# Course Identification Numbering System (C-ID) logo.Transfer Model Curriculum 5-Year Review Summary - Geology

**June 30, 2016**

1. Provide a breakdown of the respondents to the survey:

* # of CCC respondents: 10
* # of CSU respondents: 2
* # of UC respondents: 0
* Total responses: 12

In addition 3 additional FDRG members participated in the phone conferences, 1 CCC and 2 CSU faculty.

**Provide a written summary of the feedback from the survey to the question below:**

The Geology TMC and descriptors were distributed to the FDRG members and others on the listserv in a “call for comments” email. The comments were then collected and two conference calls were arranged to discuss the proposed edits. For the most part, the edits were small, related to spelling, phrasing and clarifying parts of the descriptors. 12 faculty reviewed the TMC and 27 reviewed the descriptors. Most of the comments appeared to address local issues and not universal needs of the degree.

Two conference calls were held in which a total for 4 faculty (2 CCC and 2 CSU faculty) meet and discussed the proposed changes. The proposed changes that dealt with local issues (most dealing with recommendations or prerequisites) were discussed and were ultimately discarded as not being universally necessary for the courses or degree.

1. Were there any changes suggested to the CORE of the TMC?

Approximately 64% did not see a need to change the current CORE of the TMC. Those expressing an interest in making changes (36%) were of the same type as were expressed during the original vetting of the TMC. A summary of the responses for expressing an interest in seeing the core modified is provided below

Table: Changes suggested to the CORE of the TMC (FDRG response in italics)

| Comment Received | Number of responses |
| --- | --- |
| Require Physicsor reduce Chemistry and add Physics  *This was discussed at length during the vetting process. The current configuration still is the best compromise to fit within the Unit limit.* | 3 |
| Reduce the Math requirement to one semester.  *Only affected one institution. The current math requirement is more universally required.* | 1 |
| Allow Paleontology to substitute for Historical Geology.  *Affected only one institution, not universally required.* | 1 |

1. Were there any changes suggested to the “Additional Recommended Preparation” section of the TMC?

Approximately 54% of respondents did not express an interest in seeing the TMC modified. Those expressing an interest in making changes (46%) were of the same type as were expressed during the original vetting of the TMC.

A summary of the responses for expressing an interest in seeing the core modified is provided below.

Table: changes suggested to the “Additional Recommended Preparation” section of the TMC (FDRG response in italics)

| Comment Received | Number of responses |
| --- | --- |
| Increase math requirement.  *Not universally required.* | 1 |
| Increase recommended courses to include: Oceanography, Environmental Geology, Field Geology.  *There is no room in the current TMC for additional courses. Few CCC offer these courses and they are not universally required* | 2 |
| Reduce Physics requirement from Calculus based Physics to Trig based Physics or allow the option (either/or).  *Calculus based physics is the stronger recommendation and is more universally required.* | 3 |

**Provide a written summary of the FDRG’s recommendations and attach a copy of the revised TMC, including the date of completion of the 5-year review.**

General comments: Both indicated that the current TMC fine in its current form. However, I wanted to include one comment not about the TMC that I think warrants inclusion.

“I want to add a comment even through I do not see a need for any changes to the TMC given the unit limitations that are currently in place. I wish that ICW could work to amend the course completion pattern for disciplines in sciences and engineering. It would be better for most community college transfer students to be able to complete their physics at the community colleges. In exchange, they could easily complete some of their non-major general education at the CSUs.

I understand this will difficult to get an agreement on, but it would be much better for STEM transfer students. Students who start at CSUs in STEM majors with sequential courses that are high unit spread out their non-major general education over 4 years, but transfer students cannot. This means that transfer students get really cramped up schedules during the first few years at the community colleges and that impacts their success and their completion. One way to increase STEM success would be to allow transfer students the ability to also spread out their non-major general education over 4 years rather than having to cram it into 2 and then be behind in the sequencing of their major coursework.

I could see an option such that if a student declares a STEM transfer degree as a major and I will use geology as an example, they would complete their physics at the community college and instead of having to complete 9 units in Area C and Area D they only complete 6 units in each with the understanding that those 6 units must be finished at the CSUs before they get their degree.

Thanks for listening, I just wish this is something that could be arranged.”

### General Summary

Many of the requests for changes were similar in nature to the issues addressed when the TMC was developed. Adding Environmental Geology, Field Geology, Oceanography, an additional semester of Calculus, and requiring Physics have already been addressed in the development of the TMC and it was determined that the current TMC adequately meets the needs of Geology students transferring from a CCC to a CSU.

Since most of the respondents did not see a necessity in changing the TMC CORE for the AS-T in Geology and given that the majority of negative comments dealt with local issues, it is recommended that there be no changes made to the current TMC.

## Descriptor 5-Year Review Summary

Please provide a written summary of the FDRG’s recommendations for each of the descriptors in the table below. If there are no changes to the descriptors, you can note this by stating “After a complete review of the descriptor, the FDRG does not propose any changes to the descriptor at this time.”

Four members of the Geology FDRG meet via two telephone conferences in November 2015 to discuss proposed changes to the Geology Course Descriptors. Changes to the descriptors were suggested by members of the group during the survey process in the “call for comments” period for the 5 year descriptor review. All comments were considered and discussed with the recommendations below.

### General Comments:

1. The responses that indicated changes to the descriptors were in the minority and generally regarded local issues. It was determined that these changes
2. It was suggested several times to include the content from both the lecture descriptor and the lab descriptor in the combined lecture/lab course to make the review process easier.
3. There were several comments regarding phrasing, spelling, and wording. These have been cleared up as necessary.
4. The concern was expressed in regards to online courses in the geology labs. The lab course objectives have been changed to indicate that students should be working with physical rock and mineral samples rather than virtual ones. This does not necessitate the elimination of online labs, it does require the students to be examining physical samples.
5. **All proposed chances were considered to be minor and do not require resubmission of CORs that have already been approved.**

| C-ID Descriptor and Name | Summary of the FDRG 5-Year Review |
| --- | --- |
| ***Example***  **COMM 140**  **\*Small Group Communication** | *Example Response*  88.5% of respondents agreed proposed changes were appropriate.  Several comments were about issues not being reviewed at this point (see general comment #4 above). One comment said that oral presentations should not be required in a small group class but it was noted in the FDRG discussion that oral presentations are necessary for articulation in the “Oral Communication” area.  Recommendation: Implement proposed changes. |
| **GEOL 100**  **Physical Geology** | **Are there any changes you would like to see on the GEOL 100 descriptor?**  **Answer Options Response Percent Response Count**  Yes 8.7% 2  No, the descriptor is appropriate the way it is 82.6% 19  Decline to comment/Not qualified to assess 8.7% 2  If yes, please explain. 3  ***answered question* 23**  ***skipped question*** **4**  The majority felt that the descriptor was appropriate so the change is minimal.  The comments included the suggestion on removing the Major Topic of Earth Resources and placing the subheadings under the Major Topic of Minerals.  One comment suggested a major rewrite of the course objectives. This was discussed and the majority felt that the objectives were adequate as written.  Results: The Major Topic of Earth Resources has been removed and the subtopics have been placed under the Major Topic of Minerals. |
| **GEOL 100L**  **Physical Geology Laboratory** | **Are there any changes you would like to see on the GEOL 100L descriptor?**  **Answer Options Response Percent Response Count**  Yes 4.3% 1  No, the descriptor is appropriate the way it is 87.0% 20  Decline to comment/Not qualified to assess 8.7% 2  If yes, please explain. 1  ***answered question* 23**  ***skipped question*** **4**  The majority felt that the descriptor was appropriate.  The comment was made to modify the course objectives to reflect that it is expected that students would work with physical samples of rocks and minerals rather than virtual.  Results: This change has been made in the objectives. |
| **GEOL 101 Physical Geology with a Laboratory** | **Are there any changes you would like to see on the GEOL 101 descriptor?**  **Answer Options Response Percent Response Count**  Yes 13.0% 3  No, the descriptor is appropriate the way it is. 78.3% 18  Decline to comment/Not qualified to assess 8.7% 2  If yes, please explain. 4  ***answered question* 23**  ***skipped question*** **4**  The majority felt that the descriptor was appropriate so the change is minimal.  The comments were the same as comments for GEOL 100 and GEOL 100L. In addition, it was recommended that the content for GEOL 100 and GEOL 100L be included in this descriptor to make review easier.  The group felt that the comment to include the course content and lab content in the combined course was important enough that this change was made to all the Geology combined course descriptors.  Results: The changes included in GEOL 100 and GEOL 100L are included here. The course content for GEOL 100 and GEOL 100L have been included here as well. |
| **GEOL 110 Historical Geology** | **Are there any changes you would like to see on the GEOL 110 descriptor?**  **Answer Options Response Percent Response Count**  Yes 17.4% 4  No, the descriptor is appropriate the way it is. 60.9% 14  Decline to comment/Not qualified to assess 21.7% 5  If yes, please explain. 4  ***answered question* 23**  ***skipped question*** **4**  The majority felt that the descriptor was appropriate.  The comments to remove the advisory and to make the advisory a prerequisite reflected local issues and were discussed. The group members felt that the advisory was appropriate.  Results: The lab content section was removed and the textbook section was corrected to match GEOL 111 descriptor |
| **GEOL 110L Historical Geology Laboratory** | **Are there any changes you would like to see on the GEOL 100L descriptor?**  **Answer Options Response Percent Response Count**  **Yes 17.4% 4**  No, the descriptor is appropriate the way it is. 60.9% 14  Decline to comment/Not qualified to assess 21.7% 5  If yes, please explain. 4  ***answered question* 23**  ***skipped question*** **4**  The majority felt that the descriptor was appropriate so the change is minimal.  The comments to remove the advisory and to make the advisory a prerequisite (3 comments) reflected local issues and were discussed. The group members felt that the advisory was appropriate.  The comment was made to modify the course objectives to reflect that it is expected that students would work with physical samples of rocks and minerals rather than virtual.  Results: It was suggested to remove the word “practically” from the objectives. This was discussed by the group and implemented. The objectives were reordered to match the GEOL 111 descriptor. The objective has been modified to indicate the use of physical samples of rocks and minerals. |
| **GEOL 111 Historical Geology with Laboratory** | **Are there any changes you would like to see on the GEOL 111 descriptor?**  **Answer Options Response Percent Response Count**  Yes 21.7% 5  No, the descriptor is appropriate the way it is. 60.9% 14  Decline to comment/Not qualified to assess 17.4% 4  If yes, please explain. 5  ***answered question* 23**  ***skipped question*** **4**  The majority felt that the descriptor was appropriate so the change is minimal.  The comments to remove the advisory and to make the advisory a prerequisite (3 comments) reflected local issues and were discussed. The group members felt that the advisory was appropriate.  The group felt that the comment to include the course content and lab content in the combined course was important enough that this change was made to all the Geology combined course descriptors.  Result: No change was made to the advisory. The content from the lecture and the laboratory descriptors was added to the combined course. The objectives have been modified to match the GEOL 101 and GEOL 101L objectives. |
| **GEOL 120 Earth Science** | **Are there any changes you would like to see on the GEOL 120 descriptor?**  **Answer Options Response Percent Response Count**  Yes 10.0% 2  No, the descriptor is appropriate the way it is. 85.0% 17  Decline to comment/Not qualified to assess 5.0% 1  If yes, please explain 2  ***answered question* 20**  ***skipped question*** **7**  The majority felt that the descriptor was appropriate so the change is minimal.  It was requested to remove Astronomy from the descriptor. Since this course is required for Elementary Teacher Preparation and the Astronomy content is a necessary part of the course, this change was discarded.  The comment was made to modify the course objectives to reflect that it is expected that students would work with physical samples of rocks and minerals rather than virtual.  Results: The course objectives have been modified. |
| **GEOL 120L Earth Science Laboratory** | **Are there any changes you would like to see on the GEOL 120L descriptor?**  **Answer Options Response Percent Response Count**  Yes 15.0% 3  No, the descriptor is appropriate the way it is. 80.0% 16  Decline to comment/Not qualified to assess 5.0% 1  If yes, please explain 3  ***answered question* 20**  ***skipped question*** **7**  The majority felt that the descriptor was appropriate so the change is minimal.  The comment was made to modify the course objectives to reflect that it is expected that students would work with physical samples of rocks and minerals rather than virtual.  Comments were made about the laboratory content being too vague and not emphasizing certain topics. The language was changed to indicate that the content listed were topics not necessarily activities. The group felt that this allows more flexibility for faculty.  Results: The objectives were modified. The language was modified to indicate that lab activities should be should cover at least 10 of the subject topics. |
| **GEOL 121 Earth Science with Laboratory** | **Are there any changes you would like to see on the GEOL 121 descriptor?**  **Answer Options Response Percent Response Count**  Yes 15.0% 3  No, the descriptor is appropriate the way it is. 75.0% 15  Decline to comment/Not qualified to assess 10.0% 2  If yes, please explain 3  ***answered question* 20**  ***skipped question*** **7**  The majority felt that the descriptor was appropriate so the change is minimal.  The comment was made to modify the course objectives to reflect that it is expected that students would work with physical samples of rocks and minerals rather than virtual.  Comments were made about the laboratory content being too vague and not emphasizing certain topics. The language was changed to indicate that the content listed were topics not necessarily activities. The group felt that this allows more flexibility for faculty.  Results: The objectives were modified. The language was modified to indicate that lab activities should be should cover at least 10 of the subject topics. The content from the lecture and the laboratory descriptors was added to the combined course. |
| **GEOL 130 Environmental Geology** | **Are there any changes you would like to see on the GEOL 130 descriptor?**  **Answer Options Response Percent Response Count**  Yes 5.0% 1  No, the descriptor is appropriate the way it is. 85.0% 17  Decline to comment/Not qualified to assess 10.0% 2  If yes, please explain 2  ***answered question* 20**  ***skipped question*** **7**  The majority felt that the descriptor was appropriate.  There was a comment to remove the advisory and there is no advisory so it was disregarded.  The comment to split the course into two was discussed and the group felt that this would create additional articulation problems.  Result: No changes were made to the descriptor. |
| **GEOL 130L Environmental Science Laboratory** | **Are there any changes you would like to see on the GEOL 130L descriptor?**  **Answer Options Response Percent Response Count**  Yes 5.0% 1  No, the descriptor is appropriate the way it is. 80.0% 16  Decline to comment/Not qualified to assess 15.0% 3  If yes, please explain 2  ***answered question* 20**  ***skipped question*** **7**  The majority felt that the descriptor was appropriate.  The two comments made did not seem to apply to this descriptor.  Result: No changes were made to the descriptor. |
| **GEOL 131 Environmental Science with Laboratory** | **Are there any changes you would like to see on the GEOL 131 descriptor?**  **Answer Options Response Percent Response Count**  Yes 5.0% 1  No, the descriptor is appropriate the way it is. 80.0% 16  Decline to comment/Not qualified to assess 15.0% 3  If yes, please explain 2  ***answered question* 20**  ***skipped question*** **7**  The majority felt that the descriptor was appropriate.  The two comments made did not seem to apply to this descriptor.  Result: The content from the lecture and the laboratory descriptors was added to the combined course. No other changes were made to the descriptor. |
| **GEOL 200 Geology of California** | **Are there any changes you would like to see on the GEOL 200 descriptor?**  **Answer Options Response Percent Response Count**  Yes 10.0% 2  No, the descriptor is appropriate the way it is. 85.0% 17  Decline to comment/Not qualified to assess 5.0% 1  If yes, please explain 3  ***answered question* 20**  ***skipped question*** **7**  The majority felt that the descriptor was appropriate.  The comments to remove the advisory and to make the advisory a prerequisite (2 comments) reflected local issues and were discussed. The group members felt that the advisory was appropriate.  Result: No change was made to the advisory. No changes were made to the descriptor. |
| **GEOL 280 Mineralogy** | **Are there any changes you would like to see on the GEOL 280 descriptor?**  **Answer Options Response Percent Response Count**  Yes 4.3% 1  No, the descriptor is appropriate the way it is. 60.9% 14  Decline to comment/Not qualified to assess 34.8% 8  If yes, please explain 1  ***answered question* 23**  ***skipped question*** **4**  The majority felt that the descriptor was appropriate.  The comment was made to modify the course objectives to reflect that it is expected that students would work with physical samples of rocks and minerals rather than virtual.  Results: This change has been made in the objectives. |