

Economics 870 (2011)

Midterm examination tips.

- 1. The exam will be in class Thursday November 10.**
- 2. There will be three questions of equal weight.**

Study and tips:

- 1. Go over the problem sheets 1-4.
One question will be a variation on these problems.**
- 2. Two questions will be a theorem and proof type problem with sub-questions to test your understanding. The Theorems you will have to study will be:**
 - A. DD Theorem 3.2. Also understand how you can illustrate the theorem in the triangle diagram (see Mas-Collel et al handout).**
 - B. Derivation of the mean-variance prefs under quadratic utility or the Normal distribution. DD Ch. 6 and Appendix 6.1.**
 - C. Derivation of the portfolio efficient frontier: DD Ch. 6 and Appendix 6.2**
 - D. The Traditional Derivation of the Standard CAPM, DD Ch 7, section 7.2. and the risky cash flow with CAPM, DD section 7.3. You should also consult DD Appendix 7.1 and the Copeland & Weston proof.**
 - E. The proof of the MM Theorem in terms of prices and allocations using the induced preference approach. (Milne ch. 4.) Understand the applications in Milne Ch 4.**
 - F. The construction of the Martingale measure from the first order conditions (Milne Ch.5) and its application to arbitrage pricing. Know how to apply it to Binomial option pricing and defaulting bonds. Observe when the Martingale measure is not unique in incomplete markets and what this implies.**