Neuroendocrinology PSYC 139; BiBB 260 Spring 2015					
Dr. Lori Flanagan-Cato					
T, Th 10:30-11:50 am	flanagan@psych.upenn.edu	Office hours 2:30-3:30 pm			
McNeil 286-7	Phone 215-898-4085	Wednesday, D1 Solomon			

**Text:** An Introduction to Behavioral Endocrinology, Fourth Edition.

Randy Nelson, Sinauer 2011.

Additional reading will be available on Canvas.

Resource: The online Whole Brain Atlas at Harvard is a great resource for locating and viewing brain structures discussed in

class. It can be browsed at

http://www.med.harvard.edu/AANLIB/home.html

**Assistant**: Wade Mayes (wmayes@gmail.com)

Office hour: Tuesday 3:30-4:40; D3/4 Solomon

**Overview:** This course aims to introduce students to important neuroendocrine

systems. Students have an opportunity to learn about diverse vertebrate species, hormone-dependent behaviors, and molecular mechanisms of hormone action. In addition, students will develop skills required for critical reading of primary neuroscience literature

and scientific communication skills.

Grading: Students will be evaluated based on three (3) exams consisting of

short-answer questions. The first two exams will be 20% of the final grade; the final will be worth 30% of the course grade. The remaining 30% of the grade will be based on "Newsdesk" presentations. Attendance is not measured directly, but assessed through numerous opportunities to earn class participation points. Students will need a **TurningPoint ResponseCard NXT clicker** for

participation to be counted.

Newsdesk: Students will work in teams to focus on cutting edge topics in

Neuroendocrinology. Some class time will be devoted to this group work. There will be four in-class presentations, 12-minutes each, getting progressively deeper into the chosen topic. Along with each presentation, a bibliography should be submitted citing resources.

The progression of presentations will be:

- 1. "Stories we are following"
- 2. Case study
- 3. Interview a scientist
- 4. "Breakthrough on the horizon"

## **Schedule of Topics**

Jan	15	Introduction	Ch 1
	20, 22	Puberty	Ch 2
	27, 29	Puberty, Newsday	Ch 6
Feb	3, 5	Social bonds	Ch 7
	10, 12	Social bonds	Ch 8
	17, 19	Test 1, Hypertension	Ch 9
	24, 26	Hypertension	canvas
Mar	3, 5	Hypertension, Newsday	canvas
		SPRING BREAK	
	17, 19	Diabetes/Obesity	canvas
	24, 26	Diabetes/Obesity	canvas
Mar/Apr	31, 2	TEST 2, Stress and Mental Health	canvas
Apr	7, 9	Newsday, Stress and Mental Health	Ch 11
	14, 16	Stress and Mental Health	13
	21, 23	Stress and Mental Health	canvas
	28	Newsday	
		READING DAYS	
May	13	Final Exam, 12 noon – 2 pm (comprehensive)	

Attendance policy: Attendance will not be taken for this class but students who regularly fail to attend class will not get participation points and will likely have trouble keeping up the material for the lectures they do not attend. Thus, attendance will improve your grade at multiple levels.

Incidents of academic dishonesty will be dealt with harshly. Students who plagiarize others' work or otherwise violate the university Code of Academic Integrity can expect a failing grade and be reported to the Office of Student Conduct.

(http://www.upenn.edu/academicintegrity/ai\_codeofacademicintegrity.html).

**About the Instructor:** Lori Flanagan-Cato received her Ph.D. in Behavioral Neuroscience, specializing in neuroendocrinology, from the University of Pittsburgh. She worked as a postdoctoral fellow at The Rockefeller University, researching the regulation of oxytocin receptors by ovarian hormones. Her laboratory at the University of Pennsylvania investigates the effects of ovarian hormones and fluid balance hormones on behavior and brain circuits that control motivated behavior.

**About the TA:** Wade Mayes received his B.S. in Neuroscience from Johns Hopkins University in 2013. He is now a 3rd year Neuroscience Ph.D. student at the University of Pennsylvania. He works with Dr. Kelly Jordan-Sciutto studying the mechanisms of neurodegenerative processes.