

Modification of GEOL 108

Earth and Planetary Science

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Background

❖ **GEOL 108 Earth and Planetary Science**

- Developed for Elementary Education
- Focused on geology and astronomy
- Problems

❖ **NSF TUES Proposal**

- Attended workshop to develop a proposal to modify GEOL 108
- TUES program not continued

Summer Fellowship

❖ Goal

- Partial modification of GEOL 108

❖ Objectives

- Modify content to better reflect content taught
- Develop assessment tools
 - Concept inventory
 - Basic skills and attitude survey

❖ Work Accomplished

- Content Modification
 - Reviewed K-5 elementary materials
 - Compiled list of specific topics covered by grade
 - Modified content of GEOL 108
 - added oceanography meteorology content
 - cut back on geology content
 - Used the modified content this year

○ Concept Inventory Development

- Found validated questions in...
 - Geoscience Concept Inventory
 - Astronomy Diagnostic Test
- Will need to find/develop additional questions

○ Attitude Surveys Identified

- Thinking About Science survey
 - developed for pre-service elementary teachers
- Science Teaching Efficacy Belief Instrument
 - attitudes toward teaching
- Science Anxiety survey