

Program or Department Mission:

The Department of Earth Science provides a dynamic and creative learning environment to excite students' curiosity about the world around them. We help students to: (1) trust science and understand how science works; (2) appreciate the various ways in which the Earth influences our lives and our society, and the ways in which our society impacts the Earth; (3) recognize the many potential career paths within the earth sciences; and (4) develop the skills, knowledge, and professional traits necessary to pursue those paths. The Department provides Utah with earth science professionals who are skilled and creative and who are well prepared to address the earth science challenges faced by our community.

Plan		Report	
Intended goals, outcomes, or objectives	Means of Assessment & Criteria for Success	Summary & Analysis of Assessment Evidence	Use of Results
Technical knowledge of their major field	<p>The graduate survey (Attachment 1) is distributed to graduates of the program. We consider the program to be successful in terms of this criterion if the related questions on the survey receive an average score of at least 3 (out of a possible 4).</p> <p>The graduate supervisor survey (Attachment 2) is be distributed to supervisors of graduates of the program. We consider the program to be successful in terms of this criterion if the related questions on the survey receive an average score of at least 3 (out of a possible 4).</p>	<p>The average response to this item was 3.8 out of 4. This indicates that our graduates and their supervisors are generally satisfied with the level of technical knowledge they developed as students. A couple of graduates of the Earth Science Education program mentioned that there were a few earth science subject areas that they are expected to teach, but that were not covered well in our curriculum</p>	<p>In response to the comments from the graduates of the Earth Science Education program, we have added three more required courses to the curriculum for the Earth Science Education program (Historical Geology, Historical Geology Lab, and Geologic Hazards).</p>

Plan		Report	
Intended goals, outcomes, or objectives	Means of Assessment & Criteria for Success	Summary & Analysis of Assessment Evidence	Use of Results
Skill with oral and written communication	<p>The graduate survey (Attachment 1) is distributed to graduates of the program. We consider the program to be successful in terms of this criterion if the related questions on the survey receive an average score of at least 3 (out of a possible 4).</p> <p>The graduate supervisor survey (Attachment 2) is be distributed to supervisors of graduates of the program. We consider the program to be successful in terms of this criterion if the related questions on the survey receive an average score of at least 3 (out of a possible 4).</p>	<p>The average response to this item was 3.9 out of 4. This indicates that our graduates and their supervisors are generally satisfied with the level of skill in oral and written communication they developed as students. In fact, many graduates expressed gratitude for how their speaking and writing improved in our classes.</p>	<p>We will continue to require writing and/or public speaking in all of our majors' courses.</p>

Plan		Report	
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Skill with problem solving and reasoning	<p>The graduate survey (Attachment 1) is distributed to graduates of the program. We consider the program to be successful in terms of this criterion if the related questions on the survey receive an average score of at least 3 (out of a possible 4).</p> <p>The graduate supervisor survey (Attachment 2) is be distributed to supervisors of graduates of the program. We consider the program to be successful in terms of this criterion if the related questions on the survey receive an average score of at least 3 (out of a possible 4).</p>	<p>The average response to this item was 3.9 out of 4. This indicates that our graduates and their supervisors are generally satisfied with the level of skill in problem solving and reasoning that they developed as students. Some of the students commented that these skills were developed by completing laboratory exercises in their earth science classes and by taking part in research projects.</p>	<p>We will continue to require laboratory exercises in nearly all of our majors' courses and to encourage all of our students to get involved with the research projects. The faculty of our department maintains a series of ongoing research projects that are suitable for involvement by undergraduates.</p>

Plan		Report	
Intended goals, outcomes, or objectives	Means of Assessment & Criteria for Success	Summary & Analysis of Assessment Evidence	Use of Results
Knowledge of applicable laws and regulations	<p>The graduate survey (Attachment 1) is distributed to graduates of the program. We consider the program to be successful in terms of this criterion if the related questions on the survey receive an average score of at least 3 (out of a possible 4).</p> <p>The graduate supervisor survey (Attachment 2) is be distributed to supervisors of graduates of the program. We consider the program to be successful in terms of this criterion if the related questions on the survey receive an average score of at least 3 (out of a possible 4).</p>	<p>The average response to this item was 3.2 out of 4. While this is within our acceptable range, it is the lowest average response for any item on the survey.</p>	<p>We have made two changes to address this result. First, for students in our Environmental Management program, there is now a requirement for a course in Environmental Law (the course was previously an elective). Second, we will better emphasize laws and regulations in applicable courses (especially courses that deal with water resources and geologic hazards).</p>

Plan		Report	
Intended goals, outcomes, or objectives	Means of Assessment & Criteria for Success	Summary & Analysis of Assessment Evidence	Use of Results
Knowledge of professional options and responsibilities	<p>The graduate survey (Attachment 1) is distributed to graduates of the program. We consider the program to be successful in terms of this criterion if the related questions on the survey receive an average score of at least 3 (out of a possible 4).</p> <p>The graduate supervisor survey (Attachment 2) is be distributed to supervisors of graduates of the program. We consider the program to be successful in terms of this criterion if the related questions on the survey receive an average score of at least 3 (out of a possible 4).</p> <p>The Student Survey (Attachment 3) is distributed to Earth Science classes every semester. We consider the program to be successful in terms of this criterion if the related questions on the survey receive an average score of at least 3 (out of a possible 4).</p>	<p>The average response to this item was 3.6 out of 4. While this is within our acceptable range, it shows room for improvement.</p>	<p>We have been doing more to give students opportunities to attend professional meetings. We have always publicized local meetings, and have long provided transportation and lodging for students to attend one out-of-area meeting each year. In the past year we have increased that, so we now provided transportation and lodging for students to attend at least two out-of-area meetings each year. We will also include more focus on professional options and responsibilities in all of our majors' courses.</p>
Plan submission date: Submitted by:		Report submission date: Submitted by:	

Attachment 1: Graduate Survey Letter
UVSC Department of Earth Science
Graduate Questionnaire: Bachelor of Science in Earth Science

Name: _____ Phone #: _____

Address: _____

email: _____ Today=s date: _____

- 1) When did you graduate? _____
- 2) Upon graduation, which of the following did you do? (check all that apply)
- ___ Apply for graduate programs related to earth science and/or education.
- ___ Apply for other graduate programs.
- ___ Seek employment related to earth science.
- ___ Seek employment not related to earth science.
- ___ Other - please specify: _____

- 3) Which of the following best describes your position now? (check one)
- ___ Attending a graduate program related to earth science.
Please specify _____
- ___ Attending another type of graduate program
Please specify _____
- ___ Employed in a field related to earth science.
Please specify _____
- ___ Employed in a field not related to earth science.
Please specify _____
- ___ Other - please specify: _____

- 4) Is your current position your first choice? _____. If not, what was your first choice and why, do you feel, you were not successful?

5) On a scale of 1 to 4, how well did your education provide you with the technical knowledge required for your current position? (Check one)

__1	__2	__3	__4	N/A
very	somewhat	somewhat	very	my current position does
poorly	poorly	well	well	not require technical knowledge

Comments related to technical knowledge:

6) On a scale of 1 to 4, how well did your education provide you with the field skills required for your current position? (Check one)

__1	__2	__3	__4	__N/A
very	somewhat	somewhat	very	my current position does
poorly	poorly	well	well	not require field skills

Comments related to field skills:

7) On a scale of 1 to 4, how well did your education provide you with the writing ability required for your current position? (Check one)

__1	__2	__3	__4	__N/A
very	somewhat	somewhat	very	my current position does
poorly	poorly	well	well	not require writing ability

Comments related to writing ability:

8) On a scale of 1 to 4, how well did your education provide you with the oral presentation skills required for your current position? (Check one)

__1	__2	__3	__4	__N/A
very	somewhat	somewhat	very	my current position does
poorly	poorly	well	well	not require oral presentation skills

Comments related to oral presentation skills:

9) On a scale of 1 to 4, how well did your education provide you with the problem solving and reasoning skills required for your current position? (Check one)

__1	__2	__3	__4	__NA
very poorly	somewhat poorly	somewhat well	very well	my current position does not require problem solving and reasoning skills

Comments related to problem solving and reasoning skills:

10) On a scale of 1 to 4, how well did your education provide you with the knowledge of applicable agencies, laws, and regulations required for your current position? (Check one)

__1	__2	__3	__4	__NA
very poorly	somewhat poorly	somewhat well	very well	my current position does not require knowledge of applicable agencies, laws, and regulations

Comments related to knowledge of applicable agencies, laws, and regulations:

11) On a scale of 1 to 4, how well did your education provide you with the knowledge of professional options and responsibilities related to your current position? (Check one)

__1	__2	__3	__4	__NA
very poorly	somewhat poorly	somewhat well	very well	my current position does not require knowledge of professional options and responsibilities

Comments related to knowledge of professional options and responsibilities:

Any other comments you care to make regarding the Department of Earth Science at UVSC:

Attachment 2: Graduate Supervisor Survey Letter

Employee's Name: _____

Your Name: _____ Phone #: _____

Address: _____

Your email: _____ Today=s date: _____

How long has this person worked for you? _____

Briefly describe this person's position: _____

1) On a scale of 1 to 4, how well prepared was this person in terms of his/her technical knowledge required for this position? (Check one)

- | | | | | |
|--------|----------|----------|-------|---------------------------------|
| ____1 | ____2 | ____3 | ____4 | ____NA |
| very | somewhat | somewhat | very | this position does |
| poorly | poorly | well | well | not require technical knowledge |

Comments related to technical knowledge:

2) On a scale of 1 to 4, how well prepared was this person in terms of his/her field skills required for this position? (Check one)

- | | | | | |
|--------|----------|----------|-------|--------------------------|
| ____1 | ____2 | ____3 | ____4 | ____NA |
| very | somewhat | somewhat | very | this position does |
| poorly | poorly | well | well | not require field skills |

Comments related to field skills:

3) On a scale of 1 to 4, how well prepared was this person in terms of his/her writing ability required for this position? (Check one)

- | | | | | |
|--------|----------|----------|-------|-----------------------------|
| ____1 | ____2 | ____3 | ____4 | ____NA |
| very | somewhat | somewhat | very | this position does |
| poorly | poorly | well | well | not require writing ability |

Comments related to writing ability:

4) On a scale of 1 to 4, how well prepared was this person in terms of his/her oral presentation skills required for this position? (Check one)

___1	___2	___3	___4	___NA
very	somewhat	somewhat	very	this position does not require
poorly	poorly	well	well	oral presentation skills.

Comments related to oral presentation skills:

5) On a scale of 1 to 4, how well prepared was this person in terms of his/her problem solving and reasoning skills required for this position? (circle one)

___1	___2	___3	___4	___NA
very	somewhat	somewhat	very	this position does not require
poorly	poorly	well	well	problem solving skills

Comments related to problem solving and reasoning skills:

6) On a scale of 1 to 4, how well prepared was this person in terms of his/her knowledge of applicable agencies, laws, and regulations required for this position? (circle one)

___1	___2	___3	___4	___NA
very	somewhat	somewhat	very	this position does
poorly	poorly	well	well	not require knowledge of agencies, laws, etc.

Comments related to knowledge of applicable agencies, laws, and regulations:

7) On a scale of 1 to 4, how well prepared was this person in terms of the knowledge of professional conduct and behavior related to his/her current position? (circle one)

___1	___2	___3	___4
very	somewhat	somewhat	very
poorly	poorly	well	well

Comments related to knowledge of professional options and responsibilities:

8) Any other comments you care to make regarding the employee's education by the Department of Earth Science at UVSC:

Attachment 3: Student Survey

Dear Earth Science Student:

This survey is intended for the Department of Earth Science to learn what we are doing well and what we need to improve on. Please respond to each of the following questions honestly. If you do not have any opinion about a given survey item, please leave the item blank. Use available space to write any comments you would like. This is anonymous (Do not list your name. No teachers will see your form)

Questions about the Department in general:

1. The Department provides useful academic advising.

1	2	3	4
strongly <u>disagree</u>	somewhat disagree	somewhat agree	strongly <u>agree</u>
2. The Department provides useful advise on internships and careers.

1	2	3	4
strongly <u>disagree</u>	somewhat disagree	somewhat agree	strongly <u>agree</u>
3. The Department provides useful advise on graduate school opportunities.

1	2	3	4
strongly <u>disagree</u>	somewhat disagree	somewhat agree	strongly <u>agree</u>
4. The Department provides opportunity for financial aid.

1	2	3	4
strongly <u>disagree</u>	somewhat disagree	somewhat agree	strongly <u>agree</u>
5. The Department provides opportunity for research.

1	2	3	4
strongly <u>disagree</u>	somewhat disagree	somewhat agree	strongly <u>agree</u>
6. The Department provides opportunity for socializing with other students in the major.

1	2	3	4
strongly <u>disagree</u>	somewhat disagree	somewhat agree	strongly <u>agree</u>

More on back!!!

Questions about the classes:

7. This class has increased my interest in Earth Science.
- | | | | |
|--------------------------|-------------------|----------------|-----------------------|
| 1 | 2 | 3 | 4 |
| strongly disagree | somewhat disagree | somewhat agree | strongly agree |
8. The field and laboratory exercises used in this class are effective.
- | | | | |
|--------------------------|-------------------|----------------|-----------------------|
| 1 | 2 | 3 | 4 |
| strongly disagree | somewhat disagree | somewhat agree | strongly agree |
9. The homework exercises used in this class are effective.
- | | | | |
|--------------------------|-------------------|----------------|-----------------------|
| 1 | 2 | 3 | 4 |
| strongly disagree | somewhat disagree | somewhat agree | strongly agree |
10. The field and laboratory equipment available to this class are sufficient.
- | | | | |
|--------------------------|-------------------|----------------|-----------------------|
| 1 | 2 | 3 | 4 |
| strongly disagree | somewhat disagree | somewhat agree | strongly agree |
11. Overall, this class is taught in an effective way.
- | | | | |
|--------------------------|-------------------|----------------|-----------------------|
| 1 | 2 | 3 | 4 |
| strongly disagree | somewhat disagree | somewhat agree | strongly agree |
- Summary:
12. My overall experience with the department has been a good one.
- | | | | |
|--------------------------|-------------------|----------------|-----------------------|
| 1 | 2 | 3 | 4 |
| strongly disagree | somewhat disagree | somewhat agree | strongly agree |