**Syllabus: Anth 177AB Human Reproductive Ecology and Endocrinology**

**Spring 2013**

**Class Time: Tu/Th 5-6:15 pm**

**Location:** HSSB 1173

**Instructor:** Aaron Blackwell

**E-mail:** blackwell@anth.ucsb.edu **Website:** http://www.bonesandbehavior.org/blackwell

**Office:** HSSB 2049

**Office Phone:** 805-893-4234

**Office Hours:** Mon 11 am-12 pm, Tue 4-5 pm or by appointment

**Course Description:**

Regulation of reproductive function by diet, energy balance, lactation, and social context. The role of hormones in the regulation of human reproduction, behavior, and physiology. Hormonal changes with parenting and pregnancy in men and women.

**Recommended Preparation:**

Prerequisite: Anth 5 or Anth 7 with a minimum grade of C; or equivalent preparation in evolution and basic biology from another course (e.g. EEMB 2). Open to non-majors.

**Class Format and Grading:**

The class will be primarily lecture. Class attendance is expected. To encourage attendance, small pop quizzes or homework assignments will be given at least once a week, sometimes more frequently, and you must be in attendance to receive credit. The surprise assignments will often refer to the material in the readings for that lecture day. In addition to the quizzes, there will be a multiple choice midterm and final, given in class, and a take home essay final. The final will be comprehensive.

Grade breakdown is as follows:

Multiple Choice Midterm: 25%

Multiple Choice Final Exam: 25%

Take Home Essay Final: 30%

Pop quizzes, surprise homework questions, and class participation: 20%

Note: Small amounts of extra credit will be offered on tests and for attending some guest lectures, and I will drop one quiz from the grading.

**Readings**

Two books should be purchased:

1. *On Fertile Ground: A Natural History of Human Reproduction*, by Peter Ellison. (The Kindle version is cheaper)
2. *Endocrinology of Social Relationships*, Edited by Peter Ellison and Peter Gray.

**Class Schedule**

|  |  |  |  |
| --- | --- | --- | --- |
| **Week** | **Dates** | **Topics** | **Reading** |
| **1** | 4/2 | Introduction to the course, Levels of Explanation, What are hormones | Read this syllabus!  OFG Ch 1 |
|  | 4/4 | Neuroendocrine System, Types of Hormones, Organization/ Activation | ESR Ch 2 |
| **2** | 4/9 | Life History Theory, Human Life Course | ESR Ch 5 |
|  | 4/11 | Menstruation, Implantation and Pregnancy | OFG Ch 2 |
| **3** | 4/16 | Triggering Birth, Obligate Midwifery | OFG Ch 3 |
|  | 4/18 | Video: Born in the USA | OFG Ch 4 |
| **4** | 4/23 | Lactation, Lactational Amenorrhea, | ESR Ch 7 |
|  | 4/25 | Parenting in males and females, Parental Investment Theory, Cooperative Breeding | ESR Ch 12 |
| **5** | 4/30 | Review and Catch up | ESR Ch 13 |
|  | **5/2** | **Midterm in Class** |  |
| **6** | 5/7 | Sexual Development, Timing of Adrenarche and Menstruation | OFG Ch 5 |
|  | 5/9 | Energy Balance and Fertility | OFG Ch 6 |
|  | 5/10 | Extra Credit: Claudia Valeggia lecture 3:30pm, 1 page response |  |
| **7** | 5/14 | Menopause | OFG Ch 7 |
|  | 5/16 | Testosterone and Androgens | OFG Ch 8 |
| **8** | 5/21 | Steroid Hormones and Sex Differences | ESR Ch 10 |
|  | 5/23 | Steroid Hormones and Sexual Orientation | ESR Ch 15 |
| **9** | 5/28 | HPA-axis, Cortisol | ESR Ch 16 |
|  | 5/30 | Wrap-Up | OFG Ch 9 |
| **10** | 6/4 | Review and Wrap-up |  |
| **Final** | 6/6 | **Final in Class** |  |
| **Final** | Wed 6/12 | **Essay Questions due in my box on the second floor of HSSB by 5 pm!** |  |