

CBE 440  
Fall 2008

## Problem Set 9

Due November 6, in class

Based on Callister (7<sup>th</sup> edition), chapters 9 and 10

1. Callister 9.47 – Steel phases
2. “ 9.51 – Steel phases
3. “ 9.63 – Microphase development
4. “ 10.3 – Ice nucleation
5. “ 10.9 – Avrami relationship for pearlite formation
6. “ 10.16 – Steel microphases
7. “ 10.23 – Steel transformations
8. “ 10.24 – Steel cooling variations
9. “ 10.31 – Martensite properties
10. “ 10.34 – Heat treatments