Tasks for this week:

Read the textbook.

Study Material: Pages 1-38 of textbook, PN junctions and bipolar transistor
large and small signal models

Homework:

1. Starting with a blank sheet of paper. Closed book, no notes. Draw figure 1.18
   and write simple expressions for \( r_p \), \( g_m \) and \( r_o \). Calculate each for a collector
   current of 2 mA.

   1.19 and discuss the importance of \( r_b \) in noise performance of a transistor. Then
   discuss the importance of the various Capacitors to frequency response.

Important note: These two homework problems will be given as separate ten
minute in class quizzes sometime in October.

Using the Textbook--Layers of the Onion metaphor.

Read: Quick overview of material to acquire basic understanding
Study: Understand the basic concepts, math models, and expressions
Practice: Do the homework problems
Reference: Create new circuits using the text material as reference

Midterm exam date:

In Class November 10. Closed book, no notes, no calculators. (CB, NN, NC)

Final exam content:

The standard Analog IC Design Interview Questions. (CB, NN, NC)