

PMP547 MIDTERM INFORMATION

Logistics:

- This is a take-home midterm
- Assigned **Wednesday, February 4, 2014**
- Due Wednesday, **February 11, 2014**
- This midterm is **open book, open notes**, but you must work on your own
- Good luck!

List of Topics for the Midterm:

Class 1/Lab 1/HW 1	State-space representation of dynamical systems. Linearization.
Class 2/Lab 2/HW 2	Properties of LTI systems. Impulse response and transfer function of an LTI system.
Class 3/Lab 3/HW 3	Solutions (time response) of LTV and LTI systems. Fundamental and state transition matrices. Matrix exponential and its properties. Characteristic polynomial. Cayley-Hamilton Theorem.
Class 4/Lab 4/HW 4	Eigenvalues and eigenvectors. Matrix representations. Jordan forms. Functions of a matrix.
Class 5/ Lab 5/HW 5	Stability