

Reading: Chapter 9.1-9.8. This materials can be a source of confusion sometimes, particularly the pressure-composition and temperature-composition diagrams. You have to read *all* of the content in that section

Hand in:

Q 9.6, 9.9, 9.13 (3 points each)

P 9.3, 9.35 (4 points each)

Extra Credit: 9.19

Notes:

Q9.9: Think carefully about how the process occurs. Use the data in Table 9.1. Note that the “Mole Fraction of First Component” column tells the mole fraction of the first component (here, that means ethanol) for the azeotrope, but since you don’t have that composition, you can use the boiling temperatures to make a reasonable guess about the first drops that recondense. I suggest deciding whether Figure 9.9 (a) or 9.9 (b) is more accurate for describing this situation. Again, the data in the table can help you decide that. 4

Additional:

Q 9.1, 9.7, 9.10

P 9.9, 9.17, 9.18, 9.37