

Psychology 319  
Multilevel Regression Modeling  
Course Information Sheet, Fall, 2009

Instructor:	James H. Steiger, Professor Department of Psychology and Human Development 215A Hobbs Phone: 615-322-7060 Office Hours: F 10:10-11:00; MW (By Appointment) Email: james.h.steiger@vanderbilt.edu
Course Meeting Times:	MW 2:35-3:50 Hobbs 107
Instructor Website:	<a href="http://www.statpower.net">http://www.statpower.net</a> (by next week)
Major Textbook:	Gelman, A. & Hill, J. (2007). <i>Data Analysis Using Regression and Multilevel/Hierarchical Models</i> . ISBN (Paperback) 978-0-521-68689-1 (Available from Amazon for around \$40.)
Secondary Texts"	<p>Cohen, J., Cohen, P., Aiken, L. S., &amp; West, S. G. (2004). <i>Applied multiple regression/correlation analysis for the behavioral sciences</i> (3<sup>rd</sup> ed.) Mahwah, NJ: Lawrence Erlbaum Associates. Available at <a href="http://www.netlibrary.com">www.netlibrary.com</a>.</p> <p>Gelman, A., &amp; Meng, X.L. (2004). <i>Applied Bayesian modeling and causal inference from incomplete-data perspectives: an essential journey with Donald Rubin's statistical family</i>. Ebook ISBN 9780470090442 Available at <a href="http://www.netlibrary.com">www.netlibrary.com</a></p> <p>Goldstein, H. (1999). <i>Multilevel Statistical Models</i>. Available with data files for free download from <a href="http://www.ats.ucla.edu/stat/examples/msm_goldstein/">http://www.ats.ucla.edu/stat/examples/msm_goldstein/</a></p> <p>Weisberg, Sanford (2005). <i>Applied linear regression</i> (3<sup>rd</sup> Ed.) Available in electronic format at <a href="http://www.netlibrary.com">www.netlibrary.com</a>. Ebook ISBN: 0471704083. Note: You should also download the ASCII data files and install the R package ALR3. These are available on the author's website, <a href="http://www.stat.umn.edu/alr/">http://www.stat.umn.edu/alr/</a></p>
Software:	<p>R (<a href="http://www.r-project.org/">http://www.r-project.org/</a>)</p> <p>Winbugs ( <a href="http://www.mrc-bsu.cam.ac.uk/bugs/winbugs/contents.shtml">http://www.mrc-bsu.cam.ac.uk/bugs/winbugs/contents.shtml</a>)</p> <p>HLM Student Version 6 (<a href="http://www.ssicentral.com/hlm/student.html">http://www.ssicentral.com/hlm/student.html</a>)</p> <p>Optimal Design Software (<a href="http://sitemaker.umich.edu/group-based/optimal_design_software">http://sitemaker.umich.edu/group-based/optimal_design_software</a>)</p>
Grading:	Course grades will be scaled. Midterm Exam 20% Final Exam - 20% Course Project – 20% Lab Assignments, homework, class participation - 40%.