

**Statistics 475/920**  
**Sample Survey Methods**  
**Syllabus**

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**Office Hours:** Tuesday, 3-4; Thursday, 3-4; by appointment.

**Teaching Assistant:** Yang Jiang, [yajiang@wharton.upenn.edu](mailto:yajiang@wharton.upenn.edu), 432.4 Huntsman Hall.  
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**Class Website:** <https://canvas.upenn.edu/courses/1252574>

**Text:** *Complex Surveys: A Guide to Analysis Using R*, Thomas Lumley, Wiley.

Other References: *Sampling: Design and Analysis*, Sharon H. Lohr, Duxbury Press;  
*Model Assisted Survey Sampling*, Carl-Erik Sarndal, Bengt Swensson and Jan Wretman, Springer.

**Course description:** This course will focus on statistical methods for the design and analysis of sample surveys. We plan to cover Chapter 1-5 and 9 of the textbook and time permitting, will cover parts of Chapters 6-8.

**Course Requirements:** There will be regular homework assignments and a final project. The final project will be due Wednesday, December 17<sup>th</sup>. There will not be exams. Undergraduates and graduate students will be evaluated in a way that is appropriate to their background.

**Computing software:** We will make use of the freeware statistical computing software R in class and on homework assignments. Download R from <http://cran.rstudio.com/> and download RStudio from <http://www.rstudio.com/products/rstudio/download/>

**Course Prerequisites:** For undergraduates enrolled in Stat 475, the prerequisite is Stat 102, Stat 112 or Stat 431. For graduate students enrolled in Stat 920, the prerequisite is Stat 500, Stat 501, Stat 512 (Biostat 621), Stat 520 or Stat 541.