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**EPI 204**  
**Spring 2017****Quantitative Epidemiology III**  
**Statistical Models****David M. Roche**  
**April 4, 2017**

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**Course Information**

<b>Class Meetings:</b>	Tuesdays and Thursdays 12:10pm–2:00pm 24 Carlson Library
<b>Lab:</b>	The last part of class every day will be lab. For other assistance, contact instructor or TA.
<b>Office Hours:</b>	By appointment.
<b>Office:</b>	140B Med Sci 1C (530-752-6999) FAX: 530-752-3239 e-mail: <a href="mailto:dmrocke@ucdavis.edu">dmrocke@ucdavis.edu</a> web site: <a href="http://dmrocke.ucdavis.edu/">http://dmrocke.ucdavis.edu/</a>
<b>Texts:</b>	<b>Logistic Regression: A Self-Learning Text (3rd ed.)</b> , Kleinbaum & Klein, Springer, 2010 <b>Survival Analysis: A Self-Learning Text (3rd ed.)</b> , Kleinbaum & Klein, Springer, 2012 <i>Download links on web site.</i>
<b>Computer:</b>	Please bring a laptop to class, OS X, Windows, or
<b>Software:</b>	Linux should all be fine. Example analyses will be in R and sometimes SAS. You may use any software capable of the analyses.
<b>TA:</b>	Andrew Farris ( <a href="mailto:affarris@ucdavis.edu">affarris@ucdavis.edu</a> ).
<b>Course Grading:</b>	Letter Grades based on <ul style="list-style-type: none"><li>– Homework</li><li>– Class Attendance</li><li>– Class Participation</li></ul>
<b>No Class:</b>	April 6 and possibly other dates as announced
<b>Prerequisites</b>	EPI 202 and 203 or the equivalent.

This course is an introduction to advanced regression methods for epidemiological research. The first part of the course will focus on generalizations of linear regression to binary data (logistic regression) and count data (Poisson regression). The second part of the course will focus on time-to-event data (survival analysis). We will look at the theoretical underpinnings of the models, but the main emphasis will be on model formulation, computation, and interpretation of results.

Kleinbaum logistic regression data sets are at  
<http://web1.sph.emory.edu/dkleinb/logreg3.htm#data>

Kleinbaum survival analysis data sets are at  
<http://web1.sph.emory.edu/dkleinb/surv3.htm#data>