1. Read chapters 1 and 19 from Hubbard and O’Brien.

2. Define “Real GDP” “Nominal GDP” “Expansion” “Recession” “Value Added” “Inflation” and “GDP deflator” with one or two sentences each. Do not use the definitions in the book; provide your own definitions in a way anyone can understand.

3. Define the calculation of GDP by the expenditure, income and value added methods. Why are do these give the same result? (The answer is not “because there is only one GDP”)

4. Why do we subtract imports when calculating GDP by expenditure? Does this mean that our GDP will decrease if we import more?

5. What is the impact of the following on the Turkish GDP?
   1. The state oil refinery, TÜPRAŞ, is privatized for 4 billion liras.
   2. The company that bought the refinery invests a further 2 billion liras by importing new machinery.
   3. TÜPRAŞ workers spend 200 hours of overtime at a cost of 50 million liras to assemble the new machinery.
   4. The refinery buys a billion liras worth of crude oil (produced in Turkey) to be refined.
   5. The refinery produces two billion liras worth of refined oil by using the crude it had bought and spending 250 million liras on labor for production. How is the answer different if only half of the refined oil is sold this year and the reminder is sold in the following year?
6. In Keyifistan, only three goods are produced, lakerda, arnavut ciğeri and ezme. The table below shows the prices and quantities of the three goods in years 1 and 2.

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th></th>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quantity</td>
<td>Price</td>
<td>Quantity</td>
</tr>
<tr>
<td>Lakerda</td>
<td>6</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Arnavut Ciğeri</td>
<td>20</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>Ezme</td>
<td>10</td>
<td>10</td>
<td>15</td>
</tr>
</tbody>
</table>

Given this information, calculate the nominal GDP, the real GDP using year 1 as base and the real GDP using year 2 as base. Then calculate the growth rates of nominal GDP and the two real GDP measures. Interpret your results.

7. Find the real and nominal GDP numbers for Turkey for the recent past. (Use any horizon you want but make sure that your sample period extends before 2000.) Plot these two on the same graph. What has been happening to the Turkish GDP measured both ways? How do you interpret your graph? Are you using total GDP or GDP per capita? Why?

Make sure that you properly refer to your data sources. Someone else must be easily able to exactly reproduce your data using your reference. Save the data you collected, you’ll need them in later in the semester.

8. Read The Economist of the week of January 30, 2010. Look at the tables at the end of the magazine. Do you think The Economist is reporting the real or nominal GDP growth rates? Why?