MSE 200

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Office: Room 308, Research Building II, Centennial Campus
Office Hour: Appointment by Email/ph
Quick Survey: Why am I taking this course

• It is required for graduation
• I like materials science
• Others?
Textbook

Foundations of Materials Science and Engineering

Fifth Edition (4th OK)

William F. Smith
Javad Hashemi
# Policies and Procedures

**Home work:** See the syllabus. You are NOT required to turn in your home work

**Tests:** 40 multiple choice problems, 2.5 points each, final not accumulative
- 4 closed-book tests
- 25% each toward your final grade
- Bring your student ID

**Missed tests:**
- **No documented excuse or pre-approval.** Make-up tests in the last week of class
- **With documented excuse or pre-approval.** Will be dealt with individually
- Only 1 make up test per semester

**Grading:**

<table>
<thead>
<tr>
<th>Weighted average</th>
<th>&gt;97</th>
<th>96.9 - 93</th>
<th>92.9 - 89</th>
<th>88.9 - 85</th>
<th>84.9 - 81</th>
<th>80.9 - 77</th>
<th>76.9 - 73</th>
<th>72.9 - 69</th>
<th>68.9 - 65</th>
<th>64.9 - 55</th>
<th>&lt;55</th>
</tr>
</thead>
<tbody>
<tr>
<td>Letter grade</td>
<td>A+</td>
<td>A</td>
<td>A-</td>
<td>B+</td>
<td>B</td>
<td>B-</td>
<td>C+</td>
<td>C</td>
<td>C-</td>
<td>D</td>
<td>F</td>
</tr>
</tbody>
</table>

- Targeted grade ranges: 15-25% A, 30-50% B, 30-40% C, XX% D……..  
- May curve grade if grades A- to A+ fall out of the above ranges  
- No letter grade bump-up no matter how close it is to the line
Teaching style

- Active student participation in class
- Interrupt anytime for questions!
- 3 surveys
- Powerpoint will be used; will be posted online; bring the printout
- **Important concepts will be underlined** (tests, problems will be from the underlined, the example problems in the textbook, and the HW)
- Reading assignment (check with Quiz)
  - 0.5 credit for correct answer
  - -0.5 for not reading
Quizzes

• A dice will be rolled to determine who participate
• **0.5 point will be deducted** if you are not present in the class
• 0.5 point will be given if you give the right answer
• 0.5 point to a volunteer who gives the right answer
• No credit will be given or deducted if you give an wrong answer to a regular quiz
Why are you sitting in this class?

Matter Matters

Sky is the limit?
History of Materials

Stone age ⇒ copper age ⇒ iron age

Materials determine the advance of technologies

The first Boeing airplane was made of wood in 1916.

The first Boeing 787 dream liner made of carbon fiber composites.
Space Elevators?

Mission Impossible

100,000km
62,000miles

1/6 of the distance to earth
Spirit and Opportunity are made up of materials such as
* Metals * Ceramics * Composites * Polymers * Semiconductors

www.nasa.gov

http://www.mse.ncsu.edu/zhu

Materials Science & Engineering
You do Not want to be the engineer who designed this:

Titanic

http://www.youtube.com/watch?v=vjKGYJac0GU
Types of Materials

- Metallic Materials
- Polymer
- Ceramics
- Composites
Drop the class?

• If:
  – You cannot tolerate my teaching style
  – You don’t understand my lecture

• Your options:
  – Choose another section
  – Choose another semester
Reading Assignment

• Chapter 2.1-2.5