Instructor: Dr. Terri Lewis  
PNB 110  
LewisTL@mcmaster.ca  
905-525-9140 x23009

Course TA: Laura Gibson  
gibsol@mcmaster.ca

Location: PC-204

Time: Wednesdays 11:30–2:30

Office hours: By appointment

Course Objectives. Students will engage in self-directed research, critical thinking, and problem solving in the evaluation of existing research and the design of new research in the area of developmental psychology. Through assignments, students will gain experience with the basic principles of scientific research including the scientific method, experimental design, hypothesis testing, data analysis and interpretation, and reporting scientific findings. Students will strengthen their writing and oral presentation skills, their ability to evaluate the sources and content of information, their ability to engage in problem solving and critical thinking, and their ability to evaluate the work of their peers. In the first part of the course, we will evaluate the idea of critical or sensitive periods in development through critical evaluation of eight papers from a special issue on critical periods in *Developmental Psychobiology* (2005), Volume 46. In the second part of the course students will work in groups to develop a grant proposal that addresses an important question of their choice in this domain.

Course Schedule (subject to revision)

All readings are from *Developmental Psychobiology*, 46, 2005. They are available for download from the course website:

http://www.science.mcmaster.ca/psychology/inquiry4j03
Course Schedule (continued)

September 15: Introduction to inquiry and sensitive periods in development

September 22: Sensitive periods in low-level vision
Murphy, K.M., Beston, B.R., Boley, P.M., & Jones, D. G. Development of human visual cortex: A balance between excitatory and inhibitory plasticity mechanisms.

September 29: Effects of brain lesions and visual deprivation
De Schonen, S., Mancini, J., Camps, R., Maes, E., & Laurent, A. Early brain lesions and face-processing development.
Sathian, K. Visual cortical activity during tactile perception in the sighted and the visually deprived.

October 6: Language and music
Werker, J.F., & Tees, R.C. Speech perception as a window for understanding plasticity and commitment in language systems of the brain.
Trainor, L.J. Are there critical periods for musical development?

October 13: Plasticity: Cochlear implants and learning in adults with amblyopia

October 20: Presentation work time
October 27: Presentation work time
November 3: Presentation work time
November 10: Presentations
November 17: Presentations
November 24: Presentations
December 1: Wrap up
Academic Integrity Policy Reminder

See the Academic Integrity Policy, specifically Appendix 3, located at http://www.mcmaster.ca/senate/academic/ac_integrity.htm

Any student who infringes one of these resolutions will be treated according to the published policy. Any instance of Plagiarism will be dealt with in the most severe terms allowable by the Senate Policy on such matters.

Evaluation and Due Dates

Late assignments will not be accepted unless prior arrangements have been made with the instructor.

25% Attendance and participation. Note that for high marks, comments and questions must make an intellectual contribution.

15% Sensitive Period Evaluation. Hard copy due at the beginning of class on September 22, September 29, October 6, or October 13, depending on the topic.

5% Progress Report on Grant Proposal. Due at 2:30 p.m., October 27.

20% Written Grant Proposal. Due the Friday before your oral presentation by 5 p.m.

Leave hard copy in Laura’s mail box in mail room (PC 108). Send electronic copy to Laura’s e-mail account. Both are due by 5 p.m.

20% Oral Presentation of Grant Proposal. One of November 10, 17 or 24 (assigned in class).

15% Peer Evaluation of Grant Proposal. Due one week after the oral presentation. If you are presenting that week, please make arrangements for a 1-week extension on the peer evaluation.

McMaster's Grading Scale

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The instructor reserves the right to adjust the final marks up or down, on an individual basis, in the light of special circumstances and/or the individual's overall performance in the course. All written work will be evaluated on content, grammar/spelling, clarity of writing, presentation, and organization.