

Agricultural and Applied Economics 706
APPLIED RISK ANALYSIS

Jean-Paul Chavas
jchavas@wisc.edu

Fall 2017

WEB page: www.aae.wisc.edu/aae706/main.asp

Prerequisite: AAE 635

Objectives: The course focuses on the role of risk in resource allocation. It covers a conceptual as well as empirical analysis of economic behavior under risk and its implications for management and policy decisions. Special attention is given to the role of imperfect information in the decision making process of private agents. Also, the importance of risk in the design and evaluation of public institutions is discussed. The course emphasizes economic applications exemplified in a series of homework.

Grading: 40 percent exam
60 percent homework (about one homework every two weeks)

Textbook: Chavas, Jean-Paul. *Risk Analysis in Theory and Practice*. Elsevier Academic Press, New York, 2004.

Topics:

- 1- The modeling of economic behavior under risk: (4 weeks)
 - the measurement of risk
 - the expected utility hypothesis
 - the measurement of risk preferences:
 - . absolute and relative risk aversion
 - . the risk premium
 - the nature of risk aversion: the decreasing absolute risk aversion hypothesis
 - stochastic dominance
 - mean-variance models
- 2- The economics of private risk bearing: (4 weeks)
 - production decisions under risk
 - diversification strategies
 - portfolio selection and capital-asset pricing
- 3- Risk in a multi-period framework : (3 weeks)
 - the value of information
 - the cost of information
 - learning and the demand for information
- 4- Public policy and risk allocation (4 weeks)
 - insurance and the efficiency of risk allocation
 - contract design under imperfect information
 - the design of public policy under imperfect information
 - market stabilization policy