## Advanced Methods and Analysis for the Learning and Social Sciences Spring 2012 Professor Ryan Shaun Joazeiro de Baker SYLLABUS

Instructor Info Phone: 508-831-5355 Email: rsbaker@wpi.edu Office: Salisbury Laboratories 317A Office hours: By Appointment

Course Schedule and Readings: http://users.wpi.edu/~rsbaker/AMALSS2012/course-schedule-2012.html

Required Texts: You are not required to purchase any books, however I recommend looking over the semester's readings and seriously considering purchasing some of the books which the readings are drawn from.

Information on how to obtain course readings will be provided in class.

Course Goals: This course covers key methods useful for quantitative research in the Learning Sciences, as well as the Social Sciences more generally. Students will learn how – and equally importantly, when and why – to use a range of analytic and quantitative methods.

Course Pre-requisites: PSY503, Research Methods for the Learning Sciences, covers many of the research paradigms which generate the types of data studied in this class. It is recommended that both classes be taken, but the ordering of the classes is not crucial.

Assignments: No exams or quizzes will be given.

Across the semester, ten homework assignments will be assigned. Every student must do six of the homework assignments (your choice) and turn them in by email, *at least 3 hours before the beginning of class (e.g. noon)* on the due date. You must complete 3 of assignments 1-5, and 3 of assignments 6-10 (e.g. 1,2,5,6, 9,10 is acceptable; 1,2,3,4,5,9 is not acceptable). You must be prepared to discuss your work in class (you do not need to create slides, but be prepared to have your assignment projected, and to discuss aspects of your assignment in class).

Since there is a choice of assignments, and discussion of assignments will be a key part of classroom pedagogy, extensions will only be given due to instructor error or extreme circumstances (assignments in other classes, research studies, and so on do not count as extreme circumstances; serious injury, illness, or death in the family do count as extreme circumstances). Outside of these circumstances, late assignments will not be accepted (e.g. zero credit will be given).

(Details on all assignments will be given in class)

Class participation involves both attendance and active (and constructive) participation in classroom discussions. While it is not expected that you will memorize every paper assigned for the class, it is expected that you will at minimum have skimmed the readings to the degree that you can participate actively in discussions.

Grading

- 6 of 10 Assignments 15% each (up to a maximum of 90%)
- Class participation 10%

BONUS: For every homework, there will be a special bonus of 20% for the best hand-in. "Best" will be defined in each assignment.

Plagiarism and Cheating: If you are unsure as to what plagiarism and cheating consist of, please contact the instructor before submitting an assignment that may include plagiarism or cheating. You may also want to read the Student Guide to Academic Integrity at WPI, if you are uncertain as to what plagiarism and cheating are. University regulations will be followed to the letter.

Accommodations For Students With Disabilities (quoted from Jeanine Skorinko's SS2400 syllabus): If you need course adaptations or accommodations because of a disability, or if you have medical information to share with me, please make an appointment with me as soon as possible. If you have not already done so, students with disabilities, who believe that they may need accommodations in this class, are encouraged to contact the Disability Services Office (DSO), as soon as possible to ensure that such accommodations are implemented in a timely fashion. The DSO is located in Daniels Hall, (508) 831-5235.