**Sinclair Community College**

**Continuous Improvement Annual Update 2014-15**

**Please submit to your Division Assessment Coordinator / Learning Liaison for feedback no later than March 1, 2015**

**After receiving feedback from your Division Assessment Coordinator, please revise accordingly and make the final submission to your dean and the Provost’s Office no later than May 1, 2015**

**Department:** 0355 – Chemistry 0357 Geology

Year of Last Program Review: FY 2012-2013

Year of Next Program Review: FY 2017-2018

**Section I: Department Trend Data, Interpretation, and Analysis**

**Degree and Certificate Completion Trend Data – OVERALL SUMMARY**

Please provide an interpretation and analysis of the Degree and Certificate Completion Trend Data (Raw Data is located in Appendix A*): i.e. What trends do you see in the above data? Are there internal or external factors that account for these trends? What are the implications for the department? What actions have the department taken that have influenced these trends? What strategies will the department implement as a result of this data?*

Sinclair currently has no true geology program; there is no associate degree available to interested students (which makes suspect the two completions shown in the above graph). First of all, geology, as a major, does not draw a sizeable number of students. Secondly, there are few four-year geology programs elsewhere to which students can transfer. Nevertheless, we are working to create an associate-degree program for students who are interested in pursuing geology as a career. The primary hurdle to creating such a program is the number of credits students would be expected to complete before transferring. There is quite a diversity of course expectations for different four-year programs; trying to develop a program that will easily transfer to the various programs to which students might transfer is proving somewhat difficult. We are optimistic, however, that we will be able to produce a set of courses that can provide a good beginning for students who would like to pursue a geology degree. We have good faculty who can provide a good foundation for these students.

Chemistry has historically been primarily a support program for the health-related sciences and engineering. Few students who complete the courses available at Sinclair desire to pursue chemistry as a career. Many of them are merely completing coursework that will lead to other degrees such as physicians, dentists, physician assistants, pharmacists, and other similar programs. As a result, few of these students declare chemistry as a major. To a degree, we are working with advising to convince students to complete an associate degree with the expectation that students with such a degree are more marketable and can, at least in Ohio, transfer to four-year state institutions as juniors, having satisfied the requirements of the first two years.

**Course Success Trend Data – OVERALL SUMMARY**





Please provide an interpretation and analysis of the Course Success Trend Data (Raw Data is located in Appendix A). Looking at the success rate data provided in the Appendix for each course, please discuss trends for high enrollment courses, courses used extensively by other departments, and courses where there have been substantial changes in success.

As reflected in the individual course data at the end of this document, the success rate in high-enrollment courses (Introduction to Chemistry and General Chemistry) seem fairly stable since 2007. There are the occasional outliers, but no consistent trend. Most of the students in these higher-enrollment courses feed other programs. In General Chemistry, a standardized exit testing method has yielded results within a standard deviation of the national average.

The same lack of a general trend occurs across all courses, again with the occasional negative outlier (i.e. GLG 142 in particular). The average passing rate for Geology courses is just under 80% while that of Chemistry is just above 60%. This difference can probably be attributed to the higher use of mathematics, some more complex, in Chemistry courses. Chemistry continues to try different tactics to address this issue. Some of this includes interaction with the Developmental Math and Mathematics departments.

Please provide any additional data and analysis that illustrates what is going on in the department (examples might include accreditation data, program data, benchmark data from national exams, course sequence completion, retention, demographic data, data on placement of graduates, graduate survey data, etc.)

In chemistry, the full-time to adjunct faculty ratio has diminished to a point where some courses (i.e. General Chemistry II in the fall of 2014) have no sections taught by a full-time faculty member. The department should determine if this trend is affecting the student success rate and perhaps take measures to normalize the faculty ratio, especially for the courses populated by high-risk students, such as Introductory Chemistry and General Chemistry I.

Due to changes in program requirements by other departments, fewer students need more than one semester of general education science to complete their certificates or degrees. Therefore, enrollment in Geology courses has been dropping, particularly for the second General Geology semester (GLG 142 → 1201).

A highlight from this past year in Geology is that both full-time faculty were in the top ten list of faculty who demonstrated the highest success rates with African-American students. This accomplishment is due to the cohesive interaction among the members of the Geology department.

**Section II: Progress Since the Most Recent Review**

Below are the goals from Section IV part E of your last Program Review Self-Study. Describe progress or changes made toward meeting each goal over the last year.

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| --- | --- | --- |
| **GOALS** | **Status** | **Progress or Rationale for No Longer Applicable** |
| It is the collective goal of the department to have all students successfully complete the courses in which they enroll. Faculty in the department have open-door policies for students who need additional help.  | In progress [ ] Completed [x] No longer applicable [ ]  | All instructors continue to have an open-door policy to help any student who seeks it. Additionally, we encourage students to visit the Chemistry and Geology Resource Centers when they need help. |
| While Geology has very little attrition, most of which is related to financial issues rather than academic, Chemistry, because of its more mathematical and conceptual character, loses a sizeable percentage of students during the semester. This is often due to students enrolling in the course without the needed skill set or background. Better advising and better control of student enrollment can improve this to some degree, but Chemistry also needs to look for other methods of instruction to meet the students’ needs. This is being addressed in part by redesigning the Introductory Chemistry course to include more interactive activities between small groups of students and tutors employed by the department. | In progress [x] Completed [ ] No longer applicable [ ]  | A pilot program in which small groups of students interact on-line was implemented with some success in 2013. The two primary issues with its success were finding capable tutors and convincing students to commit to participating at the available times. The first depends on available funding; the second is an issue closely related to getting students to set aside necessary study time. The full-time faculty continue to explore alternate methods of delivery and look for on-line sources of additional help for the students.With the advent of career communities and the expectation that all students interact with their advisors, we presume that students will be encouraged to make better decisions regarding their academic load. Among the issues to address with advisors is into which beginning Chemistry course students should be enrolled. Often, when a student needs only a science class and wishes to take a chemistry course, s/he is enrolled in Introductory Chemistry, which has a higher mathematical component than College Chemistry. This may lead to a lower chance for success. Additionally, students who need General Chemistry are enrolled into that course with no previous chemistry background. Again, we have found that these students are at a greater risk of failure. We will create a document to be given to each career community to help them steer each student to the best course. |

Below are the Recommendations for Action made by the review team. Describe the progress or changes made toward meeting each recommendation over the last year.

|  |  |  |
| --- | --- | --- |
| **RECOMMENDATIONS** | **Status** | **Progress or Rationale for No Longer Applicable** |
| Repairs that are needed to Chemistry labs were mentioned during the meeting with the review team. The team was particularly concerned about ventilation repairs that were reported as being needed. Given the department’s commitment to safety, there is no doubt that the department is interested in seeking repairs as soon as possible, and while it may be too late to address these repair needs in the Capital Request process for this year, other sources of funding for these repairs should be explored with the division dean. | In progress [x] Completed [ ] No longer applicable [ ]  | Plans are in place to refurbish lab 12344 and, perhaps, lab 12343, this summer (2015). Plans to refurbish other labs are possible as college monies become available. This reworking affects only the cabinetry in these labs, not the ventilation issues. We need to work with Facilities to identify the source of the problem so it can be corrected. We have requested a study |
| During the meeting with the review team the department noted that students struggled due to inadequate math skills in introductory Chemistry courses. The department has done a nice job of identifying the problem, although in the subsequent discussion it was not clear whether there is certainty regarding exactly what is causing the problem. As noted in the commendations, the department has demonstrated skill in the past in using data to solve problems and make decisions, and the review team recommends that the department employ this skill to attempt to resolve this issue. The department is encouraged to explore ways to help students develop the math skills they need to succeed in Chemistry courses, and assess the impact of any measures they implement. There may be opportunities to employ online resources to bolster math skills, perhaps a collaborative effort with the math department could lead to the development of approaches that would help Chemistry students achieve higher levels of success by improving math skills. | In progress [x] Completed [ ] No longer applicable [ ]  | The Developmental Math Department has redesigned the prerequisite math course for Introductory Chemistry to include more emphasis on math applications as they apply to SME courses. Included among the exercises in this course are questions particularly related to those expected in an introductory chemistry course. We will monitor the success rates of those who participate in this redesigned course. |
| The Geology component of the department lacks visibility, and there is some indication that this may have impacted enrollment. The chair indicated that increasing visibility for Geology has been a concern since he took over leadership of the department, and it is recommended that the department move forward with efforts to once again incorporate Geology into the department name and prioritize other appropriate efforts to increase the visibility of the Geology segment of the department. | In progress [ ] Completed [x] No longer applicable [ ]  | This is now complete. Geology is satisfied with the ability for outside entities, including potential students, to find them through the college web site. |
| It was noted that the program outcomes that the department is using are the ones that were used when Chemistry was merely an emphasis area under Liberal Arts and Sciences. Now that Chemistry is being treated as a stand-alone degree program, it would be appropriate to develop some program outcomes that are targeted for Chemistry. The existing outcomes may be kept if that is the department’s wish, but they should be supplemented by outcomes that distinguish Chemistry from other degree programs. It is recommended that the department work with the division learning liaison to develop effective and measurable outcomes.  | In progress [x] Completed [ ] No longer applicable [ ]  | This is still in discussion. |
| The recommendations from the previous Program Review were not addressed in the current self-study – the department should prioritize work on these recommendations from the last Program Review, as summarized below:**Recommendations for Action**:1. Develop evidence of student learning outcomes attainment and share the analyses with associated LHS departments to identify improvement targets
2. Enlist the support of RAR to investigate the promise of prerequisites in courses where student success is compromised due to perceptions of inadequate academic background
3. Validate the department’s assertion there is a difference in student performance based on instruction by full-time versus part-time faculty through an RAR-supported study
4. Conduct a needs analysis to identify part-time faculty development opportunities; deliver workshops and other training as appropriate.
5. Evaluate and pilot alternative modes of lecture/lab delivery through hybrid course formats and distance learning opportunities (off campus locations, too) as new models emerge
	1. Benchmark other institutions and other departments on campus
	2. Work with Distance Learning to identify current examples
	3. Track students who transfer to obtain systematic feedback for the department’s use in refining curriculum and instruction
 | In progress [x] Completed [ ] No longer applicable [ ]  | CompleteThis assertion is supported by the following data. This data is specific for Introductory Chemistry, but we would expect to see similar data for General Chemistry. #1: Completed DEV 108 before taking CHE 120 #2; Did not complete DEV 108 before taking CHE 120 #3: Did not need to take DEV 108% Success Rates for CHE 120 (now CHE 1111)

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| --- | --- | --- | --- | --- | --- | --- |
|  | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 |
| #1 | 75% | 70% | 62.9% | 61% | 54.6% | 59.5% |
| #2 | 61.4% | 61.3% | 56.0% | 53.4% | 51.1% | 53.6% |
| #3 | 67.85 | 69.1% | 70.6% | 67.5% | 65.2% | 73.9% |
| Overall | 65.9% | 67/2% | 66.5% | 63.1% | 60.3% | 66/6% |

From this data, it is clear that students who do not have the prerequisite background are not as successful as those who have demonstrated the necessary mathematical ability. This data is rather old, but we expect that these observations still exist and will collect more recent data. We will also collect similar data related to General Chemistry.In progressOne of the challenges faced by the department is the development of adjunct faculty. Many of the newer adjunct faculty, however, have full-time jobs elsewhere, so finding the time for them to attend workshops and other training is a challenge. We continue to monitor their work and offer suggestions and intervention where needed and appropriate.In progress. This is a college-wide issue. We have not been able to systematically contact previous students except as they visit Sinclair or make contact with Sinclair instructors. Generally speaking, each previous student has expressed appreciation for the instruction received at Sinclair. Among these are John Leubking, who is currently pursuing a PhD in chemistry at Ohio State University, and Ann Koschembahr, who has completed a PhD at the University of Cincinnati. |
| Work with the Academic Staffing Coordinator to identify and implement a sustainable strategy to recruit part-time faculty members | In progress [x] Completed [ ] No longer applicable [ ]  | This is a major issue for both Chemistry and Geology. It is quite difficult to find qualified instructors, with appropriate knowledge and teaching skill, in both of these areas who are available at the times needed. Numerous advertisements have been placed in the local papers with limited results, particularly in the Dayton area. We will continue to pursue all leads to create a list of potential adjunct instructors. |
| As experienced faculty members consider retirement, it is recommended that the department develop formal approaches for documenting their knowledge so that as much as possible is preserved before these faculty members transition out of the department. | In progress [x] Completed [ ] No longer applicable [ ]  | We are in the final stages of creating documents for the first semester of Introductory and General Chemistry. These documents define the concepts that must be completed by the end of the term, those that can be included at the instructor’s discretion, and topics considered to be beyond the scope of the course. A list of available demonstration kits are included with each document as are other suggestions for concept presentation. These documents will be made available to each instructor to guide their individual classroom preparation. They are also expected to minimize the instructional variability between sections yet allow for some variation in emphasis based on the individual instructor's interests. |
| The Program Review is an opportunity to highlight department successes, innovations, and strengths – it was the sense of the review team that there are a number of impressive things the department is doing and a number of faculty achievements that were not communicated in the self-study. The department should utilize the Program Review and Annual Update processes to spotlight its strengths. Prior to future Annual Update and Program Review submissions, the department should engage in some deep reflection regarding successes that should be shared. The review team also felt that there could have been more reflection regarding opportunities for improvement in the department. While some challenges were mentioned, often solutions were not proposed or discussed in the self-study. The review team requests that the department conduct a more extensive Strengths/Weaknesses/Opportunities/Threats analysis and share it with the Provost’s Office within the next three months to ensure that the department is able to benefit from the self-assessment and thoughtful reflection that are one of the major benefits of the Program Review process and that should guide the development of the self-study. The self-study document isn’t really the end product of Program Review – the opportunity for departmental self-reflection and improvement is really what the process is designed to produce. | In progress [x] Completed [ ] No longer applicable [ ]  | This is still in discussion. |

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| Please respond to the following items regarding external program accreditation. |
| **Date of Most Recent Program Accreditation Review** | Date of most recent accreditation review: \_\_\_\_\_\_\_\_\_\_\_\_\_**OR**[x]  Programs in this department do not have external accreditation  |
| **Please describe any issues or recommendations from your last accreditation review (if applicable)** |  |
| **Please describe progress made on any issues or recommendations from your last accreditation review (if applicable)** |  |

**Section III: Assessment of General Education & Degree Program Outcomes**

The Program Outcomes for the degrees are listed below. **All program outcomes must be assessed at least once during the 5 year Program Review cycle, and assessment of program outcomes must occur each year**.

**PLEASE NOTE – FOR THE NEXT TWO YEARS, GENERAL EDUCATION OUTCOME ASSESSMENT WILL BE TEMPORARILY POSTPONED. WE WOULD ASK THAT IN THIS ANNUAL UPDATE YOU IDENTIFY AT LEAST ONE COURSE IN YOUR DEGREE PROGRAM(S) WHERE ASSESSEMENT AT THE MASTERY LEVEL WILL OCCUR FOR THE FOLLOWING THREE GENERAL EDUCATION OUTCOMES:**

* **CRITICAL THINKING/PROBLEM SOLVING**
* **INFORMATION LITERACY**
* **COMPUTER LITERACY**

**NOTE THAT THERE WILL NEED TO BE AT LEAST ONE EXAM / ASSIGNMENT / ACTIVITY IN THIS COURSE THAT CAN BE USED TO ASSESS MASTERY OF THE COMPETENCY.**

**YOU MAY ALSO SUBMIT ASSESSMENT RESULTS FOR THESE GENERAL EDUCATION COMPETENCIES IF YOU HAVE THEM, BUT IT WILL BE CONSIDERED OPTIONAL**.

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| --- | --- | --- | --- | --- |
| **General Education Outcomes** | To which degree(s) is this program outcome related? | Year courses identified where mastery of general education competency will be assessed. | PLEASE INDICATE AT LEAST ONE COURSE WHERE MASTERY OF THE COMPETENCY WILL BE ASSESSED FOR EACH OF YOUR DEGREE PROGRAMS | What were the assessment results for this General Education competency? (Please provide brief summary data)**NOTE: - THIS IS OPTIONAL FOR THE FY 2014-15 AND FY 2015-16 ANNUAL UPDATES** |
| Critical Thinking/Problem Solving | CHEE.S.AS | **2014-2015** | General ChemistryCHE 1211/1251 and CHE 1221/1261Organic Chemistry CHE 2111/2151 andCHE 2121/2161 | Nearly 80% of the final exams for the General Chemistry sequence (CHE 1211/1221) requires critical thinking/problem solving skills. This increases to 100% for the Organic Chemistry courses. |
| Information Literacy | CHEE.S.AS | **2014-2015** | General ChemistryCHE 1221/1261Organic Chemistry CHE 2111/2151 andCHE 2121/2161 |  |
| Computer Literacy | CHEE.S.AS | **2014-2015** | General ChemistryCHE 1211/1251 andCHE 1221/1261 |  |
| Values/Citizenship/Community | All programs | **2015-2016** | Due in FY 2015-16 |  |
| Oral Communication | All programs | **N/A** | COM 2206/2211 |  |
| Written Communication | All programs | **N/A** | ENG 1101 |  |
| Are changes planned as a result of the assessment of general education outcomes? If so, what are those changes | **OPTIONAL FOR FY 2014-15** |
| How will you determine whether those changes had an impact?  | **OPTIONAL FOR FY 2014-15** |

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| --- | --- | --- | --- | --- |
| **Program Outcomes** | To which course(s) is this program outcome related? | Year assessed or to be assessed. | Assessment MethodsUsed | What were the assessment results? (Please provide brief summary data) |
| Achieve group goals in a variety of social contexts. | CHE 2111/2151 andCHE 2121/2161 | 2015-2016 |       |       |
| Communicate effectively in a variety of ways with varied audiences through writing skills, oral communication skills, listening skills, reading skills, computer literacy and information literacy. | COM-2211 COM-2225 ENG-1101 ENG-1201  | 2016-2017 |       |       |
| Demonstrate ability to think logically and solve problems using analysis, synthesis and evaluation. | CHE-1211 CHE-1221 CHE-2111 CHE-2121 MAT-2270 MAT-2280 MAT-2290  | 2017-2018 | Nearly 80% of the final exams for the General Chemistry sequence (CHE 1211/1221) requires critical thinking/problem solving skills. This increases to 100% for the Organic Chemistry courses. | 83% of the students in the General Chemistry sequence exhibited mastery of this skill. |
| Demonstrate responsibility and accountability in accomplishing goals. |   | 2018-2019 |       |       |
| Recognize and articulate an understanding of the increasing interdependence of world cultures and their consequences. |   | 2019-2020 |       |       |

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| **Are changes planned as a result of the assessment of program outcomes? If so, what are those changes?**  |  |
| **How will you determine whether those changes had an impact?**  |  |

Among the recommendations in our last program review was to revise our program outcomes to better reflect what should be expected of individuals pursuing an associate degree in chemistry. These are being revised and will be implemented and included in next year’s update.

**APPENDIX – PROGRAM COMPLETION AND SUCCESS RATE DATA**

**Degree and Certificate Completion**

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| Division | Department | Department Name | Program | FY 07-08 | FY 08-09 | FY 09-10 | FY 10-11 | FY 11-12 | FY 12-13 | FY 13-14 |
| SME | 0355 | Chemistry | CHEE.AS | 2 | 3 | 9 | 1 | . | 3 | . |
| SME | 0355 | Chemistry | CHEE.S.AS | . | . | . | . | . | . | 3 |
| SME | 0357 | Geology | GLGE.AS | . | 1 | . | . | . | 1 | . |

**Course Success Rates**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Department** | **Department Name** | **Course** |  | **FY 07-08** | **FY 08-09** | **FY 09-10** | **FY 10-11** | **FY 11-12** | **FY 12-13** | **FY 13-14** |
| 0355 | Chemistry | CHE-1111 |   | . | . | . | . | . | 61.9% | 63.4% |
| 0355 | Chemistry | CHE-1121 |  | . | . | . | . | . | 77.0% | 65.5% |
| 0355 | Chemistry | CHE-1151 |   | . | . | . | . | . | . | . |
| 0355 | Chemistry | CHE-1161 |  | . | . | . | . | . | . | . |
| 0355 | Chemistry | CHE-120 |   | 67.2% | 66.5% | 63.1% | 60.3% | 66.6% | 71.4% | . |
| 0355 | Chemistry | CHE-121 |  | 83.3% | 88.0% | 85.7% | 83.3% | 78.2% | 71.4% | . |
| 0355 | Chemistry | CHE-1211 |   | . | . | . | . | . | 70.9% | 74.5% |
| 0355 | Chemistry | CHE-122 |  | 93.6% | 87.3% | 83.7% | 80.1% | 79.2% | 82.6% | . |
| 0355 | Chemistry | CHE-1221 |   | . | . | . | . | . | 81.0% | 87.1% |
| 0355 | Chemistry | CHE-1251 |  | . | . | . | . | . | . | . |
| 0355 | Chemistry | CHE-126 |   | . | . | . | . | . | . | . |
| 0355 | Chemistry | CHE-1261 |  | . | . | . | . | . | . | . |
| 0355 | Chemistry | CHE-127 |   | . | . | . | . | . | . | . |
| 0355 | Chemistry | CHE-128 |  | . | . | . | . | . | . | . |
| 0355 | Chemistry | CHE-1311 |   | . | . | . | . | . | 62.7% | 78.1% |
| 0355 | Chemistry | CHE-1321 |  | . | . | . | . | . | 91.7% | 100.0% |
| 0355 | Chemistry | CHE-1351 |   | . | . | . | . | . | . | . |
| 0355 | Chemistry | CHE-141 |  | 76.5% | 75.0% | 72.0% | 66.1% | 62.0% | . | . |
| 0355 | Chemistry | CHE-142 |   | 86.7% | 93.3% | 92.9% | 92.3% | 91.7% | . | . |
| 0355 | Chemistry | CHE-143 |  | 92.3% | 100.0% | 88.9% | 90.0% | 83.3% | . | . |
| 0355 | Chemistry | CHE-147 |   | . | . | . | . | . | . | . |
| 0355 | Chemistry | CHE-148 |  | . | . | . | . | . | . | . |
| 0355 | Chemistry | CHE-149 |   | . | . | . | . | . | . | . |
| 0355 | Chemistry | CHE-151 |  | 75.8% | 70.1% | 74.4% | 63.8% | 70.7% | . | . |
| 0355 | Chemistry | CHE-152 |   | 74.5% | 76.6% | 79.3% | 77.5% | 79.0% | . | . |
| 0355 | Chemistry | CHE-153 |  | 88.5% | 86.0% | 89.4% | 87.3% | 85.0% | 90.3% | . |
| 0355 | Chemistry | CHE-157 |   | . | . | . | . | . | . | . |
| 0355 | Chemistry | CHE-158 |  | . | . | . | . | . | . | . |
| 0355 | Chemistry | CHE-159 |   | . | . | . | . | . | . | . |
| 0355 | Chemistry | CHE-201 |  | 82.4% | 86.4% | 81.1% | 75.6% | 88.1% | 93.8% | . |
| 0355 | Chemistry | CHE-202 |   | 86.8% | 91.9% | 84.3% | 84.2% | 90.0% | 93.8% | . |
| 0355 | Chemistry | CHE-203 |  | 88.2% | 93.5% | 94.0% | 88.3% | 87.5% | 95.7% | . |
| 0355 | Chemistry | CHE-207 |   | . | . | . | . | . | . | . |
| 0355 | Chemistry | CHE-208 |  | . | . | . | . | . | . | . |
| 0355 | Chemistry | CHE-209 |   | . | . | . | . | . | . | . |
| 0355 | Chemistry | CHE-2111 |  | . | . | . | . | . | 77.5% | 75.5% |
| 0355 | Chemistry | CHE-2121 |   | . | . | . | . | . | 92.5% | 83.6% |
| 0355 | Chemistry | CHE-2151 |  | . | . | . | . | . | . | . |
| 0355 | Chemistry | CHE-2161 |   | . | . | . | . | . | . | . |
| 0355 | Chemistry | CHE-245 |  | . | 100.0% | . | . | . | . | . |
| 0355 | Chemistry | CHE-270 |   | 100.0% | 100.0% | . | . | 100.0% | 100.0% | . |
| 0355 | Chemistry | CHE-297 |  | . | . | 100.0% | . | . | . | . |
| 0357 | Geology | GLG-1101 |   | . | . | . | . | . | 83.5% | 82.2% |
| 0357 | Geology | GLG-1111 |  | . | . | . | . | . | . | . |
| 0357 | Geology | GLG-1201 |   | . | . | . | . | . | 87.8% | 80.2% |
| 0357 | Geology | GLG-1211 |  | . | . | . | . | . | . | . |
| 0357 | Geology | GLG-1301 |   | . | . | . | . | . | 100.0% | 83.3% |
| 0357 | Geology | GLG-141 |  | 82.0% | 76.0% | 84.2% | 81.4% | 79.6% | . | . |
| 0357 | Geology | GLG-142 |   | 86.4% | 85.1% | 84.7% | 84.8% | 81.4% | 54.5% | . |
| 0357 | Geology | GLG-143 |  | 91.1% | 91.9% | 91.0% | 92.7% | 92.4% | 88.0% | . |
| 0357 | Geology | GLG-144 |   | 90.9% | 88.9% | 100.0% | 100.0% | . | . | . |
| 0357 | Geology | GLG-147 |  | . | . | . | . | . | . | . |
| 0357 | Geology | GLG-148 |   | . | . | . | . | . | . | . |
| 0357 | Geology | GLG-149 |  | . | . | . | . | . | . | . |
| 0357 | Geology | GLG-297 |   | 83.3% | . | . | . | . | . | . |