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<th>Degree Program/Writing Outcome</th>
<th>Target</th>
<th>Findings</th>
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| Psychology (BS) | 90% of psychology majors will demonstrate an ability to design appropriate methods to collect data and answer basic research questions by preparing a research proposal as part of PY 356. | Findings (2013-2014) - Target: Met  
Instructor assessment of student performance in PY 356 indicated that 90 - 100% of student achieved satisfactory or better levels of performance.  
Findings (2012-2013) - Target: Met  
Data from faculty assessment of student research proposals indicate that 90% of students met criteria for generating and writing a research proposal in Psychology. We also obtained data indicating that 83% achieved criteria for identifying and translating basic research ideas into workable hypotheses. This is an additional improvement of 13% from last assessment. Interpretation and Conclusions: Students have demonstrated clear learning in generating and writing a research proposal in Psychology. Importantly, we have seen marked improvement in the ability to translate basic research ideas into workable hypotheses in the past two years.  
Findings (2011-2012) - Target: Met  
Data from faculty assessment of student research proposals indicate that 94% of students met criteria for generating and writing a research proposal in Psychology. We also obtained data indicating that 70% achieved criteria for identifying and translating basic research ideas into workable hypotheses. This is an improvement of 30% from last assessment. Interpretation and Conclusions: Students have demonstrated clear learning in generating and writing a research proposal in Psychology. Importantly, we have seen marked improvement in the ability to translate basic research ideas into workable hypotheses. We will add other exercises to provide opportunities for additional improvement. |
| Chemistry (BS) | No Target Established | Findings (2012-2013) - Target: None established  
The seven CH 101 instructors gave aligned multiple choice final exam questions in the seven CH 101 sections. Questions were related to the following concepts/skills: Math/Problem Solving: 79% of students (n = 1167) answered question correctly (averages ranged from 73%-87% across the 7 sections; standard deviation = 4.1%) 3D Visualization: 75% of students answered question correctly (averages ranged from 59%-87% across the 7 sections; standard deviation = 9.7%). Considering that most students enrolled in CH 101 are not Chemistry majors, and many are not science majors, students performed reasonably well across all five course sections with respect to demonstrating fundamental chemistry knowledge.  
Findings (2011-2012) - Target: None Established  
The four CH 101 instructors gave aligned multiple choice final exam questions in the five CH 101 sections. Questions were related to the following concepts/skills: Math/Problem Solving: 86.5% of students (n = 851) answered question correctly (averages ranged from 72.5%-92.9% across the 5 sections; standard deviation = 8.5%) 3D Visualization: 51.9% of students answered question correctly (averages ranged from 36.5%-67.6% across the 5 sections; standard deviation = 11.4%). Considering that most students enrolled in CH 101 are not Chemistry majors, and many are not science majors, students performed reasonably well across all five course sections with respect to demonstrating fundamental chemistry knowledge. |
## Electrical & Computer Engineering (BSEE)

...students shall demonstrate an ability to apply knowledge of mathematics, science, and engineering necessary to analyze and design complex electrical and electronic devices, software, and systems containing hardware and software components, as appropriate to Program Educational Objectives.  

**ABET Program Outcome A**

For students passing the courses with embedded assessments for this outcome, the department average for these assessments will be 3.0/4.0 or above using a department standard assessment rubric.

### Findings (2012-2013) - Target: Met

Assessments of PROGRAM OUTCOME A (with measures A1-A9) include 11 unique assessments across 11 course offerings including courses as shown in the attached course embedded assessment curriculum maps. Course embedded assessments for 2012-2013 show that overall student performance for Program Outcome A was 3.36/4.00 as compared to 3.26/4.00 in 2011-2012. The target for this assessment was met. No substantial changes in course instruction or assessment are anticipated for the upcoming reporting cycle.

### Findings (2011-2012) - Target: Met

Assessments of PROGRAM OUTCOME A (with measures A1-A9) include 11 unique assessments across 11 course offerings including courses as shown in the attached course embedded assessment curriculum maps. Course embedded assessments for 2011-2012 show that overall student performance for Program Outcome A was 3.31/4.00 as compared to 3.36/4.00 in 2010-2011. The target for this assessment was met. No substantial changes in course instruction or assessment are anticipated for the upcoming reporting cycle.

The assessment for one measure (A7) was 2.75/4.00. The instructor notes that assessment of skill A7 is significantly below the desired threshold of 3.0. It appears from student work, that extrapolating sinusoidal steady-state circuit concepts to three-phase power problems is the primary issue.

**Corrective Action:** Currently, a non-trivial amount of class time is spent reviewing sinusoidal steady-state circuit concepts. In future terms, the review will be accomplished with out of class assignments, and more lecture time will be devoted to three-phase concepts. Also, ECE 225 (Circuits) instructors will be encouraged to focus on the primary concepts of sinusoidal steady-state analysis. Finally, more practice problems will be made available.

### Mathematics (BS)

...by the completion of Calculus III, undergraduate students will have proficient skills of single variable and multivariable calculus.

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<td>Fall 2013: 822 students took the MA125 final exam and 79.7% (or 655) made 70% or higher on the embedded one variable calculus problems; 453 students took the MA126 final exam and 70.4% (or 319) made 70% or higher on the embedded one variable calculus problems. Spring 2014: 441 students took the MA125 final exam and 79% (or 348) made 70% or higher on the embedded one variable calculus problems; 527 students took the MA126 final exam and 77% (or 406) made 70% or higher; 49 students took the MA 146 final exam and 98% (or 48) on the embedded one variable calculus problems.</td>
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### Findings (2012-2013) - Target: Met

Fall 2012: 298 students took the MA125 final from the four randomly selected sections, and 85.2% (or 254) made 70% or higher on the embedded one variable calculus problems; 277 students took the MA126 final from four randomly selected sections and 75.5% (or 209) made 70% or higher on the embedded one variable calculus problems. Spring 2013: 243 students took the MA125 final from the three randomly selected sections and 76.5% (or 186) made 70% or higher on the embedded one variable calculus problems; 235 students took the MA126 final from three randomly selected sections, and 79.6% (or 187) made 70% or higher on the embedded one variable calculus problems. 

### Findings (2011-2012) - Target: Met

Fall 2011: 196 students took the MA125 or MA145 final from the three randomly selected sections and 76.5% (or 150) made 70% or higher on the embedded one variable calculus problems; 145 students took the MA126 final from three randomly selected sections and 74.5% (or 108) made 70% or higher on the embedded one variable calculus problems. Spring 2012: 243 students took the MA125 final from the three randomly selected sections and 76.5% (or 186) made 70% or higher on the embedded one variable calculus problems; 207 students took the MA126 final from three randomly selected sections, and 75.8% (or 157) made 70% or higher.
Nursing (BSN)  
...students will be able to utilize critical thinking, such as inquiry and analysis in promoting, attaining, or restoring health throughout the lifespan.

Findings (2013-2014) - Target: Partially Met  
The Mean Scores on Critical thinking for the HESI Specialty and Exit HESI for fall 2013: NUR 324 =965 NUR 372 = 905 NUR 374=910 NUR 418 =988 NUR 420 =996 NUR 422=929 Exit Exam=921  
The Mean Scores on Critical thinking for the HESI Specialty and Exit HESI for spring 2014: NUR 324 =970 NUR 961 = 905 NUR 374=957 NUR 418 =932 NUR 420 =850 NUR 422=943 Exit Exam=953

Findings (2012-2013) - Target: Met  
During Fall 2012, there were 82 students enrolled in NUR 422. Of these, 82 (100%) demonstrated satisfactory knowledge on exams requiring application of critical thinking, knowledge and skills.  
In Spring 2013, 100% of the students enrolled in NUR 422 (92/92) demonstrated satisfactory knowledge on exams requiring application of critical thinking, knowledge and skills.

Findings (2011-2012) - Target: Met  
In Fall 2011, there were 83 students enrolled in NUR 420, with all achieving 75% on exams requiring application of critical thinking, knowledge and skills for 100% achievement. In Spring 2012, of the 89 student enrolled, all were successful for 100%. INTERPRETATIONS AND CONCLUSIONS: This target was met.

Anthropology (BA)  
...students will be expected to demonstrate a comprehensive knowledge of the concepts, theories, methods, techniques, and findings of the four sub-disciplines of anthropology: cultural anthropology, archaeology, biological anthropology, and anthropological linguistics.

Findings (2013-2014) - Target: Met  
Pre-test/post-tests were implemented in the required introductory courses for the major [Ant 102 Cultural, Ant 107 Archaeology, Ant 210 Linguistics, and Ant 270 Physical], for a total of 14 courses [(10) Ant 102, (2) 107, (1) 210, and (1) 270)]. In terms of our targets, our collection of individual level data allows us to calculate that: a) percentage improvements per class ranged from 11 to 34%, with a mean of 22%. Target met and exceeded. b) 10 of 14, or 71%, of classes saw an improvement of 20% or more by at least 50% of students. While targets were met in 2011-12, in 2012-13 the second target, 60% of classes showing improvement was not met. Thus, an item analysis of pre-tests was scheduled to be conducted over the next two years to identify areas in which students perform less well. To foster greater improvement rates, feedback is being given to teachers so that the lessons with which students have the most difficulty can be emphasized and clarified over the course of the semester. While only 8 of 16 (50%) of classes saw such improvement in 2012-13, a substantially higher percentage did so in 2013-14 (10 of 14, or 71%), so the action plan was very successful and will be continued in the coming year.

Findings (2012-2013) - Target: Partially Met  
Pre-test/post-tests were implemented in the required introductory courses for the major [Ant 102 Cultural, Ant 107 Archaeology, Ant 210 Linguistics, and Ant 270 Physical], for a total of 16 courses [(11) Ant 102, (2) 107, (1) 210, and (2) 270)]. In terms of our targets, our collection of individual level data allows us to calculate that: a) percentage improvements per class ranged from 8 to 34%, with a mean of 20%. Target met. b) 8 of 16, or 50%, of classes saw an improvement of 20% or more by at least 50% of students. Missed target by 10%.

Findings (2011-2012) - Target: Met  
Pre-test/Post-tests were implemented in our (4) required introductory courses for the major: Ant 102, Ant 107, Ant 210 and Ant 270, for a total of 13 courses [(8) Ant 102, (1) 107, (2) 210, and (2) 270)]. While we had not stated any targets, our collection of individual level data allow us to calculate that: a) percentage improvements per class ranged from 12 to 39%, with a mean of 21.3%. b) 6 of 10, or 60%, of classes saw an improvement of 20% or more by at least 50% of students.
Early Childhood Education (BSHES/BSHES Online)  
...students will be able to analyze infant and young children's stages of development by observing, identifying, and analyzing infant and young children's physical, social-emotional, and cognitive development for patterns of typical and atypical growth and maturation.

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<th>Findings (2013-2014) - Target: Met</th>
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<td>Summer 2013, Fall 2013 and Spring 2014: HD 202: Infant Development and HD 205: The Preschool Child, more than 87% of students earned a grade of C or better on the case study paper and 80% of students earned a grade of C or better in the course. For each course, attached are copies of exams and the grading rubrics for the case study papers. Interpretation: Students demonstrate good to excellent understanding of the stages of infant and young children's physical, cognitive, and social-emotional development.</td>
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Findings (2012-2013) - Target: Met  
Summer 2012, Fall 2012 and Spring 2013: HD 202: Infant Development and HD 205: The Preschool Child, more than 80% of students earned a grade of C or better on the case study paper and in the course. For each course, attached are copies of exams and the grading rubrics for the case study papers. Interpretation: Students demonstrate good to excellent understanding of the stages of infant and young children's physical, cognitive, and social-emotional development.

Studio Art (BA)  
Students will demonstrate an understanding of the broad history of art and be able to identify major styles and artworks through different historical periods.

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<th>60% or better of students will demonstrate basic proficiency or above</th>
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<td>The peer review component introduced to evaluate student achievement in writing in the prior two cycles was, as the Action Plan for 2013-14 suggested, put on hold. Instead, students in a sample of Survey Courses (ARH 252 and 253) completed two written assignments, one at the beginning of the semester and another at the end. Results Summary: Fall 2013 Sec A - Writing Assignment 1, 65 out of 69 students or 94% demonstrated Basic Proficiency or better; on Writing Assignment 2, 63 out of 69 students or 91% demonstrated Basic Proficiency or better. Fall 2013 Sec B - Writing Assignment 1, 38 out of 43 students or 88% demonstrated Basic Proficiency or better; on Writing Assignment 2, 38 out of 43 students or 88% performed with Basic Proficiency or better. Interpretations and Conclusions: The pilot program of implementing significant writing portions in Survey courses during the last three cycles has been a success and warrants expansion and standardization. This is based on both the small data pool utilized in the past – essentially a pilot group – and the fact that the writing assignments/topics varied from Assignment 1 to Assignment 2.</td>
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Findings (2012-2013) - Target: Met  
In this second year of implementing a significant writing portion into the introductory-level ARH classes, the instructors used a peer review process in order to facilitate grading AND encourage critical reflection (through student assessment of other students' work). As such, 95.76% of students in one section and 96.67% of students in the other met expectations or better, an increase of nearly 30% over the previous year. While this certainly meets or exceeding the basic objectives of the curriculum, the high level and the peer-reviewed component of the measure suggests that the evaluation methodology should be revisited for a more accurate measure in the next year. Please see "action plan" for further information.  

Findings (2011-2012) - Target: Met  
The students enrolled in introductory ARH classes were each given a short writing assignment, which was then scored/assessed by their peers using a series of quality-oriented questions. In this initial attempt to implement a significant writing portion into the introductory-level ARH classes, the instructors used a peer review process in order to facilitate grading AND encourage critical reflection (through student assessment of other students' work). As such, over 65% of students involved in the assessment met expectations for better, therein meeting or exceeding the basic objectives of the curriculum.
**Geology (BS)**

...students will be able to interpret data collected in the field to identify and describe past and present processes that formed the earth.

| ≥ 75% of students will successfully describe past and present earth processes as measured by rubrics evaluating two projects in GEO 495 Field Course. Successful is defined as a score of 2 or better in the corresponding rubric categories. |

| **Findings (2013-2014) - Target: Met**  
78% (out of 19 enrolled) earned a '2' or better in the portion of the rubrics that assessed this task. |

| **Findings (2012-2013) - Target: Met**  
78% of students in Field Course successfully described past and present earth processes as measured by rubrics evaluating two projects. |

| **Findings (2011-2012) - Target: Met**  
8 students were enrolled in GEO 495. The results for each project are: Nacimeinto Project Report: 5 of 8 earned scores of 2 or better Ranchos Project Report: 8 of 8 earned scores of 2 or better. Overall success rate = 81% |