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Statistics

Sciences Po Euro-American Campus — Fall semester 2013

Statistics are useful for many fields of social sciences. A course in statistics is often a prerequisite for upper-level courses in sociology and economics. This course, which mainly focuses on statistical inference, is open to all students who have already covered the topics of Introduction to Calculus with Algebra in high school.

Recommended textbooks:

- *Introductory Statistics (1990)* – Thomas H. Wonnacott and Ronald J. Wonnacott (**WW**)
- *Basic Statistics for Social Research (2012)* – Hanneman, R., Kposowa, A. & M. Riddle (**HKR**)
- *Statistical Methods for the Social Sciences (2007)* – Alan Agresti and Barbara Finlay (**AF**)
- *Statistics in Plain English (2010)* – Timothy J. Urdan

Class material:

- julianhinz.com/teaching/statistics

Assessment:

- Three partial exams (counts 22 percent each for final grade)
- Final Exam, covering all material (counts 33 percent for final grade)

Syllabus:

1. Introduction to Statistics
 - **Readings:** WW Ch. 1, HKR Ch. 1, AF Ch. 1 - 2;
2. Descriptive Statistics
 - **Readings:** WW Ch. 2, HKR Ch. 2 - 4, AF Ch. 3;
3. Probability
 - **Readings:** WW Ch. 3, AF Ch. 4.1;
4. Random Variables and Distributions
 - **Readings:** WW Ch. 4 - 5, HKR Ch. 5 - 6, AF Ch. 4.2 - 4.3;
5. Sampling
 - **Readings:** WW Ch. 6, HKR pp. 211 - 218, AF Ch. 4.4 - 4.6;
6. Point and Intervall Estimation
 - **Readings:** WW Ch. 7 - 8, HKR pp. 219 - 246, AF Ch. 5;
7. Hypothesis Tests
 - **Readings:** WW Ch. 9 - 10.2, HKR Ch. 8 - 11, AF Ch. 6 - 8 and 12.1 - 12.2;