

GROUP 1

Designing Successful Curricula

Organizing the curriculum to meet the need of the students

1) Two sources of change:

People that are changing due to their own decisions

People that have changed in response to external forces

2) Curricular change is best when:

Top down and bottom up movements are occurring at the same time – converging

Everyone is aware of what is happening externally and take advantage of
available resources

Must recognize that there are internal and external constraints as well as
opportunities.

Complete buy-in by the entire faculty.

Use what you require, which demands order in the sequence of courses.

Should help to build soft skills for every student.

Team work.

Communications

Responsibility

Departmental curriculum must consider developmental matrix of the University
wide curriculum.

Instead of excluding potential majors we need to find new ways to include
them.

3) Play on what is unique to us

The depth of time

Three dimensional spatial relationships

Understanding earth materials

Focus on the place of the individual and the role of the individual on the planet.

Geology teaches a number of uncomfortable truths that need to be known, but we also need to discuss “how we can make it better.”

Emphasize relevance.

4) Curricular change should not be for 2-5 years from now, but for 10-20 years.

Beware of the long- unintended consequences of curricular change.

5) Modernize our traditional BS degree to make it more useful.

Acquisition of modern skills.

Incorporate them into the curriculum in an orderly manner.

Expose students to universal languages.

Continuum mechanics (e.g., structural geology)

Conservation (mass, energy, momentum)

Transport (movement across space during time), kinetics\

Probability and uncertainty

Emphasize transferable skills and knowledge to enhance adaptability.

6) Consider a new model for the faculty and departments.

Other models for teaching assignments.

Teaching as part of other courses.

Teaching on different time schedules.