

Course Syllabus - NEURO 590

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| Course Number: | NEURO 590 |
| Course Name: | Current Topics in Sensory Neuroscience |
| Quarter: | WI |
| Year: | 2017 |
| Start Date: | 01/05/2017 |
| End Date: | 03/24/2017 |
| Credits: | 3.0 |
| Last Date To Add This Course: | 01/13/2017 |
| Last Date To Drop This Course: | 01/13/2017 |
| Last Date To Change Grading Option: | 01/13/2017 |
| Minimum Class Size: | 6 |

Meeting Days and Times

| Day | Start | End | Location | Description |
|-----|----------|----------|-----------|--|
| T | 10:00 am | 11:30 am | CA Campus | Dining Room |
| T | 10:00 am | 11:30 am | CA Campus | Dorris Neuroscience Center (on 01/10, 01/24, 01/31, 02/07, 02/28, and 03/14) |
| TH | 10:00 am | 11:30 am | CA Campus | Dining Room |

Course Managers

| Role | Last Name | First Name | Department | Mail Code | Phone | Email | Organization Name (non-TSRI personnel) |
|-----------------|-------------|--------------|---|-----------|----------------|--------------------|--|
| Course Director | Patapoutian | Ardem | Department of Molecular and Cellular Neuroscience | DNC-210 | (858) 784-9879 | ardem@scripps.edu | |
| Course Director | Cline | Hollis | Department of Molecular and Cellular Neuroscience | DNC-216 | (858) 784-2220 | cline@scripps.edu | |
| Admin | Hosac | Angela Marie | Department of Molecular and Cellular Neuroscience | DNC-202 | (858) 784-9856 | aglenn@scripps.edu | |
| Admin | Negus | Cheryl | Department of Molecular and Cellular Neuroscience | MEM-215 | (858) 784-9465 | cnegus@scripps.edu | |

Course Description

This course will provide multifaceted training in sensory system neuroscience. It will be focused around visiting speakers in the Dorris Neuroscience lecture series. Students will read and discuss background material pertaining to the speaker's topic, attend the seminar and prepare a News and Views commentary on the topic. The course will expose students to top speakers in the field and provide them with the knowledge and critical thinking tools to understand and evaluate state of the art neuroscience presentations on current topics in Sensory Neuroscience. Some of the speakers for the upcoming 2016-2017 DNC seminar series include David Julius, Bob Data, Larry Zipursky, Loren Frank, Greg Scherrer, Robert Malenka and Leslie Vosshall.

Background Preparation (Prerequisites)

Texts and Journal References

| Type | Title | Author | Date | ISBN/ISSN |
|------|-------|--------|------|-----------|
|------|-------|--------|------|-----------|

Course Learning Outcomes

By the end of this course, students will be able to:

1. Understand and discuss current topics in Sensory Systems Neuroscience
2. Analyze and critique papers on sensory systems neuroscience.
3. Understand and critique lecture presentations in sensory systems neuroscience
4. Write and defend a succinct commentary on a current paper in sensory systems research

Course Requirements and Assignments

Other Information

The course is structured around the guest speaker series. In the week before the outside speaker, students should read the speaker's papers. 1 student gives a presentation of background and presents a classic paper in the topic area. The following week, students attend the seminar lecture and hand in a commentary (2-3pg) by the end of the week.

Attendance Statement

Students are expected to attend all classes. Students who are unable to attend class must seek permission for an excused absence from the course director or teaching assistant. Unapproved absences or late attendance for three or more classes may result in a lower grade or an "incomplete" for the course. If a student has to miss a class, he or she should arrange to get notes from a fellow student and is strongly encouraged to meet with the teaching assistant to obtain the missed material. Missed extra-credit quizzes will not be available for re-taking.

Scientific and Professional Ethics

The work you do in this course must be your own. Feel free to build on, react to, criticize, and analyze the ideas of others but, when you do, make it known whose ideas you are working with. You must explicitly acknowledge when your work builds on someone else's ideas, including ideas of classmates, professors, and authors you read. If you ever have questions about drawing the line between others' work and your own, ask the course professor who will give you clear guidance. Exams must be completed independently. Any collaboration on answers to exams, unless expressly permitted, may result in an automatic failing grade and possible expulsion from the Graduate Program.

Course Grading Statement

Students will be graded based on presentations and commentaries.

Letter Grade Descriptions

| Letter Grade | Grade Point | Description | Learning Outcome |
|--------------|-------------|--|------------------|
| A | 4.00 | Outstanding achievement. Student performance demonstrates full command of the course subject matter and evinces a high level of originality and/or creativity that far surpasses course expectations. | |
| A- | 3.67 | Excellent achievement. Student performance demonstrates thorough knowledge of the course subject matter and exceeds course expectations by completing all requirements in a superior manner. | |
| B+ | 3.33 | Very good work. Student performance demonstrates above-average comprehension of the course subject matter and exceeds course expectations on all tasks as defined in the course syllabus. There is notable insight and originality. | |
| B | 3.00 | Satisfactory work. Student performance meets designated course expectations and demonstrates understanding of the course subject matter at an acceptable level. | |
| B- | 2.67 | Marginal work. Student performance demonstrates incomplete understanding of course subject matter. There is limited perception and originality. | |
| C+ | 2.33 | Unsatisfactory work. Student performance demonstrates incomplete and inadequate understanding of course subject matter. There is severely limited or no perception or originality. Course will not count toward degree. | |
| C | 2.00 | Unsatisfactory work. Student performance demonstrates incomplete and inadequate understanding of course subject matter. There is severely limited or no perception or originality. Course will not count toward degree. | |
| P | 0.00 | Satisfactory work. Student performance demonstrated complete and adequate understanding of course subject matter. Course will count toward degree. | |
| F | 0.00 | Unacceptable work/Failure. Student performance is unacceptably low level of knowledge and understanding of course subject matter. Course will not count toward degree. Student may continue in program only with permission of the Dean. | |
| I | 0.00 | Incomplete is assigned when work is of passing quality but is incomplete for a pre-approved reason. Once an incomplete grade is assigned, it remains on student's permanent record until a grade is awarded. | |
| W | 0.00 | Withdrew from the course with Dean's permission beyond the second week of the term. | |

- All courses will be recorded and maintained in the student's permanent academic record; only courses that apply towards the degree will appear on the academic transcript. Non-credit or audited courses will not appear on the transcript.
- 4 core courses taken for a letter grade (pass = A or B for a core course)
- 2 elective courses taken pass/fail (pass = A, B, C for an elective)
- Because students are encouraged to take electives outside their area of expertise, a "C" letter grade is passing.
- Grading will be based on general attendance/participation, student presentations of the classic and contemporary publications, and

Course Schedule

| Date | Type | Topic or Lecture Title | Presenter Last Name | Presenter First Name | Presenter Department | Presenter Mail | Presenter Phone | Presenter Email | Organization Name (non-TSRI personnel) |
|------------|---------|--|---------------------|----------------------|---|----------------|-----------------|------------------------|---|
| 01/05/2017 | Lecture | | Patapoutian | Ardem | Department of Molecular and Cellular Neuroscience | DNC-210 | (858) 784-9879 | ardem@scripps.edu | |
| | | | Cline | Hollis | Department of Molecular and Cellular Neuroscience | DNC-216 | (858) 784-2220 | cline@scripps.edu | |
| 01/10/2017 | Lecture | DNC Lecture Series | Julius | David | | | | djulius@ucsf.edu | University of California, San Francisco |
| 01/12/2017 | Lecture | | Patapoutian | Ardem | Department of Molecular and Cellular Neuroscience | DNC-210 | (858) 784-9879 | ardem@scripps.edu | |
| | | | Cline | Hollis | Department of Molecular and Cellular Neuroscience | DNC-216 | (858) 784-2220 | cline@scripps.edu | |
| 01/17/2017 | Lecture | | Patapoutian | Ardem | Department of Molecular and Cellular Neuroscience | DNC-210 | (858) 784-9879 | ardem@scripps.edu | |
| | | | Cline | Hollis | Department of Molecular and Cellular Neuroscience | DNC-216 | (858) 784-2220 | cline@scripps.edu | |
| 01/19/2017 | Lecture | | Patapoutian | Ardem | Department of Molecular and Cellular Neuroscience | DNC-210 | (858) 784-9879 | ardem@scripps.edu | |
| | | | Cline | Hollis | Department of Molecular and Cellular Neuroscience | DNC-216 | (858) 784-2220 | cline@scripps.edu | |
| 01/24/2017 | Lecture | DNC Lecture Series | Martin-Fardon | Remi | Department of Molecular and Cellular Neuroscience | SP30-2003 | (858) 784-7154 | rmartinf@scripps.edu | |
| 01/26/2017 | Lecture | | Patapoutian | Ardem | Department of Molecular and Cellular Neuroscience | DNC-210 | (858) 784-9879 | ardem@scripps.edu | |
| | | | Cline | Hollis | Department of Molecular and Cellular Neuroscience | DNC-216 | (858) 784-2220 | cline@scripps.edu | |
| 01/31/2017 | Lecture | DNC Lecture Series: Coupling sensation to action in the olfactory system | Datta | Sandeep | | | | sdatta@harvard.edu | Harvard Medical School |
| 02/02/2017 | Lecture | | Patapoutian | Ardem | Department of Molecular and Cellular Neuroscience | DNC-210 | (858) 784-9879 | ardem@scripps.edu | |
| | | | Cline | Hollis | Department of Molecular and Cellular Neuroscience | DNC-216 | (858) 784-2220 | cline@scripps.edu | |
| 02/07/2017 | Lecture | DNC Lecture Series: Neural Circuits and molecular mechanisms for pain perception and opoid analgesia | Scherrer | Greg | | | | gscherrer@stanford.edu | Stanford School of Medicine |

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|------------|---------|---|-------------|--------|---|---------|----------------|---------------------------|---|
| 02/09/2017 | Lecture | | Patapoutian | Ardem | Department of Molecular and Cellular Neuroscience | DNC-210 | (858) 784-9879 | ardem@scripps.edu | |
| | | | Cline | Hollis | Department of Molecular and Cellular Neuroscience | DNC-216 | (858) 784-2220 | cline@scripps.edu | |
| 02/14/2017 | Lecture | | Patapoutian | Ardem | Department of Molecular and Cellular Neuroscience | DNC-210 | (858) 784-9879 | ardem@scripps.edu | |
| | | | Cline | Hollis | Department of Molecular and Cellular Neuroscience | DNC-216 | (858) 784-2220 | cline@scripps.edu | |
| 02/16/2017 | Lecture | | Patapoutian | Ardem | Department of Molecular and Cellular Neuroscience | DNC-210 | (858) 784-9879 | ardem@scripps.edu | |
| | | | Cline | Hollis | Department of Molecular and Cellular Neuroscience | DNC-216 | (858) 784-2220 | cline@scripps.edu | |
| 02/21/2017 | Lecture | | Patapoutian | Ardem | Department of Molecular and Cellular Neuroscience | DNC-210 | (858) 784-9879 | ardem@scripps.edu | |
| | | | Cline | Hollis | Department of Molecular and Cellular Neuroscience | DNC-216 | (858) 784-2220 | cline@scripps.edu | |
| 02/23/2017 | Lecture | | Patapoutian | Ardem | Department of Molecular and Cellular Neuroscience | DNC-210 | (858) 784-9879 | ardem@scripps.edu | |
| | | | Cline | Hollis | Department of Molecular and Cellular Neuroscience | DNC-216 | (858) 784-2220 | cline@scripps.edu | |
| 02/28/2017 | Lecture | DNC Lecture Series | Zipurski | Larry | | | | lzipurski@mednet.ucla.edu | University of California, Los Angeles |
| 03/02/2017 | Lecture | | Patapoutian | Ardem | Department of Molecular and Cellular Neuroscience | DNC-210 | (858) 784-9879 | ardem@scripps.edu | |
| | | | Cline | Hollis | Department of Molecular and Cellular Neuroscience | DNC-216 | (858) 784-2220 | cline@scripps.edu | |
| 03/07/2017 | Lecture | | Patapoutian | Ardem | Department of Molecular and Cellular Neuroscience | DNC-210 | (858) 784-9879 | ardem@scripps.edu | |
| | | | Cline | Hollis | Department of Molecular and Cellular Neuroscience | DNC-216 | (858) 784-2220 | cline@scripps.edu | |
| 03/09/2017 | Lecture | | Patapoutian | Ardem | Department of Molecular and Cellular Neuroscience | DNC-210 | (858) 784-9879 | ardem@scripps.edu | |
| | | | Cline | Hollis | Department of Molecular and Cellular Neuroscience | DNC-216 | (858) 784-2220 | cline@scripps.edu | |
| 03/14/2017 | Lecture | DNC Lecture Series: Neural substrates of memories and decisions | Frank | Loren | | | | lfrank@ucsf.edu | University of California, San Francisco |
| 03/16/2017 | Lecture | | Patapoutian | Ardem | Department of Molecular and Cellular Neuroscience | DNC-210 | (858) 784-9879 | ardem@scripps.edu | |
| | | | Cline | Hollis | Department of Molecular and Cellular Neuroscience | DNC-216 | (858) 784-2220 | cline@scripps.edu | |

