing, and other technologies. Alternative assignments may be given if classes are canceled for prolonged periods. If you have not already done so, please register with TrojansAlert (https://trojansalert.usc.edu/) to facilitate communication during emergencies.