

Research Methods for the Learning Sciences

Term C, 2010

Professor Ryan Shaun Joazeiro de Baker

SYLLABUS

Course Location and Times

Wednesday Noon - 1:50pm

Friday Noon - 1:50pm

Atwater Kent 232

Instructor Info

Phone: 508-831-5355

Email: rsbaker@wpi.edu

Office: Atwater Kent 104

Office hours: By Appointment

Course Schedule and Readings: <http://users.wpi.edu/~rsbaker/LSRM2010/course-schedule-2010.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. I particularly recommend purchasing a copy of Rosenthal & Rosnow (1991) – I use it constantly.

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

Course Goals: The goals of this course are to learn data collection, design, and analysis methodologies that are particularly useful for scientific research in education. The course will be organized in modules addressing particular topics. A key goal is to help students think about and learn how to apply these methods to their own research programs. To this end, assignments will be given in a flexible fashion, where methods can be applied either to data/research questions selected by the instructor, or to data/research questions that the student selects him or herself.

Course Pre-requisites: Students enrolling must either have taken SS 2400 ("Methods, Modeling, and Analysis in Social Science"), a comparable course at another institution, or have permission from the instructor.

Assignments: Five assignments will be given during the class. In each assignment, you will apply methods learned during the class, and reflect critically upon your use of these methods. Assignments

are expected to be completed individually, unless the assignment specifically calls for some form of group work. Each assignment will count for 15% of the final grade. In these assignments, methods can be applied either to data/research questions selected by the instructor, or to data/research questions that the student selects him or herself. No preference will be given to either choice, in terms of grades assigned; however, selecting your own data and/or research questions will involve obtaining prior approval for your idea. (Instructions for doing so will be given with each assignment). Assignments should be turned in via email to the course instructor. Due dates for all assignments are given in the course schedule. All assignments are due before the beginning of class on the due date. An assignment turned in once class has begun is considered to be late. An assignment turned in late, but within 72 hours of the beginning of class on the due date, will receive a penalty of 20% (e.g. maximum grade = 80%). Assignments turned in after 72 hours will receive 0 credit. (Exceptions for illness, injury, death in the family, or corresponding situations may be made at the instructor's discretion).

Probing Questions: At the end of each class, a probing question will be given out, which is relevant to the readings and lecture from the preceding class, or the readings for the following class. Students who miss class are recommended to contact the instructor or a classmate, to obtain the probing question. Each student should write a 1-3 paragraph response to the probing question. Probing questions will, as an aggregate, count for 15% of the final grade. Probing question responses should be turned in via email to the course instructor, no later than 2 hours before the beginning of the following class (i.e. 10am). No credit is given for late submission of probing questions.

Class Participation: Active participation in discussions is an essential part of this class. Participation will count for 10% of the final grade.

Readings: Students are expected to complete all readings before class. Failing to complete readings will not be directly penalized, but is likely to reduce course grades indirectly (through poorer performance on assignments and in response to probing questions). More importantly, you'll get more out of the lectures if you've read the readings.

Examinations: No examinations will be given in this course.

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.