

## ESE 502 Fall 2009; October 20

Class	Topics	Sections	Reading
7	Solution of Time-Varying Systems	4.5	
	Equivalence of Time-Varying Systems	4.6	
	Realization of Time-Varying Systems	4.7	
	Stability	5.2	Sec. 5.2.1

Homework:

1. For this week: Study for test.

2. For next week:

- (a) Chapter 4: Problems 16, 17, 20, 21, and 22, pp. 119 – 120. (In problem 17, you can use the fact that, for an invertible matrix  $X(t)$ ,  $\frac{d}{dt}(X(t)^{-1}) = -X(t)^{-1} \left( \frac{d}{dt} X(t) \right) X(t)^{-1}$ )
- (b) Chapter 5: Problems 1, 2, 3, 4, and 6. p. 140.

**Test next week, Tuesday, October 27; covers up to the end of section 4.4. You are allowed to bring one sheet of paper, with whatever information you like on both sides.**