Macro II (UC3M, MA/PhD Econ)
Professor: Matthias Kredler
Essentials for final exam on 29 April 2011 (15.00h, aula 14.0.09)

Essential knowledge for final exam

The following knowledge is necessary in order to pass the final exam. Problems requiring this knowledge will be on the exam.

In both stochastic and deterministic environments, and for both finite-horizon and infinite-horizon problems, you should be able to:

1. **Write Lagrangians and find Euler equations (using the event-tree formulation in the stochastic case)**
   Material: Nezih's notes, chapter 6.1, for the deterministic case; refer to my lecture notes for the stochastic case.

2. **Bring sequence problems into dynamic-programming form and state the Bellman equation**
   see Nezih's notes, chapter 6.1., for the deterministic case and my last lecture for the stochastic case.

3. **Do 1 and 2 for the neo-classical growth model, give intuition for optimality conditions**
   Nezih's notes, chapter 6.2

4. **Do 1 and 2 for consumption-savings problem, give intuition for optimality conditions**
   Nezih's notes, examples in chapter 6.1.

For practice problems, see last year's exams (on my webpage), chapter 10 in Nezih Guner's notes and the problems in Stokey & Lucas' book. Besides these essentials, you should prepare the following topics (in the given order of importance):

1. Applications of dynamic programming (search etc.)

2. Knowing the theorems from class and verifying conditions for them.

3. Proofs/logic of the proofs for the theorems from class

General comments/exclusions:

- Unless a proof is explicitly asked for, you may use all theorems from class *without proof* (of course you have to verify that all the assumptions in the theorem are satisfied).

- No (computer-)programming problems will be on the exam.