From: <u>Craigmile, Peter</u>

To: <u>Vankeerbergen, Bernadette</u>

Cc: <u>Hadad, Christopher; Vaessin, Harald; Berliner, Mark; Hans, Christopher</u>

Subject: Political Science 3780

Date: Tuesday, February 04, 2014 8:48:36 AM

Dear Bernadette,

Below is our opinion on this course.

Regards,

Peter Craigmile

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Peter Craigmile, Ph.D.,

Associate Professor, Department of Statistics, The Ohio State University.

Political Science 3780: Data Literacy and Data Visualization

1) GE in Data Analysis: NO

I have asked a number of statistics faculty to look over the course proposal for Political Science 3780: Data Literacy and Data Visualization. We believe that the content does not match up with the learning objectives for the GE in Data Analysis. Students going through a GE in Data Analysis need to be able to learn about topics in statistical analysis and probability in depth, as, for example, our GE courses in Statistics achieve. This course cannot not meet the outcomes as only a small proportion of the course covers these topics.

2) Course concurrence: NOT at this time

We have no problem with teaching a course in Data Visualization. Thus we have no issue with the following proposed topics:

- * Locating and obtaining data
- * Design of data visualizations
- * R programming
- * Creating visualizations (distributional, spatial, and temporal, etc.)

However the following topics proposed in Statistics and Probability duplicate the content of courses already available in Statistics (e.g., Stat 2450, Stat 2480, Stat 3201, Stat 3202, Stat 5301 and Stat 5302):

- * The fundamentals of probability and uncertainty
- * Monte Carlo simulations for understanding probability
- * The bootstrap: generalizing from a sample to a larger population
- * Research design: theories, hypotheses, and hypothesizing

We cannot provide concurrence for a course containing this sort of duplication. Indeed we are worried that the additional topics that require more computation, such as Monte Carlo simulations and the bootstrap, need more care and time in instruction than are budgeted for by this proposed course. We believe that students need time to grasp the key concepts in probability and statistical inference.