PSY 410/510 Neuroscience and Inequality/Stress

CRN: 17189/17190 Fall 2013,

Instructor:	Dr. Helen Neville neville@uoregon.edu 335 Lewis Integrated Science Building
Teaching Assistant:	Lauren O'Neil <u>oneil@uoreogn.edu</u>
Prerequisites:	Good critical thinking skills and willingness to engage in classroom discussion

Grading option: Optional for all students Credits: 4 Time: 1600-1720 Tuesday & Thursday Location: 221 McKenzie (MCK)

Overview: This course will examine social inequality and its consequences, as well as research on interventions designed to ameliorate its negative outcomes, all from the perspective of neuroscience. We will begin with definitions of stress and will review the remarkably similar effects of stress in plants, non-human animals and humans. We will read and discuss sets of research articles each week. Topics include the basic data on the physiological, anatomical and epigenetic effects of stress and social inequality, consequences across the lifespan from early childhood to adulthood, the neuroscience of stress and social stress, cognitive outcomes of inequality, and the impact of early and later interventionsThere will be one midterm and a final.

Course readings: Weekly readings will be primary research and review papers that will be posted on Blackboard one week prior to in-class discussions. There is no textbook for this course.

Optional, but highly recommended, supplemental readings:

The Status Syndrome: How Social Standing Affects Our Health and Longevity, by Michael Marmot

The Spirit Level: Why Greater Equality Makes Societies Stronger, by Kate Pickett and Richard Wilkinson

The cost of inequality, by J Stiglitz

Weekly Topics

Week 1: Introductions, overview of syllabus and expectations, formation of topic groups

- **Week 2:** Inequality, stress and socioeconomic status: definitions and parallels of consequences of stress in plants, nonhuman animals and humans
- Week 3: Stress and inequality in nonhuman animals
- Week 4: Stress, anxiety, neural outcomes in humans Graduate Students: draft of outreach project due
- Week 5: Early life stress
- Week 6 Midterm
- Week 7: Parental nurturance
- Week 8: Interventions
- **Week 9:** Genes and gene-environment/intervention interactions
- **Week 10:** Neuroscience of sociality, altruism, 'fairness', perceived injustice Outreach project presentations