Neural Science Honors Seminar — Spring 2016
NEURL-UA.301

Time: Tuesdays 2:00 – 4:00
Location: Meyer Hall, Room 815

   Reading: Hailman and Strier, Ch. 1 - How to Plan Research

Feb 2 2. Student Oral Presentations of Research Plan
   Each student presents a 5-min research statement, and offers feedback for other presenters

Feb 9 3. Exploring the Mentor-Trainee Relationship
   Discussion: What are the benefits and challenges of collaboration in science?
   Reading: Macrina, Ch. 8 - Collaborative Research

Feb 16 4. Science Writing
   Reading: Hailman & Strier, Ch. 3 - How to Write a Research Report

Feb 23 5. Authorship and Publication Practices
   Reading: Macrina, Ch. 4 - Authorship and Peer Review
   *Journal club article selection due
   *Final paper: Introduction due

Mar 1 6. Student Journal Club presentations I
   *1-page journal club link to student’s research due

Mar 8 7. Student Journal Club presentations II
   *1-page journal club link to student’s research due

Mar 15 ** SPRING BREAK **

Mar 22 8. Responsible Conduct of Research — Research Misconduct
   Reading: Macrina, Ch. 1 - Methods, Manners, and the Responsible Conduct of Research
   Ch. 2 - Ethics and the Scientist
   *Final paper: Methods due

Mar 29 9. Ethical Treatment of Research Subjects
   Reading: Macrina, Ch. 5 - Use of Humans in Biomedical Experiments
   Ch. 6 - Use of Animals in Biomedical Experiments

Apr 5 10. Three-Minute Student Research Presentations
   Best Practices for Posters and Talks
   Reading: Hailman and Strier, Ch. 4 - How to Present Research

Apr 12 11. Data Acquisition, Management, and Analysis
   Reading: Macrina, Ch. 11 - Scientific Record Keeping
   *Final paper: Results and Figures due

Apr 19 12. Student Research Presentations and Class Critiques I

Apr 26 13. Student Research Presentations and Class Critiques II

May 3 14. Survival Skills for Research-Inspired Careers
   *Final Paper due

Grading:

**Preliminary statement and review of research goals** ................................................................. 5%

Each student presents a 5-min research statement, and offers feedback for other presenters.

**Journal club**

Each student chooses an effective research article, and leads a presentation. Class members provide constructive feedback, and discuss the implications of the article. The presenter must manage all of this within 15 mins.

Student submits one-page summary of how the article is relevant to his/her research.

- Individual oral presentation ........................................................................................................... 10%
- Class participation ......................................................................................................................... 10%
- 1-page written account of link to student’s research ................................................................. 4%

**Research oral presentation (3 mins)** .......................................................................................... 10%

Each student gives a 3-min presentation of his/her laboratory research, with just one slide, and offers feedback for other presenters.

**Research oral presentation (10 mins)**

Each student gives a 10-min presentation of his/her laboratory research.

Class members ask questions, and critique the presentation (5 mins).

- Individual presentation .................................................................................................................. 20%
- Class participation ......................................................................................................................... 10%

**Final research paper**

To be submitted electronically no later than 5pm, May 3, 2016.

The paper may serve as a preliminary draft of the Honors Thesis; further details in class.

- Preliminary Introduction .............................................................................................................. 2%
- Preliminary Methods ..................................................................................................................... 2%
- Preliminary Results and Figures .................................................................................................. 2%
- Final paper ..................................................................................................................................... 25%

**TOTAL:** ........................................ 100%

Staff:

Kenway Louie  <klouie@cns.nyu.edu>
Mal Semple  <mal.semple@nyu.edu>