

ENGR 150:
**INTRODUCTION TO HIGHER
EDUCATION FOR ENGINEERS**
MONDAY, NOVEMBER 30

Professor Ethan Lipton
FALL QUARTER 2009

TODAY'S AGENDA

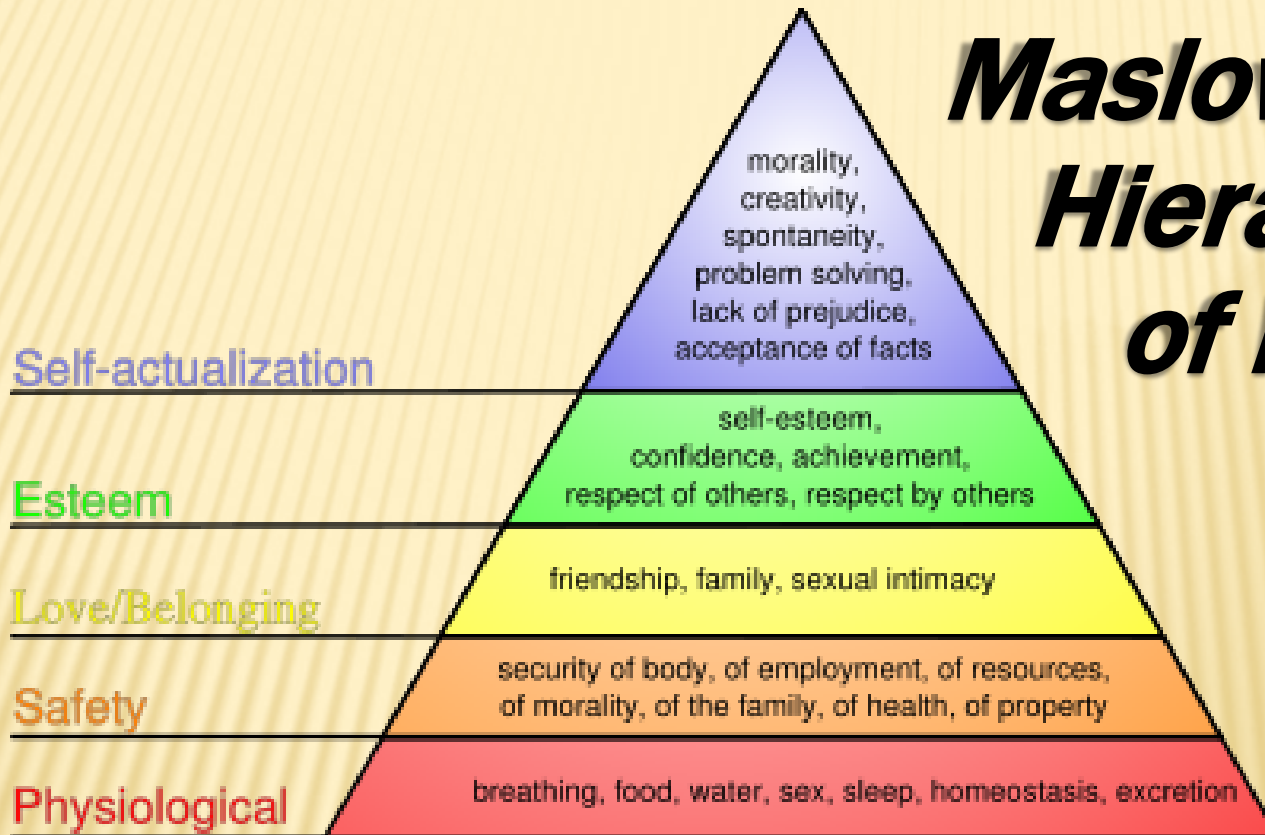
Reading Assignment: Section 6.6, 6.7 and 6.8

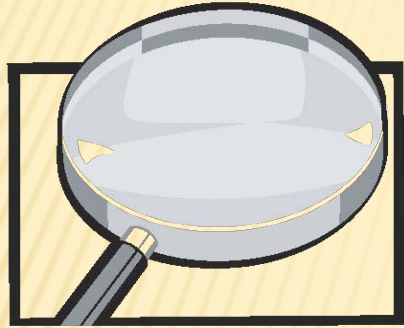
Problem Assignment: Chap 6, Problems 24, 25, 28, 29-32 & 35

Class Discussion: Written and Oral Communications
Mental and Physical Wellness
Motivation

Class Activity: Small group discussions on
Problems 23 & 35 and report out
Multiple choice exam(Chapters 5 and 6)

Maslow's Hierarchy of Needs





Personal Growth and Development

- × Written and Oral Communications
- × Mental and Physical Wellness
- × Motivation

PERSONAL DEVELOPMENT PLANS

- ✘ Identify areas for improvement
- ✘ Prioritize them in order of importance
- ✘ Choose several items to work on
- ✘ Create a personal development (action) plan

DEVELOPING YOUR COMMUNICATION SKILLS

- ✘ Importance of communications skills in engineering
- ✘ Employers want more
- ✘ Developing a positive attitude
- ✘ Developing a plan to improve your communication skills

WRITING DEMANDS OF AN ENGINEER

- ✘ Letters, memoranda, and e-mail correspondence
- ✘ Design specifications
- ✘ Requests for proposals (RFPs)
- ✘ Proposals submitted in response to RFPs
- ✘ Contracts, patents, and other government documents
- ✘ Written progress reports
- ✘ Technical reports
- ✘ Publications in professional engineering journals
- ✘ Written performance evaluations of subordinates

ORAL COMMUNICATION DEMANDS OF AN ENGINEER

- ✘ Oral progress reports
- ✘ Formal presentations
- ✘ Project and committee meetings
- ✘ Team collaborations
- ✘ Short courses and training seminars
- ✘ Guest lectures at engineering schools or professional society conferences
- ✘ Oral evaluations of subordinates

EMPLOYERS WANT MORE

National survey of over 1,000 engineering employers revealed that industry's #1 concern was:

To give engineering students more instruction in written and oral communication

DEVELOP A PLAN TO IMPROVE YOUR COMMUNICATION SKILLS

- ✘ Take courses in oral and written communications
- ✘ Look for opportunities to write (keep a journal, write a poem or short story, send e-mails)
- ✘ Read – anything and everything (newspaper, magazines, technical journals, novels)
- ✘ Look for opportunities to speak (student organizations, high school class, regular class)

MENTAL AND PHYSICAL WELLNESS

- ✘ Tips for good health
- ✘ Balancing work and play
- ✘ Managing stress

TIPS FOR GOOD HEALTH

- ✘ Eat nutritionally
- ✘ Engage in regular aerobic exercise
- ✘ Get adequate sleep
- ✘ Avoid drugs

BALANCING WORK AND PLAY

Strike a balance between immediate and future gratification

Too much immediate gratification –

Don't get work done; feel guilty

Too much delayed gratification –

Feelings of deprivation and resentment can
can sabotage your commitment

Find a proper balance between work and play

MANAGING STRESS

- × ***Eustress*** – Positive form of stress. Can motivate individuals to attain high levels of performance
- × ***Distress*** – Negative form of stress. Can distract you from being the best that you can be.

Learn strategies for coping with & managing stress

GROUP DISCUSSION IMPORTANCE OF ATTITUDE

In your group, discuss the following quote:

"The longer I live, the more I realize the impact of attitude on life. Attitude to me, is more important than facts. It is more important than the past, than education, than money, than circumstances, than failures, than successes, than what other people think or say or do. It is more important than appearance, giftedness, or skill. It will make or break a company, a church, a home.

The remarkable thing is we have a choice every day regarding the attitude we will embrace for that day. We cannot change our past. We cannot change the fact that people will act in a certain way. We cannot change the inevitable. The only thing we can do is play the one string we have, our attitude.

I am convinced that life is 10% what happens to me and 90% how I react to it. And so it is with you. We are in charge of our *Attitudes*."

Select a leader to keep the discussion on topic and a recorder to write down and report out on what was learned.

SEE YOU NEXT CLASS . . .

Reading Assignment: Section 6.3 and 6.4

Problem Assignment: Chap 6, Problems 9-14 and 17-20

Class Discussion: Understanding Yourself
Myers Briggs Type Indicator (MBTI)
Understanding Others