INSTRUCTOR: Tony Nunez

OFFICE: 102 Giltner Hall or 118 Linton Hall (by appointment)
e-mail: nunez@msu.edu; voice mail: 353-9066 or 355-0301.

TIME/PLACE: Wednesdays 9:10 am – noon, 121 Baker Hall

READEGS:

1) Background Information: Carlson, NR (2010) *Physiology of Behavior* 10th edition (or equivalent current text books).

2) Original Papers/Reviews: Sets 1-3.

COURSE OUTLINE:

The core of the course includes three thematic units. Each unit starts with a historical overview and includes individual reading of review articles and class discussion of key research papers.

GRADES: In-Class Exams (60%), class presentation/outline (15%), proposal (15%), target articles discussions (10 %).

UNIT ONE: Learning and Memory: Set 1 January 11 – February 1

Unit One Target Articles January 18 – February 1

UNIT TWO: Sleep & Rhythms: Set 2 February 8 – February 22

Unit two Target Articles Discussion February 15 and 22

February 29 In-Class Exam for Units One and Two (35 %)

March 5 - 9: SPRING BREAK.

UNIT THREE: Reproduction in Context: Set 3 March 14 – March 28

The background reading for this unit should cover text-book chapters on feeding behavior/energy balance as well as reproduction.
In-Class Exam for Unit Three April 4 (25%)

CLASS PRESENTATIONS April 11 – April 25

A SENTENCE OUTLINE WITH A LIST OF 5 TO 10 KEY REFERENCES IS DUE THE DAY OF THE PRESENTATION (provide copies for all class participants)

Discussion of Class Presentations and Grant Proposal March 21

TOPIC SELECTIONS WITH TWO CORE REFERENCES ARE DUE TWO WEEKS PRIOR TO THE START OF THE CLASS PRESENTATIONS (March 21)

PREDOCTORAL GRANT PROPOSAL: DUE MONDAY OF FINALS WEEK (April 30)

PROPOSAL OUTLINE:
1. RESEARCH EXPERIENCE: What have you done? What is the topic of your thesis? Include a list of publications/conference presentations and awards (2-page limit*).
2. SPONSOR/INSTITUTION: Why do you want to work with the sponsoring investigator? What is ideal about the selected laboratory and institution? The sponsor may be a scientist from MSU, but your proposal may also identify a sponsor from another institution (2-page limit).
3. RESEARCH PLAN: This section should include a brief review of the literature, a set of specific aims, and a description of experiments to achieve those specific aims. The proposal should include work to be completed in three years. The proposed research may be related (BUT NOT IDENTICAL) to your current research project or to work done in previous laboratory rotations (10-page limit). The research plan MUST include a discussion of how the proposed training and research activities relates to the field of Behavioral Neuroscience.
4. LITERATURE CITED: Provide a complete list of the papers cited in the proposal with full bibliographical information (no page limit).
5. TRAINING POTENTIAL: Explain how the proposed research will complement your current and past training. Describe any activity (e.g., seminars, workshops, short-courses) during the three years of support that will add to the training potential of the research experience. An important component of this section is to describe training plans in areas related to the responsible conduct of research and research ethics (1-page limit).

* All page limits are for single-spaced format.