

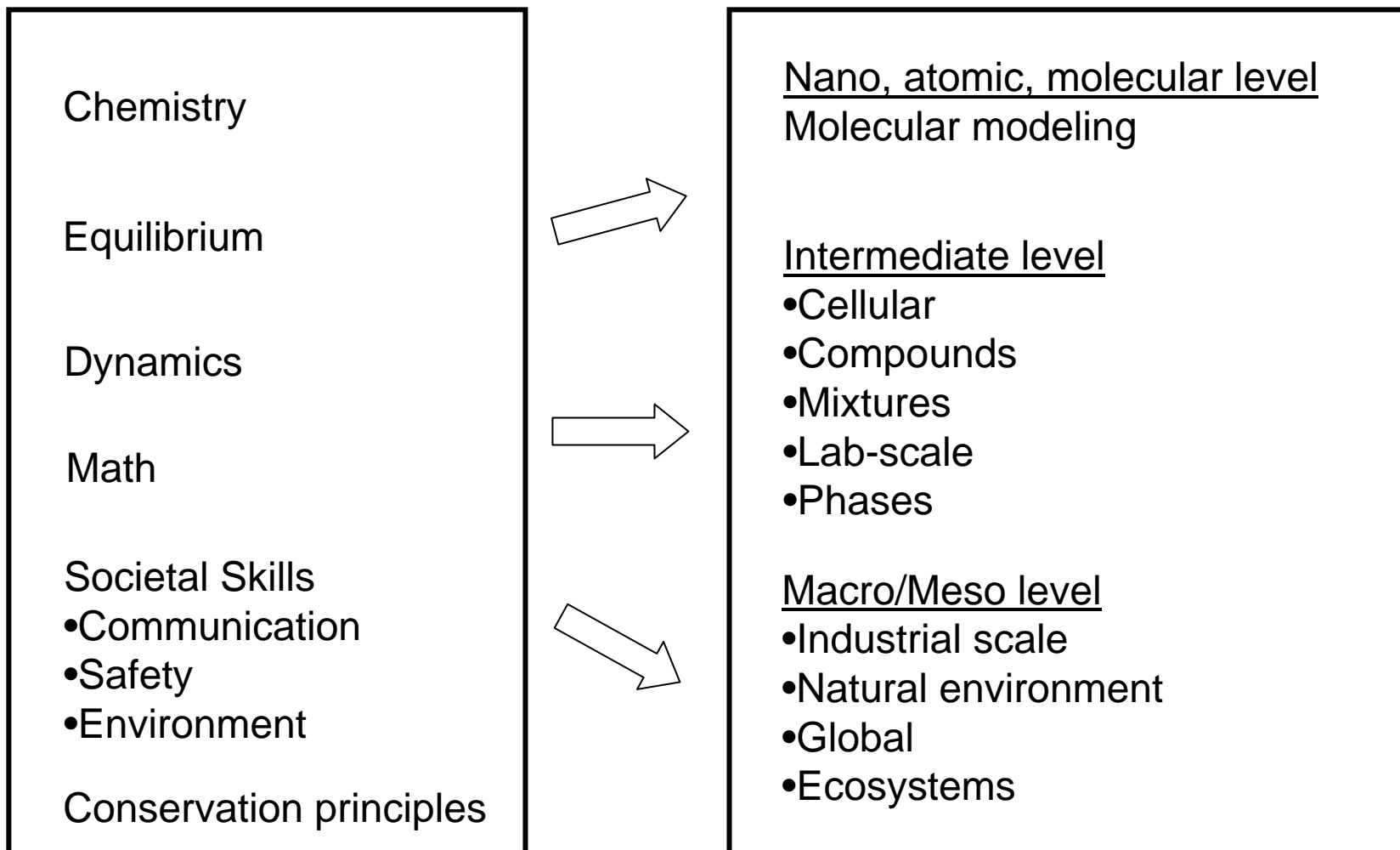
# WHAT ATTRIBUTES AND SKILLS SHOULD CHARACTERIZE THE B.S. ChE? Team 3

- Communication Skills – oral and written
- Problem Solving
- Team Work
- Practical application of theory

- Ethics
- Safety
- Awareness of life cycle
- Quantitative
- People skills
- Diversity

Attributes  
Engineering sense  
Imaginative  
Creative  
Innovative  
Ethical  
Global thinking

# HOW SHOULD WE ORGANIZE / CLASSIFY THE SUBJECT MATTER OF ChE? Team 3



# HOW SHOULD WE ARRANGE THE SUBJECT MATTER FOR PRESENTATION OVER FOUR YEARS? Team 3

## Year 1

### CASE STUDIES

- Simple
- Suite of problems

### CONSERVATION LAWS

- 1<sup>st</sup> semester - molecular scale
- 2<sup>nd</sup> semester – macro-scale
- Equilibrium (micro)

### MATH/SCIENCE SOCIETY

- Contemporary issues

### CONSERVATION

- Intermediate

## Year 2

### CASE STUDIES

- More complex

### CONSERVATION LAWS

- 1<sup>st</sup> semester - meso-scale
- 2<sup>nd</sup> semester – capstone
- Kinetics/transport (micro)

### MOLECULAR level

- Equilibrium
- Dynamics

### SOCIETY

Chemistry - organic

## Year 3

### CASE STUDIES

- Really complex

### TRANSPORT (macro)

- Transport capstone

### MACRO level

- Equilibrium – phase, reactor, separation

### SOCIETY

- music

## Year 4

### CASE STUDIES

- Unbelievably complex

Lab  
Design  
Control

### PRACTICUM

### SOCIETY

- arts