PNP 390: PNP Reading Course

Instructor: Dr. Ron Mallon rmallon@artsci.wustl.edu
Office: 204 Wilson
Hours: Wednesday Afternoons by appt.


Supplemental readings as required for presentations.

Course Description:

In this course, we'll read Marcus’s The Birth of the Mind, and consider a lot of ideas connecting genes, brains, and psychology.

No laptops, cell phones, smart phones, pdas, etc. on during class, please.

Course Assessment and Policies:

30% Presentation (fractional for group work) & Participation

Each week, we'll have presentations on, and discussions of, supplemental materials.

70% Papers: 2 4-6 page papers, Due October 31st & December 14th

Plagiarism will result in a failing grade.

I am happy to make accommodations in accordance with the WUSTL's policies on accommodation. Please see me if you need some sort of accommodation.

Topics by Week

Week 1. Wednesday, August 31st: Introduction

Week 2. Wednesday, September 7th:

Marcus Chp. 1, “Neither is Better”
Supplements:

1. Paul Ehrlich’s “Gene Shortage” Argument
   

2. David Buller’s “Gene Shortage” Argument
   
   David Buller, Adapting Minds Chp. 4: pp. 130-131

3. Gene x Environment Interactions
   

Week 3. Wednesday, September 14th

Marcus, Chp. 2, “Born to Learn”

Burlap and Downes, “Innateness and Human Diversity” on Telesis & Ares

Supplements:

4. “Poverty of the Stimulus” Arguments
   
   Laurence and Margolis (2001) pp. 217-233 (Sections 1-3)
   
   http://www.philosophy.dept.shef.ac.uk/papers/POS.pdf

5. Between and within group heritability: the two fields argument
   
   Section 5 of Burlap and Downes (in assigned reading, on Ares)

6. Innate Social Apprehension
   

Week 4. Wednesday, September 21st:


Supplements:


8. Beyond the Gene: Developmental Systems


Week 5. Wednesday, September 28th:

Marcus, Chp. 3, “Brain Storms”

Supplements:

10. Plasticity’s Extremes: Hemispherectomy


11. Face Recognition and Initial Biases


12. Is your Brain really necessary?


Week 6. Wednesday, October 5th:

Marcus, Chp. 4, “Aristotle’s Impetus”

Supplements:

13. Moss on Gene-P and Gene-D

14. Keil on Folk biology


**Week 7. Wednesday, October 12th:**

Marcus, Chp. 5., “Copernicus’s Revenge”

**Supplements:**

16. Allen Brain Atlas:


17. Genes and Epigenetic Inheritance (2)


18. Idiosyncratic Genetics

   Blog Post: Mitchell, Kevin, “Welcome to Your Genome” on Wiring the Brain

**Week 8. Wednesday, October 19th:**


Michael Gazzanniga and cerebral lateralization: [http://youtu.be/ZMLzP1VCANo](http://youtu.be/ZMLzP1VCANo)

19. Thomas Nagel and Brain Bisection

   Nagel, (1971) “Brain Bisection and the Unity of Consciousness” Synthese 396-413

**Week 9. Wednesday, October 27th:**

1st Paper is due in Philosophy Department Office Wilson 2nd Fl at 5PM.

Marcus, Chp. 6., “Wiring the Mind”
Supplements:

20. Grandmother cells and “Halley Berry” cells

Gosline, Anna. 2005. Why your brain has a ‘Jennifer Aniston cell’

21. Concepts and Brain Organization (2)


Week 10. Wednesday, November 2nd:

Marcus, Chp. 7., “The Evolution of Mental Genes”

Supplements:

22. Chimpanzees and Humans are genetically 98.5% identical

F. Ramus (2006) “Human genome specificity” (From Ramus 2006, Section 3.2, pp.252-254)

23. What does it mean to compare genomes?

Monika Piotrowska (2009). What Does It Mean to Be 75% Pumpkin? The Units of Comparative Genomics. Philosophy of Science 76 (5) or on Ares.

Week 11: Wednesday, November 9th:

Language and Thought: Revisiting the Whorf Hypothesis


Week 12: Wednesday, November 16th:


Supplements:

24. Culture and evolution in human populations.

25. Is evolution accelerating?

Wednesday, November 23rd: No Classes. Thanksgiving Break.

**Week 13. Wednesday, November 30th:**

Marcus, Chp. 8., “Paradox Lost”

H. Clark Barrett, “Dispelling Rumors of a Gene Shortage”

**Week 14. Wednesday, December 7th:**

Marcus, Chp. 9, “Final Frontiers”


**Supplements:**


Friday, December 9th: Last Day of Classes. 2nd paper is due in Philosophy Department Office Wilson 2nd floor by closing.

Thursday, December 15th-Thursday, December 21st: Final Exams