

Lecture 8

Tuesday, April 15, 2008
8:29 PM

<http://courses.washington.edu/mse170/index.shtml>

Course Notes:

1. First Homework is graded and Mueller 168 (lab room)
2. Homework solutions are posted on the website
3. First Exam is scheduled for next Monday (4/21) -- Cover all material up through Diffusion
4. Second Homework is due at the end of this week -- remember it must be submitted on engineering paper
5. The second lab starts this week and will last for 2 weeks

Review:

- Last time we did a quick review of crystallographic planes
- We talked about the polycrystalline nature of structural metals
- We then switched topics and started talking about crystalline defects
- We mentioned that in 3 dimensional space there are three commonly discussed defects
 - Point defects
 - Line Defects
 - Planar Defects
- We started by discussing point defects
- Specifically we talked about vacancies
- We talked about self interstitials
- We talked about solid solutions both substitutional and interstitial solid solutions
- We talked about the Hume Rothery Rules of solid solutions

Rest of Lecture is on PowerPoint presentation that goes with Lecture 8