

Technical Reviewers' Rating Summary

Proposal Number Application Title Submitted By Request For Total Project Costs

Section A. Scoring

Statement	Weighting Factor	G-49-03A	G-49-03B	G-49-02C	Average Weighted Score
1. Objectives	9	5	3	5	36
2. Achievability	7	5	4	2	21
3. Methodology	8	5	3	4	32
4. Contribution	8	4	4	3	24
5. Awareness / Background	5	5	4	4	20
6. Project Management	3	4	3	3	9
7. Equipment / Facilities	2	4	4	5	8
8. Value / Industry - Budget	4	4	4	5	16
9. Financial Match - Budget	4	4	4	3	12
Average Weighted Score		229	180	186	198
	Total: 50				250 possible points

OVERALL RECOMMENDATION

FUND
 FUNDING TO BE CONSIDERED
 DO NOT FUND

Section B. Ratings and Comments

1. The objectives or goals of the proposed project with respect to clarity and consistency with North Dakota Industrial Commission/Oil and Gas Research Council goals are:

I easily understood that the primary goal was to increase interest and enrollment in geology and geologic engineering majors at UND, with a secondary goal of increasing awareness of geology and industries it supports in those who don't change majors.

- Reviewer: G-49-03A

- Rating: 5

Educational and recruitment objectives are clear in the proposal.

- Reviewer: G-49-03B

- Rating: 3

The goals of this proposed work serve the education/outreach goals of OGRC. The state needs more highly-educated oilfield workers.

- Reviewer: G-49-02C

- Rating: 5

2. With the approach suggested and time and budget available, the objectives are:

It sounds as though they have a good track record in conducting similar geologic field trips that have resulted in loyal interest in their programs. Attempting to use that same methodology on 1st and 2nd year students sounds like sound logic based on their history.

- Reviewer: G-49-03A

- Rating: 5

Time allotted for recruitments seems short, but otherwise objectives appear achievable.

- Reviewer: G-49-03B

- Rating: 4

If state funds are required to get this field trip up and running quickly, there may be an issue with timing. Contracting with NDIC is unlikely to be completed before September 2019.

- Reviewer: G-49-02C

- Rating: 2

The date at which the field trip will take place is changeable. Also, most payment for this trip is due either the day before, or after the field trip. Therefore, even though the timing seem short, I will be possible to accomplish. Regarding recruitment timing, most freshmen event take place during the first week of classes in which our outreach will occur. Further, "GEOL 101 introduction to Geology" has more than 70 students enrolled, therefore I am certain it is possible to recruit 19 student for this trip within 2 weeks.

- Applicant

3. The quality of the methodology displayed in the proposal is:

Thoughts shared on question two also applicable here.

- Reviewer: G-49-03A

- Rating: 5

I would have liked to have seen more data on the enrollment trends over the past few years. It was only touched on briefly that students majoring in GGE is declining, and would have liked to know more the baseline.

- Reviewer: G-49-03B

- Rating: 3

Little methodology is required. The PI has experience in leading events like that proposed. This reviewer's only concern is that a longer lead time might be required, as mentioned above.

- Reviewer: G-49-02C

- Rating: 4

I am happy to provide enrollment data for the past 10 years.

- Applicant

4. The scientific and/or technical contribution of the proposed work to specifically address North Dakota Industrial Commission/Oil and Gas Research Council goals will likely be:

Increasing knowledge of how geology and geological engineering are key to the oil industry in North Dakota will continue to grow awareness and support the goals as outlined by the North Dakota Industrial Commissioner and Oil & Gas Research Goals.

- Reviewer: G-49-03A

- Rating: 4

The educational component of careers and the industry are significant, and would be expected to increase when students share their experiences with family and friends.

- Reviewer: G-49-03B
- Rating: 4

The proposed work will contribute in a minor, but worthy, way to facilitating a flow of geoscience professionals to staff North Dakota oil fields.

- Reviewer: G-49-02C
- Rating: 3

5. The background of the principal investigator and the awareness of current research activity and published literature as evidenced by literature referenced and its interpretation and by the reference to unpublished research related to the proposal is:

I understood that the principal investigator has extensive experience in both coordinating and participating in similar field trips.

- Reviewer: G-49-03A
- Rating: 5

It appears there is demonstrated experience with previous trips in-the-field and an educational background.

- Reviewer: G-49-03B
- Rating: 4

The PI has experience required to lead events such as those proposed. Her biggest challenge may be in corralling the efforts of student leaders to ensure adequate and accurate knowledge sharing.

- Reviewer: G-49-02C
- Rating: 4

I am planning of doing weekend trip to Western North Dakota in August for the student leaders in order to plan the trip in details, and ensure adequate and accurate knowledge during the field trip.

- Applicant

6. The project management plan, including a well-defined milestone chart, schedule, financial plan, and plan for communications among the investigators and subcontractors, if any, is:

The project management plan is detailed and gives a full outlay of the three-day field trip and financial backing needed to support. They have identified how they will adjust to support a continued successful effort if funds raised are lower than anticipated. I like that they will seek feedback after the field trip from the participants to continue to improve the experience and learn from each year it is conducted.

- Reviewer: G-49-03A
- Rating: 4

Timetable and schedule appear reasonable and well-defined.

- Reviewer: G-49-03B
- Rating: 3

This reviewer is concerned about lack of lead time upon contract completion to execute stated plans. This reviewer also did not see any mention of follow-up reporting to measure success of the state's potential investment in this project. How will success be measured? How will the state learn from its investment? Who will be doing the reporting? NDIC requires quarterly and final project reports.

- Reviewer: G-49-02C
- Rating: 3

We will create questionnaires for the students to fill out after the field trip for feedback on the immediate success of the trip. Further, we will make it AUG's responsibility (in cooperation with the faculty of the department), to keep track of student enrollment and creation of incoming GGE student questionnaires.

- Applicant

7. The proposed purchase of equipment and the facilities available is:

No comment

- Reviewer: G-49-03A

- Rating: 4

Equipment/supplies is minimal, and arrangements for facilities and transportation are reasonable.

- Reviewer: G-49-03B

- Rating: 4

The budget contained within the proposal seemed to be thoroughly considered. This reviewer was a bit puzzled by a seeming conflict between a stated funding request from Neset Consulting and the payment to Neset Consulting, leading to questions about the validity of cost share numbers.

- Reviewer: G-49-02C

- Rating: 5

8. The proposed budget "value"¹ relative to the outlined work and the commitment from other sources is of:

Encouraging students to consider enrolling in both of these majors is a key labor force element for the state. We could see great benefits from continuing to build enrollment in these programs, as it will continue to support workforce needs in the oil and gas industry and in other areas linked to the industry.

- Reviewer: G-49-03A

- Rating: 4

Budget needs outlined cover the "basics" and value to students' education is significant. It looks like a thorough schedule and experience for a very reasonable investment.

- Reviewer: G-49-03B

- Rating: 4

The proposed budget seems modest for the potential benefit produced by successful completion of the proposed project. This trip is appropriately being done on a shoestring budget, but has potential to inspire many students.

- Reviewer: G-49-02C

- Rating: 5

9. The "financial commitment"² from other sources in terms of "match funding" have been identified:

I see industry support from multiple sources, as well as support from the NDPC. I also see additional benefits as if the goal of greater number of students in the field of study result, North Dakota may benefit as well from a well-trained workforce in a field that has many high demand jobs.

- Reviewer: G-49-03A

- Rating: 4

Seminars and tours in-the-field are invaluable for experiencing an industry and determining interest in the field.

- Reviewer: G-49-03B
- Rating: 4

The minimum cash cost share marker has been met by the proposed budget.

- Reviewer: G-49-02C
- Rating: 3

1 “value” – The value of the projected work and technical outcome for the budgeted amount of the project, based on your estimate of what the work might cost in research settings with which you are familiar. A commitment of support from industry partners equates to a higher value.

2 “financial commitment” from other sources – A minimum of 50% of the total project must come from other sources to meet the program guidelines. Support less than 50% from Industrial Commission sources should be evaluated as favorable to the application; industry partnerships equates to increased favorability.

General Comments

Overall, the logic to inspire students to consider a potential course of study in geology or geologic engineering is very good. Hands on experience, when you can hold history in your hand, walk among 65 million year old geologic features, and see how knowledge in these majors translates to high-demand (and rewarding) careers in North Dakota and in the oil and gas industry provides great value. It supports good program growth at one of our universities and continues to grow awareness and support from one of the state's key industries. Ensuring we inspire and promote careers in this area is a key goal in helping North Dakota's economy to remain strong.

- Reviewer: G-49-03A

I appreciate a project championed and organized by a student organization, as well as support shown them by industry through tours and education. It seems like a grassroots approach to education and promotion of the industry. I encourage the PI to identify any enrollment changes from the initiative, and also survey students' perspectives following the event.

- Reviewer: G-49-03B

This proposed project presents a potential to have a small impact on the inflow of trained geoscientists to staff the North Dakota oilfield. Because so little money is being requested, and because the project has potential to impact many beyond just those students selected for the field trips, this seems like a worthy investment by the state. The only flaw this reviewer noticed was in timing. If funds are needed to begin efforts immediately in preparation tasks, this project will struggle. In the event that OGRC opts to recommend funding for this project, it is likely that funds will not be available until after the scheduled field trip in September.

- Reviewer: G-49-02C