Assessment: Course/Service Four Column

Evaluation of student responses for

questions on exams regarding the

Target for Success: At least 75% of

the students will accurately answer

characteristics of life.



assessed by one instructor in one

increase the number of instructors

class in one quarter. An

enhancement would be to

Dept - (BHES) Biology

the characteristics of life.

SLO Status: Active

BIOL 10:Introductory Biology

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
BIOL10_SLO_1 - Evaluate the correlation of structure and function in plants and animals. SLO Status: Active	ate the Exam - Course Test/Quiz -	Program Review Reporting Year: 2015-2016 Target: Target Not Met On the questions from the exams regarding the function of animal cells and plant cells, student responses were measured and recorded. 47% of the students met the target for this SLO. (10/02/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): Despite the target not being met, this was a good step forward in the assessment for this SLO. We hope to meet our target for this SLO in future assessments.	Enhancement: This SLO was assessed by one instructor in one class in one quarter. An enhancement would be to increase the number of instructors doing this assessment in order have a larger sample size. (10/02/2016)
		Program Review Reporting Year: 2011-2012 Target: Target Met The question on plants: 86% scored correctly and for the question on animals: 80% scored correctly. (07/03/2012) Reflection (CLICK ON? FOR INSTRUCTIONS): This SLO captures a foundational biological concept emphasized in all introductory biology courses. This material is taught in both lecture and laboratory settings with repetition throughout the course. The SLO is valid and the 75% target is being met.	Enhancement: Keep the SLO and diversify how it is measured to include lab assessments. (09/24/2012)
BIOL10_SLO_2 - Identify and explain	Exam - Course Test/Quiz -	Program Review Reporting Year: 2015-2016	Enhancement: This SLO was

02/11/2018 Generated by Nuventive Improve Page 1 of 212

Target : Target Met

On the questions from the exams regarding the

questions regarding the characteristics of life.

characteristics of life, , student responses were measured

and recorded. 88% of the students accurately answered the

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
	the questions.	(10/02/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): This was the first assessment in 4 years, and illustrates that students are understanding this important concept in biology. We're hoping to meet our target in future assessments.	doing this assessment in order have a larger sample size. (10/02/2016)
		Program Review Reporting Year: 2011-2012 Target: Target Met 77% of the students answered this question correctly. (07/03/2012) Reflection (CLICK ON? FOR INSTRUCTIONS): This SLO captures a foundational biological concept emphasized in all introductory biology courses. This material is presented and discussed primarily in lecture. The SLO is valid and the 75% target is being met.	Enhancement: Keep the SLO. Incorporate this concept into lab activities or discussions. (09/24/2012)
	Project - A worksheet was used to assess this SLO. Target for Success: 70% of the students are able to complete the worksheet successfully.	Program Review Reporting Year: 2016-2017 Target: Target Met 95% of the students were able to complete the worksheet successfully (40 out of 42) (07/01/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): This assignment was given at the beginning of the quarter after I covered the characteristics of life like order,reproduction,growth and development,energy processing,response to the environment and regulation in a list of fifteen entities from yeast and mold to seeds. The students had to analyze which characteristic that can be observed in each case. Students were little confused about mold and yeast. They were not sure they were living or non living. In future I will emphasize all characteristics may not be apparent at the same time.	Enhancement: I plan to give this assignment after I teach evolution. Evolution is also a characteristic of life. That would make it more meaningful.
BIOL10_SLO_4 - Apply principles of the scientific method to every day problems and develop potential plans for solutions. SLO Status: Active	Exam - Course Test/Quiz - Evaluation of student responses for select questions on exams regarding the utilization of the scientific method. Target for Success: For each question at least 75% of the students will choose the correct answer.	Program Review Reporting Year: 2015-2016 Target: Target Met On the questions from the exams regarding the utilization of the scientific method, student responses were measured and recorded. (10/02/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): 82% of the students answered the questions correctly. This was the first assessment in 4 years, and illustrates that students are understanding this important concept in biology. We're	Enhancement: This SLO was assessed by one instructor in one class in one quarter. An enhancement would be to increase the number of instructors doing this assessment in order have a larger sample size. (10/02/2016)

hoping to meet our target in future assessments.

Assessment Methods

Assessment Data Summaries

Enhancements

Program Review Reporting Year: 2011-2012

Target: Target Met

The first question on the scientific method: 80% scored correctly. On the 2nd question regarding the scientific

method: 85% scored correctly. (07/05/2012)

Reflection (CLICK ON? FOR INSTRUCTIONS): This SLO captures a foundational biological concept emphasized in all introductory biology courses. This material is taught in both lecture and laboratory settings with repetition throughout the course. The SLO is valid and the 75% target is being met.

Enhancement: In addition to the exam questions, a written homework assignment regarding the utilization of the scientific method in everyday life will be added. (09/24/2012)

BIOL10_SLO_3 - Demonstrate an understanding of the impacts of human activities on the biosphere. SLO Status: Active

Exam - Course Test/Quiz -

Evaluation of student responses for exam questions regarding human impacts upon the biosphere.

Target for Success: At least 75% of the student will choose the correct answer.

Program Review Reporting Year: 2015-2016

Target: Target Met

On the questions from the exams regarding human impacts upon the biosphere, , student responses were measured and recorded. 90% of the students accurately answered the questions. (10/02/2016)

Reflection (CLICK ON? FOR INSTRUCTIONS): 90% of the students answered the questions correctly. This was the first assessment in 4 years, and illustrates that students are understanding this important concept in biology. We're hoping to meet our target in future assessments.

Enhancement: This SLO was assessed by one instructor in one class in one quarter. An enhancement would be to increase the number of instructors doing this assessment in order have a larger sample size. (10/02/2016)

Program Review Reporting Year: 2011-2012

Target: Target Met

For the question regarding human impacts on the biosphere, 80% of the students correctly answered the question. (07/05/2012)

Reflection (CLICK ON? FOR INSTRUCTIONS): This SLO captures a foundational biological concept emphasized in all introductory biology courses. This material is taught in both lecture and laboratory settings with repetition throughout the course. The SLO is valid and the 75% target is being met.

Enhancement: In the future, a written research assignment may be incorporated in order to enhance student understanding of this topic. (09/24/2012)

02/11/2018 Generated by Nuventive Improve Page 3 of 212

BIOL 11:Human Biology

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

BIOL 11 SLO 1 - Investigate the forms and functions of selected human organ systems from the molecular/cellular level to homeostasis at the organismal level.

SLO Status: Active
Outcome Creation Date: 12/31/2009

Exam - Course Test/Quiz - I emailed enrolled students the week before the start of the quarter and instructed them to complete an electronic survey before coming to class. As part of the survey, students were instructed to respond to three essay questions based on their prior knowledge. Two of those three questions were connected to this SLO. One of the questions read ?"Your NERVES and your GLANDS serve a very similar purpose in your body." To what extent do you agree or disagree with this statement? Why?? The other prompt asked students to place some genetically and environmentally determined traits in the order they happen in the development of a baby, and explain the reasoning for the order. Students responded to these same essay prompts on the last day of class, so I had paired pre-class and post-class data for my students. I used the same grading rubrics for both the pre- and post-assessments, and analyzed 1) the extent to which students changed their scores from before to after the class, and 2) the average class scores before and after the course.

Target for Success: During the 2011-2012 assessment, essay scores could range from 0 to 8 possible points (first prompt) and 0 to 12 possible points (second prompt). I looked for a minimum 80% of students to

Program Review Reporting Year: 2015-2016

Target: Target Met

Based on my experiences with these same assessments in the previous assessment cycle, I changed and simplified the grading rubrics to provide simple, holistic essay scores between 0 and 5. As in the last assessment cycle, I only analyzed essays for students who had submitted both pre and post course responses (n = 52). At the start of the course the average essay scores for the first and second prompts were 0.63 points and 0.42 points, respectively. Most students received zero points and exhibited only surface-level understanding of organ systems and their interactions during development, including many common misconceptions. The end of course averages for the first and second prompts were 1.13 and 2.01 respectively. Essay responses included many more detailed examples suggesting a more complex understanding of organ systems at the cellular/molecular levels. For example, for the first prompt students discussed molecules (neurotransmitters and hormones) used in feedback loops in the nervous and endocrine systems. For the second prompt, many students specifically cited independent assortment and crossing over as important to the determination of organ/organismal traits. (06/19/2016)

Reflection (CLICK ON? FOR INSTRUCTIONS): As promised in my enhancement for the previous assessment cycle, I did continue to use the same assessment prompts to evaluate this SLO. I also increasingly incorporated student quotes into class, as discussed in my previous SLOAC enhancement. During this cycle, holistic essay scores from the start and end of the course evidenced increases in student knowledge. Essay responses further evidenced an increased understanding of organ systems at the levels of cells and molecules. Scores for the second prompt met the target of an average score of 2 or higher. Despite clear increases in content knowledge, the average score for end of course essays for the first prompt were still below 2. The target is still considered met for both prompts due to

Enhancement: The second prompt still appears to yield particularly rich responses that match nicely with the goals implicit in this SLO. Since it also allows me to detect changes in student thought, I will continue to use that prompt for in class discussions and in SLO assessments. Responses to the first prompt yielded less rich responses and showed less content knowledge at the end of the course. This might partly relate to the online nature of the survey, since in-class responses to this question seemed much deeper. It's also possible that the brief time spent on hormones during class wasn't enough to generate the strong shifts in knowledge from pre to post I anticipated. I think it would be best to come up with a slightly different prompt that doesn't rely so heavily on a content area that is only briefly discussed. However, it was still encouraging to see clear, though less dramatic than anticipated, shifts in knowledge surrounding this area. (06/20/2016)

improve their scores from the start to end of the course and for an end of course average of at least 75% of available points.

During the 2015-2016 assessment, the grading rubrics provided holistic essay ratings for each prompt between 0 and 5. My target was for a class-wide average essay rating of at least 2 for both prompts. This rating corresponded to the minimum requirements for understanding under my interpretation of the outcome and course outline.

documented increases in knowledge, but would be only partially met for the first prompt, due to average scores still below 2. A score of two for the first prompt required students to view both systems as communication systems with reference to specific examples of hormonal/nervous communication. A score of two for the second prompt required students to discuss the genetic roots of traits and understand that genetic traits are established at the time of fertilization.

Program Review Reporting Year: 2011-2012

Target: Target Met

For question one, students on average increased their scores by 4 points from the start to the end of the class, and for question two, students on average increased their scores by 7 points from the start to the end of the class. These are quite large improvements in scores, given that the questions were worth only 8 points and 12 points respectively. 100% of students improved their scores on the second question and 48 students out of 49 present improved their scores for the first question. The class average for question one increased from 29% to 76% from pre- to post-assessment. The class average for question two increased from 16% to 78% from pre- to post-assessment. (07/04/2012)

Reflection (CLICK ON ? FOR INSTRUCTIONS): I was incredibly pleased with these results, not only because students scored highly at the end of the class, but more importantly because my data shows students significantly changed their understanding of biology from the start to the end of class. Even more interestingly, the preassessment essay responses on the development of a baby showed numerous fascinating misconceptions about biology and genetics. For example, many students commented that a person?s sex is determined by hormones released by the mother or by something the mother does during pregnancy. Many other students voiced the idea that all humans begin as females and then some change to males!

Enhancement: I will continue to use these assessment prompts, because they have the ability to show conceptual changes in students, and because they yield interesting misconceptions to address in class. In the future, I will use quotes from students? pre-assessments as discussion prompts when beginning genetics and reproduction. This will help directly confront students? misconceptions and will hopefully make even higher postassessment scores possible in the future. (09/24/2012)

Enhancement: I will continue to

BIOL 11 SLO 2 - Use scientific

Exam - Course Test/Quiz - I emailed

Program Review Reporting Year: 2011-2012

02/11/2018 Generated by Nuventive Improve Page 5 of 212

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

reasoning to evaluate the biological principles underlying current human health dilemmas, such as the causes of disease, use of biotechnologies, management of epidemics and public health, ecological/environmental health, and social health inequities.

enrolled students the week before the start of the quarter and instructed them to complete an electronic survey before coming to class. As part of the survey, students were instructed to respond to three essay questions based on their prior

SLO Status: Active

enrolled students the week before the start of the quarter and instructed them to complete an electronic survey before coming to were instructed to respond to three essay questions based on their prior knowledge. One of those three questions was connected to this SLO, and it read ?There are NOT currently any DNA technologies that treat human diseases, but researchers hope to discover some in the future. To what extent do you agree or disagree with this statement? Provide examples to support your opinion.? Students also responded to this same essay prompt on the last day of class, so I had paired preclass and post-class data for my students. I used the same grading key for both the pre- and postassessments, and analyzed 1) the extent to which students changed their scores from before to after the class, and 2) the average class scores before and after the course.

Target for Success: I had two targets for success. 1) I wanted to see 85% or more of students increase their scores from before to after the course, which would indicate that students left my class with more biologically accurate concepts than they started with. 2) I wanted to see a class average score of at least 75% on the post-assessment, which would indicate a high level of competency among students leaving the course.

Target: Target Not Met

On average, students increased their scores by 5 points from the beginning of the course to the end of the course. This is quite a substantial improvement, since only 14 points were available on this essay question. Only 3 students out of 49 present did not improve their scores from the start of the class to the end. The class average score for the preassessment was a 16%, whereas the class average score for the post-assessment was a 54%. (07/04/2012)

Reflection (CLICK ON? FOR INSTRUCTIONS): I was really pleased with how dramatically most students improved on this essay question from the start to the end of the class. Most students scored 0 or 2 points out of 14 on their preassessment, and could describe at least one biotechnology with an acceptable level of biological detail at the end. On the other hand, the class average at the end of the class was not as high as I would like. I think there were some technical reasons for this, which I discuss in the enhancement/action plan.

assess this SLO using this essay prompt, but I plan to change my methodology in a few ways. For one, I think I will add another related essay question to get more information on students? concepts in this area. Also, I will administer the post-assessment differently, and will change my grading rubric. After discussions with colleagues, I realized that my grading rubric was far more rigorous than what instructors are using in other, more advanced classes. If I apply a more realistic, but still rigorous rubric, my students would have far exceeded my desired average score. I will also provide a more formal ?quiz-like? environment for the post-assessment. This quarter I gave the post-assessment somewhat informally as a ?participation credit only? exercise. I think if I made it clear to students that I would grade these for correctness as part of their grade, I would get more detailed responses. Overall, though, I am very happy with the results. (09/24/2012)

Exam - Course Test/Quiz - I emailed enrolled students the week before the start of the quarter and instructed them to complete an electronic survey before coming to class. As part of the survey, students were instructed to respond to three essay questions based on their prior knowledge. One of those three questions was connected to this SLO, and it read "Given your current ideas, do you agree or disagree with the following statement? 'The flu shot sometimes gives people the flu. Please explain the reasons for your opinion." Students also responded to this same essay prompt on the last day of class, so I had paired preclass and post-class data for my students. I used the same grading rubric for both the pre- and postassessments, and analyzed 1) the extent to which students changed their scores from before to after the class, and 2) the average class scores before and after the course. The grading rubric scored student essays and gave them a rating between 0 and 5.

Target for Success: My target was for a class-wide average essay rating of at least 2. This rating corresponded to the minimum requirements for understanding under my interpretation of the outcome and course outline.

Program Review Reporting Year: 2015-2016

Target: Target Met

The average pre course essay score was 0.63, while the average post course essay score was 2.67. Only essays for students that submitted both a pre and post course response were analyzed (n = 52). The scores were based on a rubric that yielded holistic scores for each essay, ranging from 0-5. A score of 2 required that students understand the scientific basis for why flu shots cannot in themselves give you the flu disease. It also required that students describe evidence in terms of what is inside a flu shot or why some individuals might still believe they get the flu from the flu shot. (06/20/2016)

Reflection (CLICK ON? FOR INSTRUCTIONS): Based on some changes in the way I handle the course and my reflections on the assessment of this SLO in the previous cycle, I shifted to a different essay prompt for this assessment (the prompt above about the flu shot). This seemed attractive since the topic merged biology content with public health topics and discussions of privilege and equity (which groups refuse vs. accept vaccines). I was very happy with student responses and their shifts in ideas. Students progressed from stating numerous common vaccine misconceptions to being able to describe the scientific and social reasons for those misconceptions (and why they are misconceptions in the first place). Students progressed well above the minimum target I had set.

Enhancement: I was very happy with this prompt, both as an SLO assessment and as a centerpiece for in class discussions and activities about vaccines. The dramatic shifts in student thinking and its connection to broader issues connecting biology to everyday health decisions motivate me to continue using this prompt/assessment in the future. (06/20/2016)

BIOL 13: Marine Biology

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

BIOL13 SLO 1 - Examine marine biology as a branch of the biological sciences and its relation to the scientific field and how the scientific method is used.

SLO Status: Active

Exam - Course Test/Quiz -

Evaluation of student responses for questions on exams regarding the examination of marine biology as a branch of the biological sciences and its relation to the scientific field and how the scientific method is used. Target for Success: 75% of the students will answer the SLO-related exam questions correctly.

Program Review Reporting Year: 2016-2017

Target: Target Met

Exam questions were used to assess student learning regarding the examination of marine biology as a branch of the biological sciences and its relation to the scientific field and how the scientific method is used. (10/22/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): In doing this assessment, the data indicates that students are learning about marine biology as a science as well as how the scientific method is applied in marine biology. It's good to see that the target has been met in this assessment.

Enhancement: Since this was the first assessment ever in Marine Biology, an enhancement would be to continue this process in order to have a larger sample size than one class in one quarter. More data is necessary to fully assess this SLO. (10/22/2016)

BIOL13 SLO 2 - Appraise the physical and chemical properties of the ocean. Evaluation of student responses for SLO Status: Active

Exam - Course Test/Quiz -

questions on exams regarding the physical and chemical properties of the ocean.

Target for Success: 75% of the students will answer the SLO-related exam questions correctly.

Program Review Reporting Year: 2016-2017

Target: Target Met

Exam guestions were used to assess student learning regarding the physical and chemical properties of the ocean. (10/22/2016)

Reflection (CLICK ON? FOR INSTRUCTIONS): In doing this assessment, the data indicates that students are learning about the physical and chemical properties of the ocean. It's again good to see that the target has been met in this assessment.

Enhancement: Again, since this was the first assessment ever in Marine Biology, an enhancement would be to continue this process in order to have a larger sample size than one class in one quarter. More data is necessary to fully assess this SLO. (10/22/2016)

BIOL13_SLO_3 - Compare and contrast the anatomy, behavior, reproduction, and ecology of selected invertebrates, vertebrates, plants, and protista.

SLO Status: Active

Exam - Course Test/Quiz -

Evaluation of student responses for questions on exams regarding the anatomy, behavior, reproduction, and ecology of selected invertebrates, vertebrates, plants, and protists.

Target for Success: 75% of the students will answer the SLO-related questions correctly.

Program Review Reporting Year: 2016-2017

Target: Target Met

Exam questions were used to assess student learning regarding the comparing and contrasting the anatomy, behavior, reproduction, and ecology of selected invertebrates, vertebrates, plants, and protists. (10/22/2016)

Reflection (CLICK ON? FOR INSTRUCTIONS): In doing this assessment, the data indicates that students are learning about the differences and similarities between different groups of eukaryotic organisms. It's always good to see that the target has been met in this assessment.

Enhancement: Since this was the first assessment ever in Marine Biology, an enhancement would be to continue this process in order to have a larger sample size than one class in one quarter. More data is necessary to fully assess this SLO. (10/22/2016)

BIOL 26:Introductory Microbiology

Student Learning Outcomes (SLOs)

BIOL26_SLO_1 - Evaluate and demonstrate the importance of aseptic techniques when working

SLO Status: Active

with microorganisms.

Assessment Methods

Demonstration - The assessment tool I used to assess this outcome was a rubric. If the technique was completed without any errors (all criteria addressed), the resulting score was 12 points. Points were lost as errors were made.

Target for Success: At least 8 points scored

Assessment Data Summaries

Program Review Reporting Year: 2011-2012

Target: Target Met

Yes, my students did meet my expectations. 28 students were tested. Twenty three students were able to complete the process at the Exemplary level. All students were able to complete the procedure with at the most minor flaws. (06/22/2012)

Reflection (CLICK ON? FOR INSTRUCTIONS): I was pleased with the ability of the students to perform the technique successfully without contamination. There were more successful students in this group compared to last year's group. The change I made this year was to watch the students performing the procedure on more than one occasion which gave them twice the amount of critical input than the students received at the first implementation of the SLO's.

Enhancements

Enhancement: The students that did not receive the total points (12), will be required to practice each class period until they can complete the process successfully. The instructor will continually observe the student's progress. (09/25/2012)

Enhancement: The students that did not receive the total possible points (12), will be required to practice each class period until they can complete the process successfully. The instructor will continually observe the student's progress. (09/24/2012)

Enhancement: The students that did not receive the total possible points (12), will be required to practice each class period until they can complete the process successfully. The instructor will continually observe the student's progress (06/25/2012)

Enhancement: The students that did not receive the total possible points (12), will be required to practice each class period until they can complete the process successfully. The instructor will continually observe the student's progress. (06/22/2012)

BIOL26_SLO_2 - Compare and contrast the shape, structure, nutritional and environmental requirements of bacteria, viruses,

Exam - Course Test/Quiz - A short answer question to compare the general characteristics of viruses,

Program Review Reporting Year: 2013-2014

Target: Target Not Met

73% of the students were able to score 80% or higher on

Enhancement: Although this information was presented in the context of various chapters it was

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
protozoa and fungi. SLO Status: Active	bacteria, protozoa and fungi with respect to morphology and nutritional requirements Target for Success: 100 % of the students get a passing grade on the question	this question. (07/02/2014) Reflection (CLICK ON? FOR INSTRUCTIONS): The general characteristics and differences between the various types of microbes needs to be emphasized more and reviewed at the end of the course. Although this information was presented in the context of various chapters it was not reviewed before the final exam. In the future I will ask the students to bring this information together during the review.	not reviewed before the final exam. In the future I will ask the students to bring this information together during the review. (07/02/2014)
	Exam - Course Test/Quiz - A short answer question worth 16 points was included on the final. The students had to describe the general characteristics of the various types of microbes listed in SLO2. Compare and contrast size, shape, structure, nutritional and environmental requirements of bacteria, viruses, protozoa, and fungi. Target for Success: A score of 80% on the question for the students taking the final	Program Review Reporting Year: 2015-2016 Target: Target Met Most of the class (17 out of 23 students) were able to score 80% or higher on this question. (02/08/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): 75% of the students were able to score the target 80% (B). The material assessed in this SLO is presented at the beginning of the quarter and spread out in later chapters as each type of organism is covered.	Enhancement: Give an assignmento review the material near the end of the quarter before the students take the final exam (02/08/2016)
BIOL26_SLO_3 - Investigate host parasite relationships and assess their positive and negative impact on the participants. SLO Status: Active	Exam - Course Test/Quiz - A short answer/essay question on the final Target for Success: Target for Success: a score of 80% on the question for the students	Program Review Reporting Year: 2014-2015 Target: Target Not Met Assessment Data Summary:23/42 students scored 100%, 5/42 students scored 80%, 4/42 students scored 70%. 4/42 students scored 60%, The remaining 6/42 students scored below 60% (08/24/2015) Reflection (CLICK ON? FOR INSTRUCTIONS): More than half the class got all parts of the question correct- they were able to describe the interactions and give good examples. Two thirds of the class met the goal of an 80% score on the question. They were able to describe the various types of interactions between host and microbe and give examples for most of them. Overall the class did well. 80% of the class was able to describe the interactions between host and microbe even if they were not able to give examples for all	Enhancement: An activity or assignment to review the material prior to the final exam (02/08/2016)

of them.

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
	Exam - Course Test/Quiz - A short answer question on the final to describe the interaction between host and microbes Target for Success: the students score 80% or higher on the question	Program Review Reporting Year: 2015-2016 Target: Target Met 19/23 students scored 80% on the question (02/08/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): Most of the students (83% of the class) met the target for this SLO. This is a much higher percent than previous assessment of this SLO	Enhancement: Review the material in an assignment at the end of the quarter before the final exam (02/08/2016)

BIOL 40A: Human Anatomy and Physiology

Student Learning Outcomes (SLOs)

BIOL40A_SLO_1 - Demonstrate the scientific method as employed by health professionals to evaluate real-

world problems involving the skin,

skeletal, and muscle systems.

SLO Status: Active

Assessment Methods

Exam - Course Test/Quiz - Students will be assessed using three exam questions that test the student's ability to predict the metabolic consequences of a selected enzyme deficiency.

Target for Success: Targets for each question vary based on the level of challenge.

Question 1- testing basic concepts – 80%

Question 2 - requiring some level of application of concepts – 75% Question 3 - requiring increasing levels of comprehension and application – 70%

Assessment Data Summaries

Program Review Reporting Year: 2017-2018

Target : Target Not Met Assessment Data Summary:

Question 1 – 86% Question 2 – 57% Question 3 – 61% (10/23/2017)

Reflection (CLICK ON ? FOR INSTRUCTIONS): Most students mastered the basic concepts but found application of

concepts more challenging.

Many had trouble interpreting chemical reaction sequences.

Enhancements

Enhancement: Further activities with this material might involve inclass worksheet/collaborative exercises that allow students additional practice with chemical nomenclature and the application of challenging concepts.

(10/25/2017)

BIOL40A_SLO_2 - Investigate the roles of molecules, organelles, and cells in the function of skin, skeletal, and muscle tissues.

SLO Status: Active

Laboratory Project - Students completed a laboratory exercise that required them to take the pH of several unknown samples and to determine the identity of those samples.

Target for Success: The class will average 4 out of 5 correct identifications based on solution pH values.

Program Review Reporting Year: 2017-2018

Target: Target Met

The class average was 4 out of 5 correct identifications.

~ 2/3 of the class scored a 4 or 5 ~1/3 of the class scored a 3 or below (12/15/2017)

Reflection (CLICK ON ? FOR INSTRUCTIONS): A number of students answered a question regarding the solubility and pH of a sugar solution incorrectly.

The difference between dissociation and solubility needs to be reinforced.

Enhancement: Future report sheets will have an additional thought question meant to illustrate the difference between dissociation and solubility. (12/15/2017)

BIOL40A_SLO_3 - Infer the homeostatic reactions of skin, skeletal, and muscle cells and tissues in reaction to external or internal changes in conditions.

SLO Status: Active

Exam - Course Test/Quiz - Five exam questions regarding the regulation of blood calcium levels were asked. The questions were ranked based on level of complexity, background knowledge, and reasoning required

Program Review Reporting Year: 2017-2018

Target : Target Not Met Question Ranking / % correct

1 85% 2 75% 3 59% Enhancement: Have students engage in additional in-class activities that require them to apply their knowledge when predicting outcomes of actual physiological imbalances and

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
	to answer the question. Target for Success: Target for Success: 72% of students answering all questions correctly.	(01/10/2018) Reflection (CLICK ON? FOR INSTRUCTIONS): Students showed difficulty in questions requiring the highest level of application, but showed the target level of understanding for less challenging questions.	perturbations. (01/11/2018)

02/11/2018 Generated by Nuventive Improve Page 13 of 212

BIOL 40B:Human Anatomy and Physiology

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

BIOL40B_SLO_1 - Demonstrate the ability to apply basic knowledge regarding the structure and function of the respiratory system to predicting its responses in maintainng homeostasis.

Exam - Course Test/Quiz - Stude completed one homework assignment consisting of a varied questions (online quiz format) the evaluated understanding of the various concepts captured in this

SLO Status: Active

Exam - Course Test/Quiz - Students completed one homework assignment consisting of a variety of questions (online quiz format) that various concepts captured in this SLO. Average score used because various questions were used to assess this multi-faceted SLO. Students also completed an end-ofquarter survey where they outlined three misconceptions they had about the respiratory system before taking this course and how taking the course has helped correct the misconception (this question was specifically worded to see if the students would demonstrate application of their knowledge of the respiratory system structure and function).

Target for Success: I had two targets for success. 1) I wanted to see class average score of 80% or more in homework assignments/quizzes, and evidence that students were taking advantage of the two attempt format to enhance their understanding of the various concepts the assignments were designed to assess. 2) Using student written responses to an end-ofcourse survey, I also wanted to see evidence of application of their knowledge of respiratory system structure to its functions and to see students articulate conceptual changes before and after taking the

Program Review Reporting Year: 2013-2014

Target: Target Met

The homework assignment/quiz format enhanced understanding of key concepts and correction of misconceptions. The 79% average score in homework assessment, while slightly lower than the 80% target, was still acceptable as meeting target goal (considering that this topic was taught at the very end of the quarter, and that only one homework assignment was used). Responses to the survey question on misconceptions were very instructive. Students clearly articulated both their misconceptions before taking the course and their renewed understanding of the structure and function of the respiratory system on completion of the course. I was pleased and satisfied with their demonstrated understanding of key concepts and in their articulation of conceptual changes. (04/18/2014)

Reflection (CLICK ON ? FOR INSTRUCTIONS): I was extremely pleased and impressed with the responses to the survey question on the respiratory system. This tool provided me with a way to see the students demonstrate their knowledge of the structure and function for the respiratory system through clarifying misconceptions they had before and after taking the course. Even though the average performance in the homework assignment to assess the SLO was 79% (1% point below target), I still feel confident that the students met target because of the way they responded to student survey. In addition, the 80% overall course average score (which included multiple assessment tools e.g. all homework assignments/quizzes, all lecture exams, lab practical guizzes and lab practical exam, worksheets and writing assignments) was evidence that significant learning and understanding occurred.

Enhancement: I will continue to use these assessment tools, but increase number of homework assignments to more than just one (the expectation here would be that providing opportunities to interact with the material more frequently would help better meet the learning objective). In future, I could convert the survey question into an essay or group discussion assignment. I would also assess the SLO in lab activities. (04/18/2014)

02/11/2018 Generated by Nuventive Improve Page 14 of 212

course – this would indicate enhanced understanding among students leaving the course.

Exam - Course Test/Quiz - Exam questions related to this topic will be used to assess this SLO.

Target for Success: 75% of the students will get the exam questions related to this topic correct.

Program Review Reporting Year: 2016-2017

Target: Target Met

18/23 students who took the exam, had the correct

answer. 78.2%. (08/09/2017)

Reflection (CLICK ON ? FOR INSTRUCTIONS): The data collected from the SLO Assessment for Biol.40B indicates that 78% of the students demonstrated the ability to apply basic knowledge regarding the structure and function of the respiratory system to predicting its responses in maintaining homeostasis.

Enhancement: The SLOs for Biol. 40 B were assessed during the summer 2017 summer quarter. The data was collected from one class section with 24 students only and it was taught in six weeks. The students had more time to focus and concentrate on the subject and get more attention from the instructor hence the percentage of the SLO results might be higher. An enhancement to the process would be to perform the assessment is a regular 12 week quarter and a larger sample of students. (09/21/2017)

the cardiovascular system in maintaining homeostasis.

SLO Status: Active

BIOL40B_SLO_2 - Appraise the role of Exam - Course Test/Quiz - Students completed three homework assignments composed of a variety of questions (online guiz format) and a written exam that evaluated understanding of the various concepts captured in this SLO. Students had the option to have a second attempt at each homework assignment after reflecting on responses from first attempt. Average class scores are used because various questions were used to assess SLO.

> Target for Success: I had two targets for success. 1) I wanted to see class average score of 80% or more in homework assignments/quizzes, and evidence that students were taking advantage of the two attempt

Program Review Reporting Year: 2013-2014

Target: Target Met

Providing students with option to take homework assignment twice improved their performance and provided a chance for reflection on incorrect answers and correction of misconceptions on key concepts. The 86% average score on homework assessment and 77% score in accompanying exams met the >80% (homework average) and >75% (exam average) targets respectively. (04/18/2014)

Reflection (CLICK ON? FOR INSTRUCTIONS): Most students were already familiar with the cardiovascular system (blood, heart and blood vessels) before taking the course. The high homework assignment scores indicate enhanced and accurate understanding of key concepts assessed. The exam average score for this SLO is evidence that target success was achieved.

Enhancement: I will continue to use these assessment tools and potentially include the assessment of this SLO in lab activities. (04/18/2014)

format to enhance their understanding of the various concepts the assignments were designed to assess. 2) I also wanted to see class average scores of at least 75% on the lecture exam, which would indicate a high level of competency among students leaving the course.

Exam - Course Test/Quiz - Exam questions related to this topic will be Target: Target Not Met used to assess this SLO.

Target for Success: 75% of the students will get the exam questions related to this topic correct.

Program Review Reporting Year: 2016-2017

15/23 students who took the exam had the correct answer.

65.2 %. (08/09/2017)

Reflection (CLICK ON ? FOR INSTRUCTIONS): The Data collected from the SLO Assessment for Biol.40B indicates that more than 65% of the students were successful in demonstrating their knowledge in the function of cardiovascular system in maintaining homeostasis.

Enhancement: The SLOs for Biol. 40 B were assessed during the summer 2017 summer quarter. The data was collected from one class section with 24 students only and it was taught in six weeks. The students had more time to focus and concentrate on the subject and get more attention from the instructor hence the percentage of the SLO results might be higher. An enhancement to the process would be to perform the assessment is a regular 12 week quarter and a larger sample of students.

(09/21/2017)

BIOL40B_SLO_3 - Apply the structural organization of the the nervous system to how it processes information.

SLO Status: Active

Exam - Course Test/Quiz - Students completed six homework assignments consisting of a variety of questions (online guiz format) and a written exam that evaluated understanding of the various concepts captured in this SLO. Homework assignments included two attempts (with compulsory intervening period between attempts for student reflection). Average class score used because

Program Review Reporting Year: 2013-2014

Target: Target Met

Providing students with option to attempt each homework assignment twice improved their performance and provided a chance for reflection on incorrect answers and correction of misconceptions on key concepts. The 84% average score on homework assessment and 77% score in accompanying exams met the >80% (homework average) and >75% (exam average) targets respectively. (04/18/2014)

Reflection (CLICK ON? FOR INSTRUCTIONS): The SLO is very broad and the knowledge very complex (encompassing the structure and organization of the nervous system as

Enhancement: I will continue to use these assessment tools, but try to simplify them in order to assess specific aspects of this broad SLO. For example, the nervous system is complex and it would be instructive if the structural organization was narrowed further so that an understanding of the various concepts about information

various questions were used to assess SLO.

Target for Success: I had two targets for success. 1) I wanted to see class average score of 80% or more in homework assignments/quizzes, and evidence that students were taking advantage of the two attempt format to enhance their understanding of the various concepts the assignments were designed to assess. 2) I also wanted to see class average scores of at least 75% on the lecture exam, which would indicate a high level of competency among students leaving the course.

well as how it processes information). To assess the breadth of understanding, I used multiple homework assignments and two exams. Overall, students appreciated homework assignment format as helpful in enhancing understanding of key concepts.

processing of the various structural components were assessed more precisely. Since laboratory instruction is an important part of this course, I would also include the assessment of this SLO in lab activities. (04/18/2014)

Exam - Course Test/Quiz - Exam questions related to this topic will be used to assess this SLO.

Target for Success: 75% of the students will get the exam questions related to this topic correct.

Program Review Reporting Year: 2016-2017

Target: Target Met

20/24 students (83.3%) who took the exam had the correct

answer. (07/17/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): The data collected from the SLO Assessment for Biol.40B indicates that more than 83% of the students understood the relation of the structure of the nervous system and processing neural information.

Enhancement: The SLOs for Biol. 40 B were assessed during the summer 2017 summer quarter. The data was collected from one class section with 24 students only and it was taught in six weeks. The students had more time to focus and concentrate on the subject and get more attention from the instructor hence the percentage of the SLO results might be higher. An enhancement to the process would be to perform the assessment is a regular 12 week quarter and a larger sample of students. (09/21/2017)

BIOL 40C:Human Anatomy and Physiology

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
BIOL40C_SLO_1 - Predict the homeostatic responses of the endocrine system to internal and external changes or stimuli. SLO Status: Active	Other - Small group In-class exercise involving graphing and analysis of data. Completion of follow-up questions designed to determine if the students understand the experimental results and if they are able to explain these results using previously studied information. Target for Success: Correct presentation and analysis of data. Correct reasoning and explanation of results with a demonstrated proficiency determined as at 3 correct answers out of 4.	Program Review Reporting Year: 2011-2012 Target: Target Met The average score on this exercise was 4/5. 32/78 students (41%) scored 5/5 12/78 students (15%) scored 3/5. No students scored below 3/5. (07/03/2012) Reflection (CLICK ON? FOR INSTRUCTIONS): Difficulties students had included: Problems with graphing and data analysis Understanding /application of the concept of negative feedback	Enhancement: Review of graphing and basics of negative feedback prior to exercise. (04/08/2013)
	Laboratory Project - In lab, worksheets were utilized to have the students analyze the various methods of homeostasis as it relates to each endocrine organ. To achieve this, students were to draw feedback mechanisms for several endocrine glands such as the various Hypothalamic-Pituitary pathways. Target for Success: For lab worksheets (because they are done in groups) the target goal is 90% correct.	Program Review Reporting Year: 2017-2018 Target: Target Met Lab Worksheets – 95% of students (~50/62) were able to analyze the mechanisms correctly related to the SLO. (12/16/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): I am very pleased with the results of the lab worksheet related to the endocrine anatomy and physiology. This shows that the students understood the mechanisms.	Enhancement: The next time I teach this course, I plan to spend more time on the material during lecture utilizing more drawings and videos to explain the concepts and then providing students with endocrine feedback loop in-class exercises to complete. (12/19/2017)
	Exam - Course Test/Quiz - Students were given several questions on the lecture exam to assess their knowledge of these mechanisms.	Program Review Reporting Year: 2017-2018 Target: Target Not Met Lecture Exam - 68% of students were able to achieve 70% minimum of answering the twenty-five questions related to	Enhancement: The next time I teach this course, I plan to spend more time on the material during lecture utilizing more drawings

Lecture Exam - 68% of students were able to achieve 70% minimum of answering the twenty-five questions related to this SLO correctly. (~42/62 students) (12/19/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): The lecture exam questions ranged from easy to very difficult so I am not surprised by the outcome. This illustrates that most students understand the mechanisms, but some did not teach this course, I plan to spend more time on the material during lecture utilizing more drawings and videos to explain the concepts and then providing students with endocrine feedback loop in-class exercises to complete. (12/19/2017)

Target for Success: For lecture exam

questions, the target goal is 70%

the material

correct for 25 questions regarding

and were not able to answer multiple choice and essay questions related to the material correctly

BIOL40C_SLO_2 - Appraise the role of the lympathic and immune system in the body's defense to disease.

SLO Status: Active

Presentation/Performance -

Students were asked to act out the steps of the immune response. They were provided with all the 'props' to act out their cellular 'roles'.

Target for Success: Basic understanding of the processes carried out by the cells of the immune system and the mechanisms by which these processes protect and clear antigens from the body.

Laboratory Project - Utilizing questions on lab worksheets, students were asked questions (multiple choice, fill in the blanks, matching, etc.) to analyze their understanding.

Target for Success: Lab Worksheet Questions – 90% success in answering the questions correctly

Exam - Course Test/Quiz - Utilizing questions on lecture exams, students were asked questions (multiple choice, fill in the blanks, matching, etc.) to analyze their understanding.

Target for Success: Lecture Exam Questions – 70% success in answering the questions correctly **Program Review Reporting Year: 2012-2013**

Target: Target Met

Students received a group score based on the recognition of correct 'props' needed by each cell type and the demonstration of the sequential steps of the specific and non-specific immune responses.

Students worked through the exercise until they felt they understood both processes. (02/11/2014)

Reflection (CLICK ON ? FOR INSTRUCTIONS): Students enjoyed this activity and commented that it helped their understanding.

Program Review Reporting Year: 2017-2018

Target: Target Met

Lab Worksheet Questions – 95% of students (\sim 59/62) were able to complete the lab questions related to the SLO correctly. (12/19/2017)

Reflection (CLICK ON ? FOR INSTRUCTIONS): I am very pleased with the students' performance in lab and their understanding of various complex mechanisms related to the lymphatics and immune system.

Program Review Reporting Year: 2017-2018

Target: Target Not Met

Lecture Exam Questions – 60% of students (~

Lecture Exam Questions -60% of students (~37/62) achieved the goal of 70% or above on 25 exam questions related to this SLO. (12/19/2017)

Reflection (CLICK ON ? FOR INSTRUCTIONS): Student success on the exam was below my expectation.

Enhancement: The props used for this exercise receive heavy use and several 'props' are in need of replacement or repair. (02/11/2014)

teach this course, I plan to do an enhanced immunity lab utilizing materials that will help explain the immune process (drawings, student creation of posters, a physiological experiment relating to antibodies.) (12/19/2017)

Enhancement: The next time I

Enhancement: Because student success on the lecture exam fell below my expectations, I will analyze the questions in the future to ensure that they are not too difficult as well as rewording/changing the type of questions. I will also do the above in laboratory to enhance understanding. (12/19/2017)

BIOL40C_SLO_3 - Generalize the way in which nutrients are processes to perform various energetic and structural functions in the body.

SLO Status: Active

Exam - Course Test/Quiz - 50 multiple choice examination questions were given that were meant to assess the student's understanding of the fate of

Program Review Reporting Year: 2012-2013

Target: Target Met

The scores on this exam ranged from 60%-96% with an average score of 73%. (04/03/2014)

Reflection (CLICK ON? FOR INSTRUCTIONS): The average

Enhancement: An activity in which students create a storyboard and then step through he processes of glycolysis, the citric acid cycle, and

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
	ingested nutrients (carbohydrates, proteins, and lipids) and the flow of energy from foodstuff to ATP production. These questions built upon one another and varied in the level to which they tested a student's ability to apply foundational information to novel Target for Success: General understanding of ways in which ingested nutrients are metabolized and utilized by the body General understanding of the physiological processes involved in the production of ATP with emphasis on the significant products of each step in the process	score on this exam was a C with scores following a normal distribution.	oxidative phosphorylation will be implemented Spring 14 and used to enhance the worksheet-type activities used to reinforce this material. (04/03/2014)
	Other - Students were given a 3-day (2 hour per day) lecture on the various mechanisms in which nutrients are processed. Questions were posed orally to students during the lecture and videos were utilized to further their understanding of the material. During the 2-week analysis of the material, students were asked to assess the anatomy of each structure and the function of each structure. Target for Success: Oral questions – 85% correct	Program Review Reporting Year: 2017-2018 Target: Target Met Oral Questions – Approximately 90% of students (~56/62) were able to answer the oral questions posed during class discussion related to the SLO. (12/19/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): I am overall pleased with the ability of the students who volunteered to answer the questions posed correctly	Enhancement: Next time I teach this course, I plan to randomly select students to answer the questions to get better overview of understanding of the material. (12/19/2017)
	Laboratory Project - Students were given a 3-day (2 hour per day) lecture on the various mechanisms	Program Review Reporting Year: 2017-2018 Target: Target Not Met Experimental Procedure – Approximately 50% (~31/62) of	Enhancement: Next time I teach this course, I will change the process in which the digestion

Laboratory Project - Students were given a 3-day (2 hour per day) lecture on the various mechanisms in which nutrients are processed. Students performed physiological digestion by utilizing amylase and starch in various scenarios to see if the breakdown of nutrients occurred. They were then tested

Experimental Procedure – Approximately 50% ($^31/62$) of the class were able to follow the instructions and receive the correct outcome of the experiment that is related to the SLO. ($^12/19/2017$)

Reflection (CLICK ON ? FOR INSTRUCTIONS): There was obviously issues related to the understanding of experimental procedures as well as a problem with

Enhancement: Next time I teach this course, I will change the process in which the digestion experiment is performed providing my own instruction sheet (not utilizing the lab manuals instructions) and make sure of student understanding of the

02/11/2018 Generated by Nuventive Improve Page 20 of 212

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
	utilizing practical examination questions about the structure and function. Target for Success: Experimental Success – 90% correct in following the procedure and receiving the expected outcome.	materials provided that were provided leading to this very low correct outcome.	material before beginning the experiment. Further, I plan to discuss the concentrations of the materials provided to ensure they will work properly with the lab tech. (12/19/2017)
BIOL40C_SLO_4 - Integrate the structure and function of the kidneys in the regulation of fluid, electrolyte, and pH balance. SLO Status: Active	Other - Students were provided data regarding urine output and urine osmolarity for three experimental cohorts that had ingested different solutions. Students graphed data and analyzed results with regards to renal function and hormonal control of water balance and body fluid composition Target for Success: Basic understanding of the role of the kidneys in the maintenance of body fluid volume and composition as demonstrated by the correct interpretation of experimental results and the application of renal physiology to explain these results.	Program Review Reporting Year: 2012-2013 Target: Target Met Students received points for: correct graphing of data, correct analysis of dats, and correctly answering questions relating to graphically displayed results and hormonal control of ECF osmolarity. Scores ranged between 5pts-8pts out of a possible 8 total points. The average score was 7/8 (02/11/2014) Reflection (CLICK ON? FOR INSTRUCTIONS): Students had the most difficulty in the graphing portion of this exercise. The also had to be cautioned against searching for answers using their electronics rather than using their notes and critical thinking skills.	Enhancement: A pre-activity discussion on graphing techniques is planned for the next time this activity is scheduled. (02/11/2014)
	Exam - Course Test/Quiz - During laboratory, students were asked to analyze the structure of the kidney utilizing various models. Lab worksheets were utilized for them to understand the regulation of fluids, electrolytes, and pH balance as it is associated with the kidney. Experiments included utilizing urine testing strips and four different artificial urine types to look at values for the various components found in	Program Review Reporting Year: 2017-2018 Target: Target Met Of the three lab questions, approximately 76% of students (~47/62) were able to answer all questions correctly related to the SLO. (12/19/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): I am pleased that the students showed understanding of the complex material related to the SLO.	Enhancement: I will continue to ask diverse types of questions during laboratory related to the SLO. (12/19/2017)

urine (pH, glucose, specific gravity, leukocytes, etc.) On a subsequent

lab exam, there were questions asked regarding this material. **Target for Success:** Experimental results and Understanding – 3 lab exam questions regarding the experimental material with an 70% success rate.

Other - During laboratory, students were asked to analyze the structure of the kidney utilizing various models. Lab worksheets were utilized for them to understand the regulation of fluids, electrolytes, and pH balance as it is associated with the kidney. Experiments included utilizing urine testing strips and four different artificial urine types to look at values for the various components found in urine (pH, glucose, specific gravity, leukocytes, etc.) During lecture, students were asked to complete a take-home acid/base worksheet specific to the kidney's role in acid/base (pH) homeostasis. Target for Success: Acid/Base Worksheet - 80% success rate for completion of the worksheet without error.

Program Review Reporting Year: 2017-2018

Target: Target Met

Acid/Base Worksheet – approximately 88% of students (~55/62) were able to complete the take-home assignment (related to the SLO) without error. (12/19/2017)

Reflection (CLICK ON ? FOR INSTRUCTIONS): I am pleased by the student's performance on the take-home acid/base worksheet.

Enhancement: I would like to assess student understanding inclass instead of by homework of acid/base relationships to the kidney. To achieve this, I will have the students work in small groups to complete the problems provided within the lecture presentation. (12/19/2017)

BIOL 45:Introduction to Human Nutrition

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

topic. (06/29/2017)

Enhancement: For the next

assessment, I will make sure that

the assessment regarding this

more time is spent in class prior to

BIOL45_SLO_1 - Demonstrate a coherent understanding of the relationship between diet and the major chronic diseases.

SLO Status: Active

Project - One of the questions on the Diet Assignment asks students "In what ways does your diet help to reduce your risk of developing cardiovascular disease, diabetes and cancer? In what ways does your diet increase risk of developing these diseases? This question is worth 10 points out of the 100 that the entire Diet Assignment is worth.

Target for Success: 80% of the class earns 7-10 points on this question.

Program Review Reporting Year: 2016-2017

Target: Target Met

90% of the class earned between 7-10 points on this

question. (06/29/2017)

Reflection (CLICK ON ? FOR INSTRUCTIONS): I feel this project assessed this SLO effectively and it was good that the target was met in this assessment.

Program Review Reporting Year: 2013-2014

Target: Target Not Met

75% of the students taking Biology 45 (2 sections) during winter quarter scored 7-10 points on this question.

(04/19/2014)

Reflection (CLICK ON ? FOR INSTRUCTIONS): Writing coherently, organizing ideas and information are areas that many students need to improve, in order to earn higher scores on this question. There is room for improvement.

Enhancement: The top areas for students to improve include organizing their information better (editing their work) and including more dietary factors that influence the chronic diseases. A voluntary out-of-class workshops for peer reviewing of this essay could potentially help students to do better. (04/21/2014)

BIOL45_SLO_2 - Evaluate a meal plan or diet for meeting the criteria of a "healthy diet."

SLO Status: Active

Project - 2 questions on the Diet
Assignment ask students to list the
ways their diet (from a 3-day food
record and subsequent,
computerized nutritional analysis) is
healthy and nutritious and in what
ways it is not. Additionally, students
are asked to come up with
suggestions for specific
modifications of their food choices
on those 3 days that would "fix"
those nutritional shortcomings.
These 2 questions together make up
30 points out of 100 for the entire

Target for Success: 80% of the class earns 21-30 points (70-100%), combined, on these 2 questions.

Diet Assignment.

Program Review Reporting Year: 2016-2017

Target: Target Met

90% of the class earned 21-30 points combined on the 2

questions. (06/29/2017)

Reflection (CLICK ON ? FOR INSTRUCTIONS): This assessment was effective for this SLO. I'm glad that the target was met.

Program Review Reporting Year: 2013-2014

Target: Target Not Met

During winter quarter 2014, 78% of the students (total, in 2 sections) met the target. (04/19/2014)

Reflection (CLICK ON ? FOR INSTRUCTIONS): The target was met but there is room for improvement.

Enhancement: Prior to the next assessment, I will focus more on this topic in the lecture to increase student understanding. (06/29/2017)

Enhancement: Giving students an opportunity to peer review their early drafts of their answers to these questions would help students to get help and help each other in making their answers accurate and complete. (04/20/2014)

Student Learning
Outcomes (SLOs)

Assessment Methods Assessment Data Summaries Enhancements

02/11/2018 Generated by Nuventive Improve Page 24 of 212

BIOL 54G:Applied Human Anatomy and Physiology: Levels of Organization

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
BIOL54G_SLO_1 - Define the characteristics of life and demonstrate an understanding of how homeostatic mechanisms are important to survival. SLO Status: Active	Exam - Course Test/Quiz - Evaluation of student responses for 2 Select questions on TEST # 1 regarding this objective. Target for Success: For each question, at least 75% of the student will choose the correct answer.	Program Review Reporting Year: 2016-2017 Target: Target Met Assessment Data Summary: Percentage of students scoring these two questions correctly: 84.5% for item # 1 82% for item # 2. (05/08/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): This SLO requires that student's understand the basic characteristics of life, which includes an organisms internal mechanisms to maintain homeostasis. This material is presented in both lecture and the text as well as in lab reports. The 75% SLO target is being met with 84.5% of the students achieving this objective.	Enhancement: Keep the SLO but will raise the target to 80%, (05/14/2017)
		Program Review Reporting Year: 2013-2014 Target: Target Met Assessment Data Summary: Percentage of students scoring these two questions correctly: 89% for item # 1 81% for item # 2. (12/10/2013) Reflection (CLICK ON ? FOR INSTRUCTIONS): Keep the SLO .	Enhancement: Keep the SLO . (04/18/2014)

02/11/2018 Generated by Nuventive Improve Page 25 of 212

BIOL 54H:Applied Human Anatomy and Physiology: Support, Movement, and Integration

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
BIOL54H_SLO_1 - Describe the macroscopic and microscopic aspects of a long bone and their function. SLO Status: Active	Exam - Course Test/Quiz - Evaluation of student responses for one select question on TEST # 1 regarding this objective. Target for Success: At least 75% of the students will accurately answer the question.	Program Review Reporting Year: 2016-2017 Target: Target Met 77% of the students answered this item correctly on test 1. (05/08/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): The content that supports the achievement of this SLO is presented in lecture (power point images and using models of bones), in the text. Students also complete multiple questions on this topic in lab report # 12. The SLO 75% target is being met.	Enhancement: Will increase the expectation to 80% for the next SLO cycle. (05/14/2017)
		Program Review Reporting Year: 2013-2014 Target: Target Met 75.2% of the students answered this item correctly on test 1. (12/10/2013) Reflection (CLICK ON ? FOR INSTRUCTIONS): Keep the SLO. Evaluate this SLO next time in lab reports as well as a test question.	Enhancement: Keep the SLO. Evaluate this SLO next time in lab reports as well as a test question. (04/18/2014)

BIOL 54I:Applied Human Anatomy and Physiology: Coordination and Transport

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

BIOL54I_SLO_1 - Apply principles of homeostasis and distinguish between the mechanisms that regulate hormones and cardiovascular function.

SLO Status: Active

Exam - Course Test/Quiz -

Evaluation of student responses for 2 questions (one question from Test # 1 and one question from Test # 3) regarding this objective.

Target for Success: For each question, at least 75% of the student will choose the correct answer.

Program Review Reporting Year: 2016-2017

Target: Target Met

Percentage of students scoring these two questions

correctly:

79.4%for item # 1

82.3% for item # 2. (05/08/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): Students show a slight improvement in achieving this objective. This SLO requires that students apply their understanding of homeostatic mechanisms to the regulation of the Cardiac Cycle and maintenance of hormone levels. The 75% target is being met.

Program Review Reporting Year: 2013-2014

Target: Target Met

Percentage of students scoring these two questions

correctly:

76%for item # 1

80% for item # 2. (03/18/2014)

Reflection (CLICK ON? FOR INSTRUCTIONS): This SLO requires that the students apply their understanding of homeostatic mechanisms to the regulation of the Cardiac Cycle and maintenance of hormone levels. The 75% target is being met.

Enhancement: This material is presented to students in lecture, (power point notes & with the use of heart models) as well as in lab report exercises and the text which offers schematic diagrams and images. I have also added extra credit work that requires students to spend additional time with these concepts. I will keep the SLO and the75% target. (05/14/2017)

Enhancement: Keep the SLO . This material is currently emphasized in the text, the lecture and the lab manual. I will incorporate this SLO into an extra credit activity that is available to the students on the endocrine system . (03/18/2014)

BIOL 54J:Applied Human Anatomy and Physiology: Absorption, Excretion, and Reproduction

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
BIOL54J_SLO_1 - Evaluate the anatomy and general functions of the human digestive system. SLO Status: Active	Exam - Course Test/Quiz - Evaluation of student responses for one select question on TEST # 1 regarding this objective. Target for Success: At least 75% of the students will accurately answer the question.	Program Review Reporting Year: 2016-2017 Target: Target Met 82% of the students answered this item correctly on test 1. (05/08/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): Evaluation of one lab report exercise and one question on test 1 indicates that 84.6% if students are meeting this SLO. The content of this SLO is presented in one lab report, one lecture (power point slides) and in chapter 15 of the text. The SLO 75% target is being met.	Enhancement: Keep the SLO. Will increase the SLO achievement target to 79% for the next SLO cycle. (05/14/2017)
		Program Review Reporting Year: 2013-2014 Target: Target Met 83% of the students answered this item correctly on test 1. (03/18/2014) Reflection (CLICK ON? FOR INSTRUCTIONS): The content of this SLO is emphasized in chapter 15 of the text and evaluated on Test # 1. The SLO 75% target is being met.	Enhancement: Keep the SLO. Evaluate this SLO next time in lab reports as well as a test question. (03/18/2014)

Generated by Nuventive Improve Page 28 of 212

BIOL 6A:Form and Function in the Biological World

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

BIOL6A_SLO_1 - Analyze and compare the process of homeostasis as applied to common physiological processes across higher taxonomy. SLO Status: Active

Exam - Course Test/Quiz - Several selected exam questions specifically targeting student achievement in analyzing and comparing the processes of homeostasis as applied to common physiological processes across higher taxonomy. Successive exams over the course of the quarter continue assessing application of these skills to alternative examples of physiological processes and taxonomic groups.

Target for Success: Class scores on these targeted questions at, or exceeding, the overall class scores on these exams.

Program Review Reporting Year: 2016-2017

Target: Target Not Met

In order to assess this SLO for my class, I am using questions from the final exam. I included 8 questions that focus on homeostasis in physiological processes. Students scored as average of 60% on these questions. The average on the final exam was 69%. (07/02/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): In looking at the questions I included for this assessment, the questions with the lowest levels of understanding were those related to kidney function. I believe this is due, at least in part, to the fact that it is the last topic we cover at the end of the quarter. I believe more time is necessary for students to achieve higher levels of understanding.

Enhancement: In order to improve levels of understanding of homeostasis in physiological systems, I am first going to focus on kidney function because this seems to be an area of difficulty for students. I am going to add a white board component to lab in which various osmotic scenarios are presented to students and they will draw the tubules and indicate the movement of water and salts in their drawing. This will be followed up with online exercises to direct students to the most important ideas. (07/02/2017)

Program Review Reporting Year: 2012-2013

Target: Target Met

Class scores on these targeted questions exceed the overall class scores on these exams. (07/13/2012)

Reflection (CLICK ON ? FOR INSTRUCTIONS): Current instructional methods and resources are adequately achieving these learning outcomes. It is always beneficial to seek new examples of physiological processes and organisms to use to demonstrate homeostasis.

Enhancement: Incorporating an outline system of homework assignments to expand the exposure throughout the quarter of each student to broader examples of physiological processes and organisms to demonstrate homeostasis. (07/13/2012)

BIOL6A_SLO_2 - Apply the principles of the scientific method to critique case studies in comparative biology research.

SLO Status: Active

Exam - Course Test/Quiz - Several selected quiz questions embedded within biweekly online exercises specifically targeting student achievement in analyzing and using the processes of scientific methodology as applied to comparative biology research. Successive online quiz questions

Program Review Reporting Year: 2016-2017

Target: Target Met

For this assessment, which was initially written by another instructor, I do not have online quiz scores to use as an assessment tool. I will be using scores on an assignment on Scientific Method which presents a case study and requires students to explain aspects of it. Students scored 82% on this assignment. My target for this assessment is an average minimum of 70%.

Enhancement: In order to improve students' understanding of Scientific Method and its application to case studies, I will add Mastering Biology's online quizzes that enable instructors to direct students to focus on specific important aspects of each topic. Mastering Biology is the tool

Assessment Methods

Assessment Data Summaries

Enhancements

over the course of the quarter continue assessing application of these skills to varied examples of biological processes and taxonomic groups.

Target for Success: Class scores on these targeted questions at, or exceeding, the overall class scores on these online quizzes.

(07/02/2017)

Reflection (CLICK ON ? FOR INSTRUCTIONS): Students demonstrated a B-level understanding of this topic based on this assignment. While my target was met, I would like to see a higher level of understanding because Scientific Method is an important aspect of the foundation Biology 6A strives to build.

sed instr like Mast fic decidency ogy class

initially specified in this SLO assessment, as written by another instructor. After discussing Mastering with this instructor, I decided to implement it in my class, as well. (07/02/2017)

Program Review Reporting Year: 2013-2014

Target: Target Met

Class scores on these targeted questions match the overall class scores on these online exercises. (04/20/2014)

Reflection (CLICK ON? FOR INSTRUCTIONS): Current instructional methods and resources are adequately achieving these learning outcomes. It is always beneficial to seek new examples of studies in physiological processes and biological diversity to demonstrate scientific methodologies.

Enhancement: Incorporating an Adaptive Follow-Up component to the online system of assignments to target reinforcement of concepts specifically to each individual student demonstrating difficulty with those particular concepts. (04/20/2014)

BIOL6A_SLO_3 - Contrast the Linnaen traditional phylogenetic and cladistic processes of taxonomy.

Exam - Course Test/Quiz - Several selected quiz questions embedded within biweekly online exercises

SLO Status: Active

selected quiz questions embedded within biweekly online exercises specifically targeting student achievement in using and contrasting the different methods and rationales of biological taxonomy. Successive online quiz questions over the course of the quarter continue assessing application of these skills to varied examples and levels of taxonomic groups.

Target for Success: Class scores on these targeted questions at, or exceeding, the overall class scores on these online guizzes.

Program Review Reporting Year: 2016-2017

Target: Target Met

In assessing my class for this SLO, which was written by another instructor, I will use questions from my final exam rather than on-line quizzes.

On my final exam, there were 5 questions that assessed understanding of the differences between Linnaean (Traditional) and Cladistic Taxonomy. The class averaged 92% on these questions. The mean score on the exam was 69.1%. These scores illustrate an excellent understanding of this topic.

Historically, students struggled with the ideas in this topic, and scored extremely low on exam questions. The quarter of this assessment, I instituted a new approach to improve student understanding of this challenging topic. I wrote a lab in which groups of students classify inanimate objects, and draw the resulting cladograms on white boards. This lab went extremely well, and students demonstrated a much deeper understanding in class discussions, and as noted above, on the final exam. (07/02/2017)

Enhancement: I believe 92% on the final exam, which was several weeks after the topic was covered in class, demonstrates success of the Student Learning Outcome. As an enhancement, I will be using Mastering Biology's online assessment tools, as mentioned in the original SLO assessment strategy. I believe using online tools, such as open book online quizzes, allows instructors to guide students to the important concepts. (07/02/2017)

pleased with the outcome of the enhancement I added. Drawing on white boards increased student engagement and discussion and was instrumental in achieving the level of understanding demonstrated in this assessment. I will continue to use white boards, and expand their use to other challenging topics.

Program Review Reporting Year: 2013-2014

Target: Target Met

Class scores on these targeted questions exceed the overall class scores on these online exercises. (04/20/2014)

Reflection (CLICK ON? FOR INSTRUCTIONS): Current instructional methods and resources are adequately achieving these learning outcomes. It is always beneficial to seek new examples of comparative morphology and molecular diversity to demonstrate relative utility of contrasting taxonomic systems.

Enhancement: Incorporating an Adaptive Follow-Up component to the online system of assignments to target reinforcement of concepts specifically to each individual student demonstrating difficulty with those particular concepts. (04/20/2014)

BIOL 6B:Cell and Molecular Biology

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
BIOL6B_SLO_1 - Demonstrate the ability to use appropriate molecular biology techniques to answer research questions and to interpret ans explain the results. SLO Status: Active	Exam - Course Test/Quiz - Lab exam questions. Target for Success: 80% correct on questions relevant to this objective.	Program Review Reporting Year: 2011-2012 Target: Target Met Class average of 80% correct on lab exam concept questions. (07/03/2012) Reflection (CLICK ON? FOR INSTRUCTIONS): Most students are meeting this objective.	Enhancement: Continue with current approach. (07/03/2012)

BIOL 6C:Ecology and Evolution

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

BIOL6C_SLO_1 - Design and compute an independent ecological research project.

SLO Status: Active

Project - The assessment tool that I used was a rubric. 150 points were possible. Students were graded on content (data collection, analysis, and report of findings), oral presentation, poster aesthetics, and their field notebooks.

Target for Success: At least 112.5 (70%) points earned.

Program Review Reporting Year: 2016-2017

Target: Target Met

Students' use of statistical analysis this year was much improved over last year, although since this is not the only criterion for grading, this is not explicitly apparent in the overall all project grades. This quarter, I instituted pre- and post-lab quizzes (open book through Canvas) that helped direct students through the statistics labs, and allowed me to highlight those aspects of the labs that were particularly important. The outcome of this additional instruction and direction was that students had better experimental designs with statistical tests incorporated into the planning of data collection. Students also demonstrated a deeper understanding of their statistical analysis in both their write-ups (their posters) and in their oral poster presentations.

Students complete their projects in groups of 3-5 students. There were 16 groups.

7 students scored between 116 and 120 (2 groups) 8 students scored between 126 and 130 (2 groups) 5 students scored between 131 and 135 (1 group) 17 students scored between 136 and 140 (4 groups) 12 students scored between 141 and 145 (3 groups) 17 students scored between 146 and 150 (4 groups)

The mean score this quarter was 137.8/150.

As I mentioned above, statistical analysis is not the only criterion used in grading the research projects, so while the overall project scores did not improve, I still noticed an improved overall understanding.

All students did score above 112.5% (70%), so in that sense the target was met. (06/28/2017)

Reflection (CLICK ON ? FOR INSTRUCTIONS): This project is a very big part of the 6C course, and I feel it provides students with an extremely valuable experience. Every

Enhancement: Now that students are designing their studies with the use of a particular statistical test in mind, I would like them to take that a step further and learn to collect and record data in a systematic way that lends itself to they type of analysis they will be using.

This year, notebooks were not all that impressive It was often difficult for them to find and organize the data they collected. It was also difficult for me to see what they had done.

Next year, I am going to incorporate a lab exercise in which we collect data in field notebook format. I am also going to have example pages posted on our website before their data collection begins. Finally, I am going to require they include a sample of their own notebook design with their Proposed Methods assignment, which must be approved before they begin data collection.

I think these enhancements will greatly improve the field notebook aspect of the field research project, and add to the value of the assignment. (06/28/2017)

0

4

22

140.0

145.0

150.0

(07/03/2012)Reflection (CLICK ON? FOR INSTRUCTIONS): Students performed very well on their projects. Everyone earned passing grades, and most students earned A?s. Although the projects were very well done, I would like to see more clarity on the students? presentation of their statistical analysis.

so my instructions will include references to the statistical analyses we did in those labs.

(04/08/2013)

HLTH 21:Contemporary Health Concerns

Student Learning Outcomes (SLOs)

HLTH21_SLO_1 - Appraise the interrelationship between individual lifestyle choices, societal influence and personal health.

SLO Status: Active

Planned Assessment Quarters: 2011-

12 4 -Spring

Outcome Creation Date: 12/31/2009

Assessment Methods

Project - Students compose a succinct, two-page paper that analyzes how personal choices (behaviors, issues, circumstances, etc) are affected by societal influences which ultimately impact personal health. Students choose no more than three personal choices to address and analyze them applying what they have learned in the class and experience in their communities and lives.

Target for Success: 80% of the students earn 80% (a B or higher) of the total points for the assignment

Assessment Data Summaries

Program Review Reporting Year: 2016-2017

Target: Target Met

Of the 28 students who turned in the project, 26 of them earned a B (80%) or higher grade on the assignment. Target was met. 4 students did not turn the assignment in. (08/03/2017)

Reflection (CLICK ON ? FOR INSTRUCTIONS): The target was met, and this continues to be forward progress in the assessment for this SLO. Enhancements will continue to be utilized in future assessments.

Enhancements

Enhancement: In the future, continued emphasis will be placed on encouraging all students to submit work. Students will be encouraged to work on their writing and analytical skills by using on-campus resources. Additionally, students will be encouraged to view themselves as individuals who are members of a family, community, and society in order to increase their self-reflection for this project. (10/05/2017)

Program Review Reporting Year: 2016-2017

Target: Target Met

Of the 32 students that turned in the project, 27 of them received a B (80%) or higher grade on the assignment. (06/09/2017)

Reflection (CLICK ON ? FOR INSTRUCTIONS): The target was met, and this was a good first step forward in the assessment for this SLO. Enhancements will be utilized in future assessments.

Enhancement: In the future, a stronger emphasis will be placed on encouraging all students to submit work. Students will be encouraged to work on their writing and analytical skills by using on-campus resources. Additionally students will be encouraged more strongly to view themselves as individuals who are members of a family, community, and society in order to increase their self-reflection in this project. (06/18/2017)

HLTH 57A:First Aid for the Community, Home, Wilderness, and Disasters

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
Outcomes (SLOs) HLTH57A_SLO_1 - Demonstrate life saving skills in care of injuries and sudden illness as specified by the American Red Cross. SLO Status: Active Outcome Creation Date: 12/31/2009	Demonstration - Main assignment/activity: 1) Red Cross multiple choice exam 2) Splinting and bandaging injuries Target for Success: 85% achieving the SLO would be satisfactory	Program Review Reporting Year: 2009-2010 Target: Target Met (With the exception of one student who stopped attending) all students passed all the practical skills tests. 22 of 23 passed the written exam for certification and earned the certification. The Red Cross allows two tries at the 25-question multiple choice exam for certification. 19 of 23 students passed the exam on their first try (four students had perfect scores, four missed one question, two missed eight questions on their first try). Of the four who needed a second try, three passed. A last class day survey of the students (not all students replied): I know when to use the skills I learned in this course: 8 students strongly agree, 9 students agree, 0 disagree, 2 not sure I have confidence I can do the skills correctly: 5 students strongly agree, 12 students agree, 0 disagree, 2 not sure (03/16/2010)	Enhancement: In the future I will have students answer questions the Red Cross asks me to ask in class during lecture as homework as well as lecture, so that everyone thinks in more detail about them. (04/20/2010)
	Demonstration - Demonstration Main assignment/activity:	Reflection (CLICK ON? FOR INSTRUCTIONS): The only issues we have with the class besides students who do not certify due to lack of attendance, are those who fail two tries at the Red Cross multiple choice exam. Program Review Reporting Year: 2014-2015 Target: Target Met	Enhancement: I have found that by assigning the questions the Re

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
	1) complete a primary assessment	(With the exception of three students who stopped attending) all students passed all the practical skills tests. A last class day survey of the students (not all students	Cross asks me to ask in class as homework, the students get better feedback on what they do
	2) Splinting and bandaging injuries	replied): I know when to use the skills I learned in this course: 11 students strongly agree, 8 students agree, 0	not fully understand and everyone thinks in more detail about each
	Target for Success: 85% achieving the SLO would be satisfactory	disagree, 0 not sure. I have confidence I can do the skills correctly: 7 students strongly agree, 10 students agree, 0 disagree, 2 not sure. (01/30/2015)	subject. I will continue this enhancement. (03/10/2015)
		Reflection (CLICK ON ? FOR INSTRUCTIONS): We still have	
		the issue of students who do not attend the entire class and do not qualify for the Red Cross certification.	
		But most of the class does well and qualifies for the certification if they want it.	

HLTH 57D:CPR/AED for the Professional Rescuer - Recertification

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HLTH57D_SLO_1 - Demonstrate life saving skills in respiratory and cardiac emergencies as specified by the American Red Cross. SLO Status: Course Not Currently Taught Outcome Creation Date: 12/31/2009	Demonstration - Main assignment/activity: 1) Red Cross multiple choice exam 2) Skills demonstration on manikins of CPR and automated external defibrillation Target for Success: 75% would be certified.	Program Review Reporting Year: 2009-2010 Target: Target Met Only one student was enrolled in this class for recertification that is taught in conjunction with HLTH 57E. He passed all the practical skills and the Red Cross exam for certification. A last class day survey: I know when to use the skills I learned in this course: 1 student strongly agrees, 0 students agree, 0 disagree, 0 not sure I have confidence I can do the skills correctly: 1 student strongly agrees, 0 students agree, 0 disagree, 0 not sure (03/15/2010) Reflection (CLICK ON ? FOR INSTRUCTIONS): The few students who enroll in this class are usually successful. This course is offered only to students with a current certification in CPR for the Professional Rescuer.	

Assessment: Course/Service Four Column



Dept - (BHES) Environmental Studies

E S 1:Introduction to Environmental Studies

Student Learning	
Outcomes (SLOs)	

Assessment Methods

Assessment Data Summaries

Enhancements

ES1 SLO_1 - Demonstrate a coherent Presentation/Performance understanding of environmental issues, their underlying causes and potential solutions from an interdisciplinary perspective.

SLO Status: Active

Students (working in small teams) developed and made a Final Presentation designed to convey their vision & blueprint for an environmentally sustainable city and how it fits in to their vision of a sustainable society. In so doing, they were asked to weave in as many aspects of the course as possible/ appropriate (such as sustainable resource use, pollution prevention, preservation of nature, environmental justice & ethics, etc.). After presenting, each team was then questioned by the instructor on various aspects of their presentation, with such questions designed to probe the depth of course knowledge and/or critical thinking skills of individual team members and/or the team as a whole.

Target for Success: 70% of students participating in the Final Presentation achieving at least a grade of 70% (C) for their Final

Program Review Reporting Year: 2015-2016

the objectives and outcomes of this course.

Target: Target Met

100% of the students (30 out of 30) participating in the Final Presentation achieved at least a grade of 70% (C) for their Final Presentation. (06/20/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): The targeted outcome for this course was achieved. In general, both faculty and students were satisfied with

Presentation.

ES1_SLO_2 - Demonstrate a coherent understanding of the relationships between human use and exploitation of natural resources, environmental and ecological concepts and possible solutions and sustainable practices.

SLO Status: Archived SLO Statement

Presentation/Performance - I.

Presentation/Performance - I.

Presentation/Performance - I.

Presentation Performance - I.

Students (working in small tear developed and made a Final Presentation designed to convert their vision & blueprint for an environmentally sustainable cit

Presentation/Performance Students (working in small teams) developed and made a Final Presentation designed to convey their vision & blueprint for an environmentally sustainable city and how it fits in to their vision of a sustainable society. In so doing, they were asked to weave in as many aspects of the course as possible/ appropriate (such as sustainable resource use, pollution prevention, preservation of nature, environmental justice & ethics, etc.). After presenting, each team was then guestioned by the instructor on various aspects of their presentation, with such questions designed to probe the depth of course knowledge and/or critical thinking skills of individual team members and/or the team as a

Target for Success: 70% of students participating in the Final Presentation achieving at least a grade of 70% (C) for their Final Presentation.

Related Documents:

whole.

JStaundinger SLOAC ES 1 Wi2013

Presentation/Performance -

Students synthesized the information that was learned in the class into a final presentation. The final presentation was graded based on information included, which was

Program Review Reporting Year: 2012-2013

Target: Target Met

100% of the students participating in the Final Presentation achieved at least a grade of 70% (C) for their Final

Presentation. (03/25/2013)

Reflection (CLICK ON? FOR INSTRUCTIONS): The targeted outcome for SLO #2 for this course (ES -001.-04) was achieved for the Winter 2013 quarter.

In general, both faculty and students were satisfied with the objectives and outcomes of this course.

Program Review Reporting Year: 2012-2013

Target: Target Met

100% of the students participating in the Final Presentation achieved at least a grade of 70% (C) in the course.

(03/25/2013)

Reflection (CLICK ON ? FOR INSTRUCTIONS): The targeted

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
	required to include cumulative information covered in the class. Target for Success: 90% of students participating in the Final Presentation achieving at least a grade of 70% (C) for their Final Presentation.	outcome for SLO #2 for this course (ES -00101) was achieved for the Winter 2013 quarter.	
	Related Documents: ADeToro SLOAC ES 1 Wi2013		

ES!_SLO_3 - Assess (apply) the criteria necessary to be successful in the Environmental Studies class.

SLO Status: Active

Outcome Creation Date: 09/01/2014

ES 2: Humans, the Environment, and Sustainability

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Program Review Reporting Year: 2016-2017

Enhancements

ES2_SLO_1 - Assess (apply) the criteria necessary to be successful in the Humans, the Environment and Sustainability class.

Sustainability class. **SLO Status:** Active

Presentation/Performance -

Students Presentations

Target for Success: Mean score of 70% or higher.

Conducted oral surveys in class to see if students knew the resources available in the department and different ways of contacting and availing of instructor's help 100% of

contacting and availing of instructor's help. 100% of students enrolled showed understanding of how to utilize

the resources in the department.

(07/10/2017)

Reflection (CLICK ON ? FOR INSTRUCTIONS): The target outcome for SLO 1 has been met for this course. E S

D002.01 Spring 2017

Target: Target Met

Enhancement: Extend SRC hours into the evening for greater access to all students (equity issue). (07/10/2017)

ES2_SLO_2 - Analyze and communicate the relationships between our health and the health of the environment in order to apply this information in a civic and community setting.

SLO Status: Active

Presentation/Performance -

Presentation/Performance Students (working in small teams) developed and made a Final Presentation designed to inform a general audience as to the importance and history of Humans, the Environment, and Sustainability (the overall subject of the course). In so doing, they were to address the major subjects/themes covered in the course (e.g., human evolution, human impacts on the environment, kev issues/obstacles to obtaining a sustainable society and potential solutions). After presenting, each team was then questioned by the instructor on various aspects of their presentation, with such questions designed to probe the depth of course knowledge and/or critical thinking skills of individual team members and/or the team as a whole.

Target for Success: 70% of students participating in the Final

Program Review Reporting Year: 2016-2017

Target: Target Met

84% was the average percentile of student scores on this assignment, showing that they comprehended the above-stated concepts targeted for success (via their written or oral evaluation) (04/05/2016)

Reflection (CLICK ON? FOR INSTRUCTIONS): Greater encouragement and persistence in urging students to complete all assignments. I have a great deal of communication with my students in class and via email, phone conversations and office visits. For example, numerous students visit me during office hours to seek additional help but I will do my best to incite even more student visits!

Program Review Reporting Year: 2011-2012

Target: Target Met

100% of the students participating in the Final Presentation achieved at least a grade of 70% (C) for their Final Presentation. (07/24/2012)

Reflection (CLICK ON? FOR INSTRUCTIONS): The targeted outcome for SLO #2 for this course (ES -002.-01) was achieved for the Spring 2012 quarter.

In general, both faculty and students were satisfied with the objectives and outcomes of this course.

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
	Presentation achieving at least a grade of 70% (C) for their Final Presentation.	Related Documents: ES 2 SLOAC JStaudinger Sp 2012	
	Related Documents: ES 2 SLOAC JStaudinger Sp 2012 Exam - Course Test/Quiz - A two- person team exam with questions to assess their ability to: 1) analyze and communicate the relationships between their health and the health of the environment 2) utilize their knowledge of past societies and human history and to apply lessons learnt from their successes and failures towards current environmental problems. Target for Success: 70% of students	Program Review Reporting Year: 2016-2017 Target: Target Met Over 70% of students enrolled achieved the target for success (07/10/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): The target outcome for SLO 2 has been met for this course. E S D002.01 Spring 2017.	Enhancement: Additional textbooks available in the SRC so students can have better access to them when needed (equity issue). (07/10/2017)

will be able to apply the knowledge

assignments, quarter-long bookreading project and lectures to show comprehension of the concepts and

learnt from their weekly

be successful in this class

E S 3:Imagery of the Environment

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
ES3_SLO_1 - Appraise and communicate relationships between art history and environmental impacts - what art tells us about environmental change. SLO Status: Active	Exam - Course Test/Quiz - Exam score Target for Success: Mean of 80% or higher	Program Review Reporting Year: 2016-2017 Target: Target Met Approximately 80% of students showed obvious comprehension of the concepts covered in class, to the extent that they were capable of accurately explaining the information during their final exam. The other 20% showed comprehension of the material but had some difficulty explaining it accurately during the final presentation. (08/08/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): The Target Outcomes have been met for this course. ES D003.01 Spring 2017	Enhancement: More course review before tests and possibly offer a study guide to aid students in preparing for the final and midterm. (08/08/2017)

E S 50:Introduction to Environmental Protection and Pollution Prevention

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
ES50_SLO_1 - Demonstrate the ability to communicate the elements, principles and practices involved with Environmental Resource Management and Pollution Prevention. SLO Status: Active	Exam - Course Test/Quiz - A comprehensive Final Exam was administered to the class. Target for Success: 70% of students taking the Final Exam achieving at least a grade of 70% (C) on the exam.	Program Review Reporting Year: 2015-2016 Target: Target Met 95% of the students (23 out of 24) taking the Final Exam achieved at least a grade of 70% (C) on the exam. (06/20/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): The targeted outcome for this course was achieved. In general, both faculty and students were satisfied with the objectives and outcomes of this course.	

E S 56:Introduction to Environmental Health

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
ES56_SLO_1 - Demonstrate the ability to communicate the elements, principles and practices utilized in the field of environmental health. SLO Status: Active	Exam - Course Test/Quiz - A comprehensive Final Exam was administered to the class. Target for Success: 70% of students taking the Final Exam achieving at least a grade of 70% (C) on the exam.	Program Review Reporting Year: 2017-2018 Target: Target Met 89% of the students (17 out of 19) taking the Final Exam achieved at least a grade of 70% (C) on the exam. (12/19/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): The targeted outcome for this course was achieved. In general, both faculty and students were satisfied with the objectives and outcomes of this course.	

E S 58:Introduction to Green Building

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
ES58_SLO_1 - Assess (apply) the			

ES58_SLO_1 - Assess (apply) the criteria necessary to be successful in the Introduction to Green Building class.

SLO Status: Active Pending Revision

ES58_SLO_2 - Investigate and communicate the relationship between the elements and principles of green building design, the economy, sustainability and society.

E S 6:Introduction to Environmental Law

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
ES6_SLO_1 - Demonstrate the ability to communicate the elements, principles and practices involved with Environmental Law and associated Regulation in the U.S. and California. SLO Status: Active	Exam - Course Test/Quiz - A Final Exam was administered to the class. Target for Success: 70% of students taking the Final Exam achieving at least a grade of 70% (C) on the exam.	Program Review Reporting Year: 2015-2016 Target: Target Met 85% (17 out of 20) of the students taking the Final Exam achieved at least a grade of 70% (C) on the exam. (06/20/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): The targeted outcome was achieved. In general, both faculty and students were satisfied with the objectives and outcomes of this course.	

E S 61A:Environmental Protection and Pollution Prevention with Emphasis on Local and Regional Communities

Student Learning Assessment Methods Assessment Data Summaries **Enhancements** Outcomes (SLOs) ES61A_SLO_1 - Understand and Exam - Course Test/Quiz - A **Program Review Reporting Year:** 2015-2016 communicate the elements, Target: Target Met comprehensive Final Exam was principles and practices involved with administered to the class. 100% (23 out of 23) of the students taking the Final Exam **Environmental Resource** Target for Success: 70% of students achieved at least a grade of 70% (C) on the exam. Management and Pollution taking the Final Exam achieving at (06/20/2017) least a grade of 70% (C) on the exam. Reflection (CLICK ON? FOR INSTRUCTIONS): The targeted Prevention as it specifically relates to outcome for this course was achieved. our basic air, water and land In general, both faculty and students were satisfied with resources. **SLO Status:** Active the objectives and outcomes of this course.

ES61A_SLO_2 - Investigate and communicate the relationship between the local and/or regional governmental processes and the interactions of the stakeholders in establishing environment protection and pollution prevention.

SLO Status: Archived SLO Statement

Project - Students (working in small teams) conducted 2 separate research projects into organizations (gov't agencies or NGOs) working in: 1) pollution control/prevention and 2) natural resource management/protection, and subsequently made class presentations of their findings. After presenting, each team was then questioned by the instructor on various aspects of their presentation, with such questions designed to probe the depth of course knowledge and/or critical thinking skills of individual team members and/or the team as a whole.

Target for Success: 70% of students participating in each Research Project achieving at least a grade of 70% (C) for their Research Project.

Related Documents:

JStaundinger SLOAC ES 61A Wi2013

Program Review Reporting Year: 2012-2013

Target: Target Met

100% of the students participating in each Research Project achieved at least a grade of 70% (C) for their Research

Project. (03/25/2013)

Reflection (CLICK ON ? FOR INSTRUCTIONS): The targeted outcome for SLO #2 for this course (ES -061A.-01) was achieved for the Winter 2013 quarter.

In general, both faculty and students were satisfied with the objectives and outcomes of this course. **ES61A_SLO_3** - Assess (apply) the criteria necessary to be successful in the Environmental Resource Management and Pollution Prevention: Air, Water and Land class.

SLO Status: Active Pending Revision
Outcome Creation Date: 09/01/2013

E S 61B:Environmental Protection and Pollution Prevention with Emphasis on the State and Federal Levels

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
ES61B_SLO_1 - Demonstrate the ability to communicate the elements, principles and practices involved with Environmental Resource Management and Pollution Prevention as it specifically relates to 1) our energy and chemical production and use and 2) prevention and management of our solid and hazardous waste.	Exam - Course Test/Quiz - A comprehensive Final Exam was administered to the class. Target for Success: 70% of students taking the Final Exam achieving at least a grade of 70% (C) on the exam.	Program Review Reporting Year: 2015-2016 Target: Target Met 95% (20 out of 21) of the students taking the Final Exam achieved at least a grade of 70% (C) on the exam. (06/20/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): The targeted outcome for this course was achieved. In general, both faculty and students were satisfied with the objectives and outcomes of this course.	

E S 62A:Introduction to ISO 14001 and Sustainability Management Plans (SMP)

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

ES62A_SLO_1 - Demonstrate the ability to communicate the elements, principles and practices involved with Environmental Management Systems and associated Environmental Performance Reporting.

Project - A Project which served as the Final Assessment for the course was given as an individual (nongroup) assignment. The Project was to generate an Environmental Management Plan (EMP) for the

SLO Status: Active

Project - A Project which served as the Final Assessment for the course was given as an individual (nongroup) assignment. The Project was to generate an Environmental Management Plan (EMP) for the student's household, incorporating all the principles learned in course for generating and carrying out an EMP, which serves as the heart of an Environmental Management System (EMS), the focus of the course.

Target for Success: 70% of students submitting a Project achieving at least a grade of 70% (C) for their Project.

Program Review Reporting Year: 2015-2016

Target: Target Met

94% of the students (15 out of 16) submitting a Project achieved at least a grade of 70% (C) for their Project. (06/20/2017)

Reflection (CLICK ON ? FOR INSTRUCTIONS): The targeted outcome for this course was achieved.

In general, both faculty and students were satisfied with the objectives and outcomes of this course.

02/11/2018 Generated by Nuventive Improve Page 52 of 212

E S 62B:Environmental Management Tools: CEQA and Environmental Impact Reports (EIRs)

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
ES62B_SLO_1 - Demonstrate the ability to communicate the elements, principles and practices involved with the "CEQA process" and Environmental Impact Report (EIR) generation and use. SLO Status: Active		Program Review Reporting Year: 2015-2016 Target: Target Met 94% (16 out of 17) of the students taking the Final Exam achieved at least a grade of 70% (C) on the exam. (06/20/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): The targeted outcome for this course was achieved. In general, both faculty and students were satisfied with the objectives and outcomes of this course.	

E S 62C:Environmental Management Tools: Environmental Site Assessments (ESAs)

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
ES62C_SLO_1 - Demonstrate the ability to communicate the elements, principles and practices involved with conducting, reporting and using the results of Environmental Site Assessments (ESAs). SLO Status: Active		Program Review Reporting Year: 2015-2016 Target: Target Met 87.5% (14 out of 16) of the students taking the Final Exam achieved at least a grade of 70% (C) on the exam. (06/20/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): The targeted outcome for this course was achieved. In general, both faculty and students were satisfied with the objectives and outcomes of this course.	

E S 62D:Environmental Management Tools: Industrial Ecology and Sustainable Design Principles

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
ES62D_SLO_1 - Demonstrate the ability to communicate the elements, principles and practices involved with Industrial Ecology and Sustainable Design. SLO Status: Active	Exam - Course Test/Quiz - A comprehensive Final Exam was administered to the class. Target for Success: 70% of students taking the Final Exam achieving at least a grade of 70% (C) on the exam.	Program Review Reporting Year: 2015-2016 Target: Target Met 100% (15 out of 15) of the students taking the Final Exam achieved at least a grade of 70% (C) on the exam. (06/20/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): The targeted outcome for this course was achieved. In general, both faculty and students were satisfied with the objectives and outcomes of this course.	

E S 63:Agenda 21: Blueprint for Sustainability

ES63_SLO_1 - Demonstrate the ability to communicate the elements, principles and practices involved with Agenda 21 and their role in designing a sustainable society.

E S 64: California's Approach to Global Warming/Global Climate Change

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

ES64_SLO_0 - Assess (apply) the criteria necessary to be successful in the AB 32 class.

SLO Status: Active Pending Revision Outcome Creation Date: 02/03/2018

ES64_SLO_1 - Demonstrate the ability Exam - Course Test/Quiz - A to communicate the elements, principles and practices involved with California's approach to addressing global warming/global climate change.

SLO Status: COR Update Necessary

comprehensive Final Exam was administered to the class.

Target for Success: 70% of students taking the Final Exam achieving at least a grade of 70% (C) on the exam. **Program Review Reporting Year: 2016-2017**

Target: Target Met

95% (20 out of 21) of the students taking the Final Exam achieved at least a grade of 70% (C) on the exam.

(06/20/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): The targeted

outcome for this course was achieved.

In general, both faculty and students were satisfied with the objectives and outcomes of this course.

to communicate the relationship between AB 32 law, history, values, stakeholders, and strategies to assist in implementing AB 32 (or like) targets and timetables.

SLO Status: Active Pending Revision

ES64_SLO_2 - Demonstrate the ability Other - To engage students in their communities, students are assigned the following assignment: Prepare an individual AB 32 Climate Action Plan. This assignment will help to demonstrate the student's ability to communicate the relationship between AB 32 law, history, values, stakeholders, and strategies to assist in implementing AB 32 (or like) targets and timetables.

> Target for Success: 70% of students enrolled in my class will demonstrate his/her ability to communicate the relationship between AB 32 law, history, values, stakeholders, and strategies to assist in implementing AB 32 (or like) targets and timetables. Students will show their understanding of the above via their

Program Review Reporting Year: 2015-2016

Target: Target Met

87% was the average percentile of student submitted scores on this assignment, showing that they comprehended the above-stated concepts targeted for success (via their written Climate Action Plan). There were four students who did not submit the assignment; the average with these four students was 73%.

(04/05/2016)

Reflection (CLICK ON ? FOR INSTRUCTIONS): Greater encouragement and persistence in urging students to complete all assignments. I have a great deal of communication with my students in class and via email, phone conversations and office visits. For example, numerous students visit me during office hours to seek additional help but I will do my best to incite even more student visits!

Climate Action Plan.

Comments/Notes: Greater encouragement and persistence in urging students to complete all assignments. I have a great deal of communication with my students in class and via email, phone conversations and office visits. For example, numerous students visit me during office hours to seek additional help but I will do my best to incite even more student visits!

E S 65:Environmental Stewardship

Student Learning
Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

ES65_SLO_1 - Assess the criteria necessary to be successful in Environmental Stewardship.

SLO Status: Active

ES65_SLO_2 - Demonstrate the ability to communicate the relationship between Environmental stewardship principls and the role in designing a sustainable society.

E S 66:Environmental Leadership

Student Learning
Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

ES66_SLO_1 - Assess the criteria necessary to be successful in the Environmental Leadership class.

SLO Status: Active

ES66_SLO_2 - Demonstrate the ability to communicate the relationship between environmental leadership principles and practices and their role in designing a sustainable society.

E S 67:Environmental Team-Building

Student Learning
Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

ES67_SLO_1 - Assess (apply) the criteria necessary to be successful in the Environmental Team-Building class.

SLO Status: Active

ES67_SLO_2 - Demonstrate the ability to communicate the relationship between environmental teambuilding and its role in environmental protection as an integral component of a sustainable society.

E S 68:Community-Based Coalitions and Stakeholders

Student Learning
Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

ES68_SLO_1 - Assess (apply) the criteria necessary to be successful in the Community-Based Coalitions and Stakeholders class.

SLO Status: Active

ES68_SLO_2 - Demonstrate the ability to communicate the relationship between environmental protection, community-based coalitions including the involvement by key stakeholders and long-term environmental regional planning.

E S 69:Energy Reliability and Your Organization

Student Learning
Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

ES69_SLO_1 - Assess the criteria necessary to be successful in Energy Reliability.

SLO Status: Active

ES69_SLO_2 - Investigate and communicate the relationship between: energy efficiency, ethic justice principles, ecological and biological principles and evaluate the role of energy management in establishing and fostering sustainable society.

SLO Status: Active

ES69_SLO_3 - Understand the process of continuous improvement in relation to an organization establishing an effective energy management plan.

SLO Status: Active

Outcome Creation Date: 09/25/2017

E S 70:Introduction to Energy Management Technology

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

ES70_SLO_1 - Assess (apply) the criteria necessary to be successful in the Introduction to Energy Management Technology class.

SLO Status: Archived SLO Statement

Exam - Course Test/Quiz - Massimo Maniacci- A comprehensive final exam was administered at the end of the course. The exam consisted of multiple choice, problems, short answer, and true/false questions and the students had approximately one hour to complete it. Since there are four modules to the course, the exam has equal amounts of questions from each one.

Target for Success: My target for success on the final exam is based on De Anza College's definition of a passing/satisfactory grade of a C (i.e., greater than or equal to a 70%).

Program Review Reporting Year: 2016-2017

Target: Target Not Met

Final exam grades for the 2017 spring quarter ranged from a low of 0% (student did not take the final exam) to a high of 83%. Only one student did not take the final exam and the average grade for it was a 54%. (08/01/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): This is a difficult course to teach because 1. it covers a broad range of energy topics (from energy basics to energy efficiency to utility rate structures to energy economics) and 2. there are no prerequisites for it. Hence, I have students with varying levels of course preparation. But what I do notice in general about the students on the final exam (and even the assignments) is that the concepts are not difficult to master; it's how to take those concepts and apply them to setting up and solving problems. Some students even have difficulty in performing basic arithmetic operations.

Enhancement: Based on my assessment analysis, there seems to be a general deficiency in basic numerical proficiency among the students. So in future courses I will try to spend more time in the beginning reviewing basic math skills and showing how to systematically approach solving problems. This will be followed by giving the students ungraded practice problems to work on at home. I could even give the students an ungraded quiz on the first day of class to see where they are with their math skills. My subsequent class could then target those areas where they are deficient in.

Another approach to building numerical proficiency would be to have a basic math course as a requirement for this course.

(08/01/2017)

ES70_SLO_2 - Demonstrate an understanding of energy efficiency principles, economic analysis, auditing techniques and a sustainable course. The exam consisted of society utilizing energy efficiency practices.

SLO Status: Archived SLO Statement

Exam - Course Test/Quiz -

Comprehensive final exam administered at the end of the multiple choice, problems, short answer, and true/false questions and the students had approximately one hour to complete it. Since there are four modules to the course, the exam has equal amounts of

Program Review Reporting Year: 2016-2017

Target: Target Met

Final exam grades for the 2017 spring quarter ranged from a low of 0% (student did not take the final exam) to a high of 83%. Only one student did not take the final exam and the average grade for it was a 54%. (08/01/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): Based on my assessment analysis, there seems to be a general deficiency in basic numerical proficiency among the students. So in future courses I will try to spend more time in the beginning

Enhancement: Based on my assessment analysis, there seems to be a general deficiency in basic numerical proficiency among the students. So in future courses I will try to spend more time in the beginning reviewing basic math skills and showing how to systematically approach solving problems. This will be followed by

Student Learning
Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

questions from each one.

Target for Success: Target for success on the final exam is based on De Anza College's definition of a passing/satisfactory grade of a C (i.e., greater than or equal to a 70%). Comments/Notes: This is a difficult course to teach because 1) it covers a broad range of energy topics (from energy basics to energy efficiency to utility rate structures to energy economics) and 2) there are no prerequisites for it. Hence, I have students with varying levels of course preparation.

But what I do notice in general about the students on the final exam (and even the assignments) is that the concepts are not difficult to master; it's how to take those concepts and apply them to setting up and solving problems. Some students even have difficulty in performing basic arithmetic operations.

reviewing basic math skills and showing how to systematically approach solving problems. This will be followed by giving the students ungraded practice problems to work on at home. I could even give the students an ungraded quiz on the first day of class to see where they are with their math skills. My subsequent class could then target those areas where they are deficient in.

Another approach to building numerical proficiency would be to have a basic math course as a requirement for this course.

giving the students ungraded practice problems to work on at home. I could even give the students an ungraded quiz on the first day of class to see where they are with their math skills. My subsequent class could then target those areas where they are deficient in.

Another approach to building numerical proficiency would be to have a basic math course as a requirement for this course. (08/01/2017)

ES70_SLO_3 - Assess (apply) the value and components of a successful energy management program

SLO Status: Active

Outcome Creation Date: 09/25/2017

ES70_SLO_4 - Understand and be able to demonstrate knowledge of

energy and energy efficiency principles, energy bills, auditing techniques, simple economic analyses, and energy conservation measures.

SLO Status: Active

Outcome Creation Date: 09/25/2017

E S 71:The Building Envelope

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

ES71_SLO_1 - Assess (apply) the criteria necessary to be successful in the The Building Envelope class.

SLO Status: Active

Exam - Course Test/Quiz - Massimo Maniacci- A comprehensive final exam was administered at the end of the course. The exam consisted of multiple choice, problems, short answer, and true/false questions and the students had approximately one hour to complete it. Since there are four modules to the course, the exam has equal amounts of questions from each one.

Target for Success: My target for success on the final exam is based on De Anza College's definition of a passing/satisfactory grade of a C (i.e., greater than or equal to a 70%).

Program Review Reporting Year: 2016-2017

Target: Target Met

Final exam grades for the 2017 spring quarter ranged from a low of 28% (student completed the final exam in less than 7 minutes) to a high of 85%. All the students took the final exam and the average grade for it was a 71%. (08/01/2017) **Reflection (CLICK ON? FOR INSTRUCTIONS):** The course topics are the most familiar to students so they usually do better here than in my other introductory EM&BS courses. With no prerequisites, I have students with varying levels of course preparation. And while not as bad as in my other courses, some students have difficulty in performing simple arithmetic operations.

The other issue is the time spent reviewing introductory material (e.g., the energy basics) before diving into the course topics. Although important, it seems to be redundant to me.

Enhancement: My assessment analysis revealed that even though the course topics are familiar to most students, some still have a general deficiency in basic numerical skills. But I don't think spending class time in the beginning reviewing these is useful here. Rather, I would give some ungraded practice problems to work on at home. However, showing them how to systematically approach solving problems is still useful.

A solution to the other problem, the energy basics, could be to revamp the ES 70 course to heavily address this issue (as well as the problem solving skills) by removing some of the current course content (e.g., utility rate structures). Then I would make this new course a prerequisite for this course.

(08/01/2017)

ES71_SLO_2 - Demonstrate knowledge of energy efficiency principles, properties of building materials, basic principles of solar orientation, sustainable building practices and sustainable society utilizing energy efficient building practices.

SLO Status: Active

Exam - Course Test/Quiz - Massimo Maniacci- Comprehensive final exam was administered at the end of the course. The exam consisted of multiple choice, problems, short answer, and true/false questions and the students had approximately one hour to complete it. Since there are four modules to the course, the

Program Review Reporting Year: 2016-2017

Target: Target Met

My assessment analysis revealed that even though the course topics are familiar to most students, some still have a general deficiency in basic numerical skills. But I don't think spending class time in the beginning reviewing these is useful here. Rather, I would give some ungraded practice problems to work on at home. However, showing them how to systematically approach solving problems is still useful.

Enhancement: The course topics are the most familiar to students so they usually do better here than in my other introductory EM&BS courses. With no prerequisites, I have students with varying levels of course preparation. And while not as bad as in my other courses, some

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
	exam has equal amounts of questions from each one. Target for Success: The target for success on the final exam is based on De Anza College's definition of a passing/satisfactory grade of a C (i.e., greater than or equal to a 70%). Comments/Notes: Final exam grades for the 2017 spring quarter ranged from a low of 28% (student completed the final exam in less than 7 minutes) to a high of 85%. All the students took the final exam and the average grade for it was a 71%.	A solution to the other problem, the energy basics, could be to revamp the ES 70 course to heavily address this issue (as well as the problem solving skills) by removing some of the current course content (e.g., utility rate structures). Then I would make this new course a prerequisite for this course. (08/01/2017) Reflection (CLICK ON ? FOR INSTRUCTIONS): The course topics are the most familiar to students so they usually do better here than in my other introductory EM&BS courses. With no prerequisites, I have students with varying levels of course preparation. And while not as bad as in my other courses, some students have difficulty in performing simple arithmetic operations.	students have difficulty in performing simple arithmetic operations. The other issue is the time spent reviewing introductory material (e.g., the energy basics) before diving into the course topics. Although important, it seems to be redundant to me. (08/01/2017)
		The other issue is the time spent reviewing introductory	

ES71_SLO_3 - Examine environmentally responsive building strategies and systems for controlling the indoor environment in order to provide comfort and health while minimizing energy use.

SLO Status: Active

Outcome Creation Date: 09/25/2017

ES71_SLO_4 - Understand the fundamental scientific principles governing the thermal environment of buildings.

SLO Status: Active

Outcome Creation Date: 09/25/2017

ES71_SLO_5 - Analyze building energy calculations to provide maximum cost reduction, human comfort and worker productivity.

redundant to me.

material (e.g., the energy basics) before diving into the course topics. Although important, it seems to be

Student Learning
Outcomes (SLOs)

Assessment Methods Assessment Data Summaries Enhancements

SLO Status: Active

Outcome Creation Date: 09/25/2017

E S 72:Heating, Ventilating and Air Conditioning (HVAC) Systems

Outcomes (SLOs)		
ES72_SLO_1 - Assess (apply) the criteria necessary to be successful in the Heating, Ventilation and Air Conditioning (HVAC) Systemsclass. SLO Status: Archived SLO Statement A survey to comfort in the conter and commercial sett HVAC drawings and data; Two field trips different types of HV (including the Kirsch assignment to assess understanding of the materials. Target for Success: Scompletion of the as Student engagement and small group wor Related Documents: ES72 SLOAC SGould Statement	o understand ext of residential extings; Review of name plate to see firsthand /AC equipment Ctr; a written s the e lecture successful esignments, t in the lectures ek.	

ES72_SLO_2 - Demonstrate an understanding of energy efficiency principles, laws of thermodynamics, effective design of HVAC systems and a sustainable society utilizing energy efficient HVAC systems.

E S 73:Electric Motors and Drives

Student Learning
Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

ES73_SLO_1 - Assess (apply) the criteria necessary to be successful in the Electric Motors and Drives class.

SLO Status: Active

ES73_SLO_2 - Demonstrate an understanding of energy efficiency principles, economic analysis, basic principles of electricity, principles of electric motor design and the importance of a sustainable society utilizing energy efficient electric motor systems.

E S 74:Lighting Distribution Systems

Outcomes (SLOs)
ES74_SLO_1 - Assess (apply) the
critaria naccasaruta ha successful in

Student Learning

Assessment Methods

Assessment Data Summaries

Enhancements

ES74_SLO_1 - Assess (apply) the criteria necessary to be successful in the Photovoltaic Technology class.

SLO Status: Archived SLO Statement

ES74_SLO_2 - Demonstrate an understanding of energy efficiency principles, economic analysis, basic principles of light, design of lighting systems and importance of a sustainable society utilizing energy efficient lighting distribution systems.

SLO Status: Archived SLO Statement

ES74_SLO_3 - Understand basic lighting terminology and the relationships among light, vision, and color.

SLO Status: Active

Outcome Creation Date: 09/25/2017

ES74_SLO_4 - Analyze the operation, performance, and application of various types of electric light sources, luminaires and lighting controls available today.

SLO Status: Active

Outcome Creation Date: 09/25/2017

ES74_SLO_5 - Explore the factors associated with key lighting issues, such as sustainability, daylighting, lighting economics, codes and standards, and light and health.

SLO Status: Active

Outcome Creation Date: 09/25/2017

E S 75:Electric Power Systems

	-		
Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
ES75_SLO_1 - Assess (apply) the criteria necessary to be successful in the Electric Power Systems class. SLO Status: Active	Exam - Course Test/Quiz - Samir Abboud- An exam/test was administered at the end of the class Target for Success: Correct responses to exam questions, regarding above subjects of at least 70% average class score	Program Review Reporting Year: 2016-2017 Target: Target Met Target for success of minimum 70% has been achieved. (08/01/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): Target success criteria have been met. Students have kept up with the study material. On the whole they seem to understand subject matter and concepts presented and appreciate the concepts of power, power generation, energy and conservation of energy, also three phase power and power calculations, real power apparent power, reactive power and power factors among many other concepts.	Enhancement: Raise target for success from minimum of 70% to 75% next time class is taught. (08/01/2017)
ES75_SLO_2 - Demonstrate an understanding of energy efficiency principles, basic principles of electricity, principles of electric power generation, distribution and a sustainable society utilizing efficient electric power systems. SLO Status: Active	Exam - Course Test/Quiz - Samir Abboud- Comprehensive exam administered at the conclusion of the class Target for Success: Correct responses to exam questions, regarding above subjects of at least 70% average class score	Program Review Reporting Year: 2016-2017 Target: Target Met Target for success of minimum 70% has been achieved. (08/01/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): Target success criteria have been met. Students have kept up with the study material. On the whole they seem to understand subject matter and concepts presented and appreciate the concepts of power, power generation, energy and conservation of energy, also three phase power and power	Enhancement: Raise target for success from minimum of 70% to 75% next time class is taught (08/01/2017)

calculations, real power apparent power, reactive power and power factors among many other concepts.

02/11/2018 Generated by Nuventive Improve Page 73 of 212

E S 76:Energy Star Products

Student Learning Outcomes (SLOs)

ES76_SLO_1 - Assess (apply) the criteria necessary to be successful in the Energy Star Products class SLO Status: Archived SLO Statement

Assessment Methods

Other - Written assignment:

After students have reviewed PowerPoint presentations that explain the Energy Star Program and have reviewed the EPA's Energy Star website they have opportunities to interact and ask question of the instructor.

SLO 1, Assessment 1, students are asked to list and describe the principals of the Energy Star Program and how it would affect a home in Minnesota. A 25-point rubric is used to assess their understanding

SLO 1, Assessment 2, students are asked to look at their own use of energy and how it affects the environment. A 25-point rubric is used to assess their understanding.

SLO 1, Assessment 3 (final), students are asked to reflect on how they would use the SLO's in a business or employment environment. A 50-point rubric is used to assess their competence as potential Energy Manager using Energy Star Products.

Target for Success: The student target for success is 80-100% of the students will achieve the Student Learning Objective. The students

Assessment Data Summaries

Program Review Reporting Year: 2016-2017

Target : Target Met

Assessment Data was collected for 2 quarters -Fall 2016 and

Spring 2017:

 Students Enrolled
 Students Meeting

 SLO >80%Percentage %
 13

 Fall 2016
 22
 13

 60%
 27
 24

 88%
 24

(08/01/2017)

Reflection (CLICK ON ? FOR INSTRUCTIONS): • A variety of students take this course (differentiated learners);

o 1) some students have very little knowledge of energy use or the cost of energy units,

o 2) some students have a working knowledge because they pay their own utility bills, and

- o 3) some students are in the Energy Management Program and are very knowledgeable about the course content. The assessments need to accommodate the differentiation in student abilities.
- Common ground for student learning appears to be technology, using websites, videos, mobile assessments and concise content.

Enhancements

PowerPoints and Assessments

Add 2 course modules
for those new to energy

management 1) Glossary of Terms and 2) Energy Management Math.

(08/01/2017)

02/11/2018 Generated by Nuventive Improve Page 74 of 212

ES76_SLO_2 - Demonstrate an understanding of the US EPA's Energy Assignment: Star program principles, those affected by the program and how the program is implemented nationwide. SLO Status: Active Other - Rona Assignment: Assignment: PowerPoint program is implemented nationwide.

Other - Ronald Wheelehan- Written Assignment:

demonstration videos, sample calculators, and on-line resources.

After students have reviewed PowerPoint presentations that explain the Energy Star Program and have reviewed the EPA's Energy Star website they have opportunities to interact and ask question of the instructor.

Target for Success: The student target for success is 80-100% of the students will achieve the Student Learning Objective. The students have all the information needed to be successful in written form, demonstration videos, sample calculators, and on-line resources.

Program Review Reporting Year: 2016-2017

Target: Target Met

Assessment Data was collected for 2 quarters -Fall 2016 and Spring 2017:

Students Enrolled Students Meeting SLO >80%

 Quarter
 Enrollment
 # students assessed

 Success %
 Fall
 2016
 22
 13

 60%
 Spring
 2017
 27
 24

 88%
 (08/01/2017)

Reflection (CLICK ON ? FOR INSTRUCTIONS): • A variety of students take this course (differentiated learners);

- o 1) some students have very little knowledge of energy use or the cost of energy units,
- o 2) some students have a working knowledge because they pay their own utility bills, and
- o 3) some students are in the Energy Management Program and are very knowledgeable about the course content. The assessments need to accommodate the differentiation in student abilities.
- Common ground for student learning appears to be technology, using websites, videos, mobile assessments and concise content.

Enhancement: • Update
PowerPoints and Assessments
• Add 2 course modules
for those new to energy
management 1) Glossary of Terms
and 2) Energy Management Math.
(08/01/2017)

02/11/2018 Generated by Nuventive Improve Page 75 of 212

E S 76A:Solar Thermal Systems

Student Learning Outcomes (SLOs)

ES76A_SLO_1 - Assess (apply) the criteria necessary to be successful in the Solar Thermal Systems class.

SLO Status: Active

Assessment Methods

Exam - Course Test/Quiz - Massimo Maniacci- A comprehensive final exam at the end of the course. The exam consisted of multiple choice, problems, short answer, and true/false questions and the students had approximately one hour to complete it. Since there are four modules to the course, the exam has equal amounts of questions from each one.

Target for Success: My target for success on the final exam is based on De Anza College's definition of a passing/satisfactory grade of a C (i.e., greater than or equal to a 70%).

Assessment Data Summaries

Program Review Reporting Year: 2016-2017

Target: Target Met

The final exam grades for the 2017 winter quarter ranged from a low of 0% (students did not take the final exam) to a high of 94%. Four students did not take the final exam and the average grade for it was 52% if we include all the students and 75% if we exclude the four non-test-taking students. (08/01/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): Most of the material in this course is familiar to the students. The only exception is the module on siting the solar collection system, which involves some geometry and trigonometry. Students have trouble visualizing the motion of the sun across the sky and using the equations that describe it. Also, because there is no prerequisite for this course, I have students with varying levels of course preparation. But I do not spend as much time on the energy basics as I do I my other introductory EM&BS courses and I do not review any basic geometry or trigonometry. However, I do spend quite a lot o time on the solar collection orientation and tilt.

Enhancements

Enhancement: Given the difficulty students have in the module on solar orientation and tilt, I could spend less time on this and more on other important solar thermal design issues (such as sizing pumps or pipes). But it is still important that they understand the basic motion and position of the sun in the sky. One way to address the geometric issue could be to find a website that allows students to see the path of the sun through the sky during the year based on their location. And I could resolve the trigonometric difficulties by spending some time at the beginning of the course (during the energy basics discussion) to review the necessary background information.

I do not believe this course requires a prerequisite as most of what is needed could be taught at the beginning of the course.

(08/01/2017)

ES76A_SLO_2 - Demonstrate an understanding of the basic principles of solar thermal energy, residential/utility scale solar system principles and a sustainable society utilizing.

SLO Status: Active

Exam - Course Test/Quiz - Massimo Maniacci- A comprehensive final exam at the end of the course. The exam consisted of multiple choice, problems, short answer, and true/false questions and the students had approximately one

Program Review Reporting Year: 2016-2017

Target : Target Met

The final exam grades for the 2017 winter quarter ranged from a low of 0% (students did not take the final exam) to a high of 94%. Four students did not take the final exam and the average grade for it was 52% if we include all the students and 75% if we exclude the four non-test-taking

Enhancement: Given the difficulty students have in the module on solar orientation and tilt, I could spend less time on this and more on other important solar thermal design issues (such as sizing pumps or pipes). But it is still

hour to complete it. Since there are four modules to the course, the exam has equal amounts of questions from each one.

Target for Success: The target for success on the final exam is based on De Anza College's definition of a

passing/satisfactory grade of a C

(i.e., greater than or equal to a 70%).

students. (08/01/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): Most of the material in this course is familiar to the students. The only exception is the module on siting the solar collection system, which involves some geometry and trigonometry. Students have trouble visualizing the motion of the sun across the sky and using the equations that describe it. Also, because there is no prerequisite for this course, I have students with varying levels of course preparation. But I do not spend as much time on the energy basics as I do I my other introductory EM&BS courses and I do not review any basic geometry or trigonometry. However, I do spend quite a lot o time on the solar collection orientation and tilt.

important that they understand the basic motion and position of the sun in the sky. One way to address the geometric issue could be to find a website that allows students to see the path of the sun through the sky during the year based on their location. And I could resolve the trigonometric difficulties by spending some time at the beginning of the course (during the energy basics discussion) to review the necessary background information.

I do not believe this course requires a prerequisite as most of what is needed could be taught at the beginning of the course. (08/01/2017)

E S 78:Energy Management Systems and Controls

Student Learning
Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

ES78_SLO_1 - Assess (apply) the criteria necessary to be successful in the Energy Management Systems and Controls class.

SLO Status: Active

ES78_SLO_2 - Demonstrate an understanding of energy efficiency principles, principles of energy management, control system design and a sustainable society utilizing energy management and control systems.

E S 79:Renewable and Alternative Energy Systems

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

ES79_SLO_1 - Assess (apply) the criteria necessary to be successful in the Renewable and Alternative Energy Systems class.

SLO Status: Archived SLO Statement

ES79_SLO_2 - Demonstrate an understanding of the principles of renewable energy generation, economic analysis and a sustainable society utilizing renewable energy generation.

SLO Status: Active

ES79_SLO_3 - Assess the positive impact renewable energy systems have in regard to Global Climate Change

SLO Status: Active

E S 80, X-Z:California Field Studies

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

ES80_SLO_1 - Assess (apply) the criteria necessary to be successful in the California Field Studies class. **SLO Status:** Archived SLO Statement

ES80_SLO_2 - Identify and assess natural communities and watersheds in the California Floristic Province and demonstrate an understanding of the social and environmental parameters that affect these natural communities.

SLO Status: Active

Other - To engage students in their communities, students are assigned the following assignment: Journal with reflections/worksheets. This assignment will help to demonstrate the student's ability to identify and assess natural communities and watersheds in the California Floristic Province and understand the social and environmental parameters that affect these communities.

Target for Success: 70% of students enrolled in my class will show their understanding of the above via their Journal with reflections/worksheets. This assignment will help to demonstrate the student's ability to identify and assess natural communities and watersheds in the California Floristic Province and understand the social and environmental parameters that affect these communities.

Program Review Reporting Year: 2015-2016

Target: Target Met

93% was the average percentile of student submitted scores on this assignment, showing that they comprehended the above-stated concepts targeted for success (via their written Climate Action Plan). There were four students who did not submit the assignment; the average with these four students added in would be 76%. (04/18/2016)

Reflection (CLICK ON? FOR INSTRUCTIONS): Greater encouragement and persistence in urging students to complete all assignments. I have a great deal of communication with my students in class and via email, phone conversations and office visits. For example, numerous students visit me during office hours to seek additional help but I will do my best to incite even more student visits!

ES80_SLO_3 - Identify ecosystem protection and policies as they relate to environmental and health effects on various species as well as on individuals, cultures, and society.

SLO Status: Active

E S 85A: California Native Plants and Animals

Student Learning	
Outcomes (SLOs)	

Assessment Methods

Assessment Data Summaries

Enhancements

ES85A_SLO_1 - Assess the criteria necessary to be successful in California Native Plants and Animals class.

SLO Status: Archived SLO Statement

ES85A_SLO_2 - Identify and access the dominant components within native plant communities in the California Floristic province. And demonstrate an understanding of the Studies Area. Their presentation environmental parameters that affect focused on their ability to conduct the presence of these communities. **SLO Status:** Archived SLO Statement

Presentation/Performance -

Students had a final presentation on a California native plant community in the Cheeseman Environmental research and organize their presentation to cover specific topics of the characteristics, climate, plants, animals and threats posed to a specific plant community.

Target for Success: The main target that needed to be obtained was the student?s ability to not only conduct a well organized presentation but also to present the information in a way to capture, engage and retain their audiences focus and attention (docent skills).

Program Review Reporting Year: 2011-2012

Target: Target Met

100% of the students in this course achieved the required expectations by accurately communicating the set requirements for their final presentation to the faculty of this course and the other students in this class. (07/13/2012)

Reflection (CLICK ON ? FOR INSTRUCTIONS): The students learning objectives for the ES85A course were achieved for the Spring 2012 quarter.

Related Documents:

DMartinez SLOAC 85A Sp2012

ES85A SLO 3 - Demonstrate ability to identify California native plants and animals for 3 of the 12 California plant communities in the Cheeseman Environmental Studies Area.

SLO Status: Active

Outcome Creation Date: 09/25/2017

ES85A_SLO_4 - Illustrate ability to lead a group tour in the Cheeseman **Environmental Studies Area with** adequate identification of plants,

Student Learning Outcomes (SLOs) Assessment Methods Assessment Data Summaries Enhancements

animals, biotic and abiotic components of of the California plant communities.

SLO Status: Active

E S 85B:Cheeseman Environmental Study Area Interpretive Training and Other Docent Activities

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
ES85B_SLO_1 - Assess the criteria necessary to be successful in Cheesemen Environmental Study Area Interpretive class. SLO Status: Archived SLO Statement			
ES85B_SLO_2 - Research plant communities in the Cheeseman Environmental Study Area land understand plant adaptation to varying climates and habitats in California. SLO Status: Archived SLO Statement			
ES85B_SLO_3 - Research the food webs, California flora and fauna of the 12 California plant communities in the Cheeseman Environmental Studies Area. SLO Status: Active Outcome Creation Date: 09/25/2017			
ES85B_SLO_4 - Explain differences in the plant communities within the Cheeseman Environmental Study Area revealing an understanding plant adaptation to varying climates and habitats in California. SLO Status: Active Outcome Creation Date: 09/25/2017			

ES85B_SLO_5 - Demonstrate an understanding of native plant restoration of a selected ESA plant community through research and hands on experience of restorations practices including: weeding,

Student Learning Outcomes (SLOs) Assessment Methods Assessment Data Summaries Enhancements

mulching, soil tests, signage, planting and pruning.

SLO Status: Active

E S 93:Sustainability Across the Curriculum

Student Learning
Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

ES93_SLO_1 - Assess (apply) the criteria necessary to be successful in the Sustainability Across the Curriculum class.
SLO Status: Active

ES93_SLO_2 - Demonstrate the ability to communicate the strategies needed to implement sustainability across the curriculum in academic institutions and the critical role of education and educators in this process.

E S 95:Introduction to Environmental Careers

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

ES95_SLO_1 - Assess (apply) the criteria necessary to be successful in the Introduction to Environmental Careers class.

SLO Status: Archived SLO Statement Outcome Creation Date: 09/25/2017

ES95_SLO_2 - Demonstrate the ability Other - Students are assigned the to communicate the relationship between values, skills, environmental Academic/Career Action Plan. This education, and environmental careers in order to play a role in furthering a sustainable society.

SLO Status: Archived SLO Statement

following assignment:

assignment will help to demonstrate the student's ability to communicate the relationship between values, skills, environmental education, and environmental careers in order to play a role in furthering a sustainable society.

Target for Success: 70% of students enrolled in my class will show their understanding of the above via their Academic/Career Action Plan. This assignment will help to demonstrate the student's ability to communicate the relationship between values, skills, environmental education, and environmental careers in order to play a role in furthering a sustainable 2008/2009). society.

Program Review Reporting Year: 2015-2016

Target: Target Met

95% was the average percentile of student submitted scores on this assignment, showing that they comprehended the above-stated concepts targeted for success (via their written Climate Action Plan). There were four students who did not submit the assignment; the average with these four students added in would be 63%. (04/18/2016)

Reflection (CLICK ON ? FOR INSTRUCTIONS): Though the Target Outcomes have not been met for this course, ES-95.55 Winter 2016, this was highly unusual. Since this is an environmental careers course, students tend to be extremely motivated and therefore submit and perform very well on their Academic/Career Action Plans. Also, the majority of the time this course has ~20 students or more enrolled. So, though this was an unusual quarter, I am confident that past target outcomes in ES 95 have almost always been met (since I began teaching this class in

ES95_SLO_3 - Compare, contrast, and identify the various transfer colleges and universities as well as the multitude of career options in environmental studies and sciences. especially as they relate to our three degree/certificate areas.

SLO Status: Active

ES95_SLO_4 - Demonstrate the ability to communicate the relationship between values, skills, environmental education, and environmental careers in order to play a role in furthering a sustainable society.

SLO Status: Active

ESCI 1:Environmental Science

Student Learning **Enhancements** Assessment Methods Assessment Data Summaries Outcomes (SLOs) **ESCI1_SLO_1** - Utilize the scientific Exam - Course Test/Quiz - Exam **Program Review Reporting Year: 2017-2018** Enhancement: It would be helpful method to demonstrate role of Target: Target Met Question to have the assessment earlier in scientist and public to determine a Target for Success: A mean score of Based on 46 students, 40 answered the question correctly, the quarter to identify strategy to create a sustainable 70% or higher will be achieved by 3 left it blank and 3 got the wrong answer (07/26/2017) misconceptions and to give society using scientific principles. the students who answer this exam Reflection (CLICK ON? FOR INSTRUCTIONS): Although enough time to correct any **SLO Status:** Active question more than 85% of the students answered the guestion on mistakes (07/26/2017) how science works correctly, it is still a little concerning to know that about 15% of the students did not know or have no clue regarding this important topic ESCI1_SLO_2 - Utilize the **Demonstration - Demonstration OR Program Review Reporting Year: 2011-2012** Enhancement: Require improved environmental method to presentation/performance (Team Target: Target Met monitoring of team assessment demonstrate role of scientist and Assessment and Final Team preparation (07/16/2012) public to determine a strategy to Assessment)? student presents a 100% of the students successfully achieved the student create a sustainable society using learning outcome required in this course. competence of the skills for SLO 2. scientific principles. Target for Success: Students should (07/16/2012)**SLO Status:** Active be able to successfully presents all Reflection (CLICK ON? FOR INSTRUCTIONS): Review the basis for the performance (team assessment and final aspects of the assessment. assessment requirements **Related Documents:** Review the performance scores of the students in ESCI ESCI 1 SLOAC JPhillips Sp2012 001.01 **Related Documents: ESCI 1 SLOAC JPhillips Sp2012**

Presentation/Performance -

Presentation that will explain key concepts learned through the quarter.

Target for Success: Students will obtain a mean score of 70% or higher.

ESCI 19:Environmental Biology

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

ESCI19_SLO_1 - Demonstrate a coherent understanding of the relationship between human use and exploitation of natural resources. **SLO Status:** Archived SLO Statement

Demonstration - Students are required to research, using peer reviewed journals, and present their findings, in their own words, in a 750-1000 word literature review paper. This paper must cite a minimum of 5 reputable sources, including 3 peer reviewed journals. Students are asked to discuss how global climate change is impacting one of the following biomes: Coral Reefs, Tropical Rainforests, Tundra, or Grassland. They must draw conclusions and connections about how our actions and exploitation of resources here in the USA affect biomes outside our borders.

Target for Success: 70% of students enrolled in my class will show obvious signs of comprehension and critical thinking as they develop and deliver their literature review papers.

Program Review Reporting Year: 2015-2016

Target: Target Met

Although only 75% of my class submitted this assignment, those that did showed a high rate of comprehension and delivered on the requirements of the assignment with 100% obtaining a grade of B or higher. The other 25% of the class did not submit any paper at all, and thus received a zero for this assignment. (04/18/2016)

Reflection (CLICK ON? FOR INSTRUCTIONS): The Target Outcomes have been met for this course. ESCI-019.05 and ESCI-019.06 Fall 2015. For all ESCi19 Labs: Water test equipment needed, cataloguing of plant and animal species in our labs and an investment of new species displays for all Kingdoms taught in lab.

ESCI19_SLO_2 - Compare Environmental and ecological principles, concepts, and possible solutions and sustainable practices. SLO Status: Active

Exam - Course Test/Quiz - Test question asking students to describe and draw energy transfer in a food web. Students should be able to name trophic levels, explain how much energy is transferred as biomass, and give an example organism.

Target for Success: Mean of 70% or

higher

Program Review Reporting Year: 2016-2017

Target: Target Met

Students scored a mean of 75% on this question.

(06/22/2017)

Reflection (CLICK ON ? FOR INSTRUCTIONS): Students benefited from this question as part of the review.

Enhancement: Students would benefit from a set of clickers that could accommodate 75+ students. Students could track their progress by being assigned a clicker number. (06/22/2017)

ESCI 1L:Environmental Science Laboratory

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

ESCI1L_SLO_1 - Assess (apply) the criteria necessary to be successful in the Environmental Science Lab class.

SLO Status: Active

ESCI1L_SLO_2 - In a outdoor laboratory setting; survey local open space areas such as major aquatic life zones (coastal wetlands, inland wetlands, coastal ocean, and riparian) during the laboratory (in-field) and terrestrial biomes (grasslands, forests, savannah and transitional areas (ecotones)) and the impacts on these systems by humans; as well as human systems including sanitary landfills, sewage treatment facilities and others.

SLO Status: Active

Laboratory Project - Students (working in small teams) developed and made a Final Presentation on a topic building off what was learned sessions (such as restoration of wetlands). After presenting, each team was then questioned by the instructor on various aspects of their presentation, with such questions designed to probe the depth of course knowledge and/or critical thinking skills of individual team members and/or the team as a whole.

Target for Success: 70% of students participating in the Final Presentation achieving at least a grade of 70% (C) for their Final Presentation.

Related Documents:

JStaundinger SLOAC ESCI 1L Wi2013

Presentation/Performance -

Students are given a current scenario and asked to prepare and present a PowerPoint Presentation that focuses on their ability to research and explain human impacts on natural resources, plants, animals and non-renewable resources. Their presentation is based on the concepts they learned throughout

Program Review Reporting Year: 2012-2013

Target: Target Met

100% of the students participating in the Final Presentation achieved at least a grade of 70% (C) for their Final

Presentation. (03/25/2013)

Reflection (CLICK ON? FOR INSTRUCTIONS): The targeted outcome for SLO #2 for this course (ESCI -001.-01) was achieved for the Winter 2013 guarter.

In general, both faculty and students were satisfied with the objectives and outcomes of this course.

Program Review Reporting Year: 2016-2017

Target: Target Met

Approximately 95% of students showed obvious comprehension of the concepts covered in class, to the extent that they were capable of accurately explaining the information during their final presentations. The other 5% showed comprehension of the material but had some difficulty explaining it accurately during the final presentation. (06/16/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): The Target

Enhancement: Portable air and water testing equipment would help students quantify human impacts on those ecological systems (06/16/2017)

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
	the quarter. Their presentation must be in their own words and demonstrate their ability to utilize critical thinking skills to find creative ways to explain complex concepts in a simple manner. Target for Success: 70% of students enrolled in my class will show obvious signs of comprehension of the critical concepts covered in class during their final presentations.	Outcomes have been met for this course. ESCI D001L 01, 02, 05, 06	

ESCI 20:Introduction to Biodiversity

Student Learning
Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

ESCI20_SLO_1 - Assess the criteria necessary to be successful in the Introduction to Biodiversity class.

SLO Status: Active

ESCI20_SLO_2 - Utilize the scientific principles to evaluate biological diversity and the methods to analyze the underlying cause of biodiversity loss and the trends to conserve it.

ESCI 21:Biodiversity 2

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

ESCI21_SLO_1 - Assess and apply the criteria and requirements needed to be successful in the California Biodiversity class.

ESCI21_SLO_2 - Evaluate the long-term impacts on California's landforms and biodiversity of their major determinants, with the Pacific and Sierra acting as major physical/biological barriers.

SLO Status: Active

SLO Status: Active

ESCI21_SLO_3 - Appraise the impacts of human activity affecting California's biodiversity, historically **SLO Status:** Active

Exam - Course Test/Quiz - Students are tested on material that was covered in lecture and on field trips. In addition, students were given meta-data from species diversity that we collected throughout the guarter and were asked to assess broad patterns in biodiversity that observed in the field and how topics we learned in course can explain for the observed patterns. The exam tests their acquisition of knowledge and the written assessment enabled them to communicate in their own words to showcase their critical thinking skills.

Target for Success: 70% of students will score above 70% on exams and 100% students should feel comfortable with nature-based inquiry and analysis in the field, as well as understanding broad concepts in California biodiversity.

Program Review Reporting Year: 2012-2013

Target: Target Met

Approximately 70% of the students performed with excellence and conveyed a thorough understanding and retention of course material. Another 20% of students showed obvious comprehension of the concepts covered in class, to the extent that they were capable of accurately explaining the information during their final presentations. The other 10% showed comprehension of the material but had some difficulty explaining it accurately during the final presentation, or were lacking in participation. (04/01/2013) Reflection (CLICK ON ? FOR INSTRUCTIONS): The Target Outcomes have been met for this course. ESCI-21 Winter 2013

Enhancement: Better attendance and involvement can be fostered if all mandatory field trips are in the schedule of classes. (03/10/2013)

Related Documents:

RPhillips SLOAC ESCI 21 Wi2013

02/11/2018 Generated by Nuventive Improve Page 94 of 212

ESCI 30:Conservation Biology

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

ESCI30_SLO_1 - Assess and apply the criteria and requirements needed to be successful in the Conservation Biology class.

SLO Status: Archived SLO Statement

ESCI30_SLO_2 - Appraise current national and extra national conservation issues and critique solutions to stop and/or mitigate species decline or loss.

SLO Status: Active

Presentation/Performance -

Students will give a presentation that focuses on Conservation Biology topics

Target for Success: Mean score of 70% or higher for students that give a presentation.

Program Review Reporting Year: 2016-2017

Target: Target Met

The mean score on the presentation assignment was 90%. (06/17/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): The students were able to learn about and critique conservation issue by reading scientific peer reviewed journal article and present

them to the class

Enhancement: Students might benefit from the library subscribing to more Conservation Biology journals (06/17/2017)

ESCI30_SLO_3 - Defend the importance of genetic diversity within You are the newly hired biologist in species as a key conservation tool aiding species' long-term survival.

SLO Status: Active

Exam - Course Test/Quiz - 2. (6 pts)

charge of a population of endangered Red Pandas (Ailurus fulgens) at a local zoo. All of the past breeding records have been destroyed in a flood. Your boss comes to you and says that the Zoo would like to start breeding the pandas with one another in order to release the juvenilles back into the wild. The problem is there is only one male and the rest are female. What challenges does this present if you want to maintain long-term success of these organisms and their

Target for Success: Average class score of 70% or higher for those students who took the exam

offspring?

Program Review Reporting Year: 2016-2017

Target: Target Met

The mean score was 84% (06/17/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): Students were

successful in answering this question.

Enhancement: PVA software to help students run population simulations and manipulate variables like gene flow etc. (06/17/2017)

02/11/2018 Page 95 of 212 Generated by Nuventive Improve

ESCI 50:Introduction to Wildlife Corridor Technician: Connectivity

Student Learning
Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

ESCI50_SLO_1 - Assess (apply) the criteria necessary to be successful in the Introduction to WCT: Connectivity class including reviewing the course objectives.

SLO Status: Active

ESCI50_SLO_2 - Students will research and utilize the practices, technologies and principles utilized in wildlife corridor (connectivity) assessments.

ESCI 54:Wildlife Corridor Technician: Data Analysis

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

ESCI54_SLO_1 - Assess (apply) the criteria necessary to be successful in the Wildlife Corridor Technician Data Analysis class including reviewing the course objectives.

SLO Status: Active

ESCI54 SLO 2 - Students will analyze and assess the techniques and practices of data analysis used in wildlife corridor technology and apply of class and will work on it all these concepts to a local corridor case study

SLO Status: Active

Project -

Students are assigned a team project (1-3 person teams) on the 2nd week quarter long - use critical thinking to pose a question/hypothesis, enter data using Excel, analyze using Excel or a Geographical Information System such as ARCMAP, Google Earth. Each student will write a 6 -10 page project report of their findings, showcasing their knowledge of the natural history of the study area, ecosystems and wildlife corridor issues.

Target for Success: Target for Success:

70% of students enrolled in my class will demonstrate their comprehension of using the scientific method to study the environmental and wildlife issues pertaining to a selected study area in the in-class activities, project report and the final presentation. Their project report will show their expertise in setting up and using a Microsoft Excel Spreadsheet to help answer their question/hypothesis, optionally using geographic

Program Review Reporting Year: 2013-2014

Target: Target Met

100% of the class demonstrated their comprehension of using the scientific method to study environmental and wildlife issues pertaining to their study area in the in-class activities (setting up a spreadsheet and entering data) presentation and project report. 78% highly improved their skills in setting up Excel Spreadsheets and analyzing data, as well as presenting their findings in a project report and class presentation. 100% of the students used the scientific method to pose a question, gather the data, analyze the data and answer the question. A few, 4 out of 5 teams did use GIS tools to illustrate their study area. (03/26/2013) Reflection (CLICK ON? FOR INSTRUCTIONS): It would be good to have more in-depth meetings with each team at the beginning of every class starting during the middle of the quarter. It was good to have the students submit a first draft of the project report. It was necessary to spend a lot of time was spent on data entry which left less room for the actual analysis.

Enhancement: Incorporate student wishes in the class - e.g. incorporate the GIS intro class early on in the quarter. Reduce other lecture time so more time can be spent on analysis and writing the project report. (05/04/2013)

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements

information tools to illustrate further.

Related Documents:

NSrinivasan SLOAC ESCI 54 Wi2013

ESCI 55:Wildlife Corridor Technician: Corridor Design

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
ESCI55_SLO_1 - Assess (apply) the criteria necessary to be successful in the Wildlife Corridor Technician Corridor Design class including reviewing the course objectives. SLO Status: Active			

ESCI55_SLO_2 - Students will analyze and assess the process of wildlife corridor design and ecosystem management and apply these concepts to a local corridor design case study

ESCI 56:Wildlife Corridor Technician: Plant Survey Techniques

Student Learning
Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

ESCI56_SLO_1 - Assess the criteria necessary to be successful in Plant Techniques class.

SLO Status: Active

ESCI56_SLO_2 - Research and conduct the various plant survey techniques utilized in vegetation assessments.

ESCI 57:Wildlife Corridor Technician: Advanced Tracking

Student Learning
Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

ESCI57_SLO_1 - Assess (apply) the criteria necessary to be successful in the Wildlife Corridor Technician Advanced Tracking class.

SLO Status: Active

ESCI57_SLO_2 - Students will research and analyze, in a field setting, the advanced tracking techniques utilized in wildlife

corridor/connectivity assessments.

ESCI 58:Wildlife Corridor Technician: Advanced Tracking 2

Student Learning
Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

ESCI58_SLO_1 - Assess (apply) the criteria necessary to be successful in the Wildlife Corridor Technician Advanced Tracking 2 class.

SLO Status: Active

ESCI58_SLO_2 - Students will research and analyze, in a field setting, the advanced tracking, level 2, techniques utilized in wildlife corridor/connectivity assessments.

ESCI 61:Introduction to Photovoltaic (PV) Technology

Student Learning
Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

ESCI61_SLO_1 - Assess (apply) the criteria necessary to be successful in the Introduction to Photovoltaic Technology class.

SLO Status: Active

ESCI61_SLO_2 - Investigate and communicate the fundamentals of solar electricity (including conversion of sunlight to electricity, solar potential and types of solar systems) and the role of this form of renewable energy in establishing a sustainable society.

ESCI 63:Photovoltaic (PV) Technology Field Project

Student Learning Outcomes (SLOs) Assessment Methods Assessment Data Summaries Enhancements	
---	--

ESCI63_SLO_1 - Assess (apply) the criteria necessary to be successful in the Photovoltaic Technology class.

SLO Status: Active

ESCI63_SLO_2 - Investigate and communicate the relationship between the sun and the role of solar power in establishing a sustainable society.

ESCI 90:Santa Clara County Field Studies: Tule Elk

Student Le	arning
Outcomes	(SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

ESCI90_SLO_1 - Assess (apply) the criteria necessary to be successful in the Santa Clara County Field Studies: Tule Elk class.

SLO Status: Active

ESCI90_SLO_2 - Identify and assess tule elk natural history including habitat utilization, home range use, behavior, distribution and abundance. Demonstrate an understanding of the environmental parameters that affect the presence of this subspecies of North American elk.

ESCI 92:Santa Clara County Field Studies: Raptors

Student Learning
Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

ESCI92_SLO_1 - Assess (apply) the criteria necessary to be successful in the Santa Clara County Field Studies: Raptors class.

SLO Status: Active

ESCI92_SLO_2 - Identify and assess raptor natural history including habitat utilization, home range use, behavior, distribution and abundance. Demonstrate an understanding of the environmental parameters that affect the past and present distribution and abundance of raptors in Santa Clara County.

Assessment: Course/Service Four Column



Dept - (BHES) Health Technologies

HTEC 101A:Skill Building in Clinical Laboratory Procedures

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC101A_SLO_1 - Observation of compliance to the OSHA Bloodborne Pathogen Standard during the performance of the last 15 venipunctures.	Demonstration - Observation of compliance to the OSHA Bloodborne Pathogen Standard during the performance of the last 15 venipunctures.	Program Review Reporting Year: 2015-2016 Target: Target Met All 21 students exhibited compliance to the OSHA Bloodborne Pathogen Standard. (10/04/2016) Reflection (CLICK ON ? FOR INSTRUCTIONS): 100% Compliance. Continue to monitor.	Enhancement: This SLO significantly impacts the student's safety. It will be monitored each quarter. (10/04/2016)
SLO Status: Archived SLO Statement	Target for Success: Compliance – 100% All 21 students wore required attire, cleansed appropriately, handled equipment safely.		
HTEC101A_SLO_2 - Observation of the last 15 venipunctures to ensure all phlebotomy steps were correctly performed. SLO Status: Archived SLO Statement	Presentation/Performance - Observation of the last 15 venipunctures to ensure all phlebotomy steps were correctly performed.	Target: Target Met 21 of 21 students demonstrated proper venipuncture technique during the last 15 (10/04/2016) Reflection (CLICK ON ? FOR INSTRUCTIONS): 100% of the	Enhancement: Assessment will continue to be performed each quarter. Assess individual required steps versus the complete Phlebotomy procedure. (10/04/2016)
	Target for Success: 100% of students perform the last 15 venipunctures correctly.		

HTEC101A_SLO_3 - Consistently apply the OSHA Bloodborne Pathogen Standard during the collection of blood **SLO Status:** Active

Outcome Creation Date: 09/25/2017

HTEC101A_SLO_4 - Demonstrate the proper procedures for the collection of blood by venipunture and capillary puncture.

SLO Status: Active

HTEC 101B:Skill Building in Basic Patient Care

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC101B_SLO_1 - Demonstrate medical asepsis, nutrition, diet therapy, vital signs, preperation of patients and examination rooms, and various procedures in the medical office. SLO Status: Active	Demonstration - Students will demonstrate proper asepsis, nutrition, diet therapy, vital signs, preparation of patients for various procedures in the medical setting safely and properly. Target for Success: 100 pass with a C or better	Program Review Reporting Year: 2016-2017 Target: Target Met Assessment data: Students will submit vital logs, core competency sheets each class, and have a final against the instructor for accuracy of results of each course objective. (11/30/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): 100% of students passed with a C or better. Continue to go over core competency and practice vitals as a warm up so they master the skills they need prior to externship.	Enhancement: More student resources, more help, more time before or after class for questions and practice. (11/30/2016)

HTEC 101C:Skill Building in Medical Communications and Medical Transcription

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

HTEC101C_SLO_1 - Demonstrate a level of competence in the skills learned in Medical Communications and Medical Transcription.

SLO Status: Active

Demonstration - Demonstration -Typing Test

Target for Success: Achieve a typing test score of 40 words per minute and /or to show continual improvement throughout the quarter. Improvement to be monitored with 3 typing test per quarter.

Program Review Reporting Year: 2015-2016

Target: Target Met

81% of students achieved a score of 40 words per minute. 100% of students showed an increase in their typing speeds

on the 3 typing tests. (08/26/2016)

Reflection (CLICK ON? FOR INSTRUCTIONS): Students encouraged to type all their homework/lab assignments to help improve their typing skills. Students encouraged to use the computers available on campus or to use their personal laptops to practice so that they can get familiar with the stories on the typing test.

Enhancement: Students encouraged to use the computer available on campus or to use their personal laptops to practice so they can get familiar with the stories on the typing test. Practice needs to start at the beginning of the quarter to be prepared for the typing test in class. (08/27/2016)

HTEC101C_SLO_2 - Demonstrate improvement in speed and accuracy in keyboarding medical reports and transcription.

SLO Status: Archived SLO Statement

HTEC 101D:Skill Building in Medical Office Financial Procedures

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
htteC101D_SLO_1 - Demonstrate billing and collection procedures and the various steps in preparing insurance claim forms. SLO Status: Active	Directly related to Student Learning Outcome (SLO)	Program Review Reporting Year: 2016-2017 Target: Target Met 90% of the students achieved a score of 82% on CMS 1500 completion (12/20/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): In order to be able to perform medical billing a student must know how to properly complete a CMS 1500 form	Enhancement: Students need to be encouraged to keep up with the practice coding/CMS 1500 exercises (12/20/2016)
	Exam - Course Test/Quiz - Course Test/Quiz- Embedded test and assignment questions Target for Success: 100% passage in proper completion of CMS 1500, in addition 80% of students to achieve at least 75% on completion of CMS 1500		
HTEC101D_SLO_2 - Illustrate the ICD-9-CM and CPT codes used in medical office. SLO Status: Active	Exam - Course Test/Quiz - Embedded test and assignment questions Target for Success: 100% passage in proper completion of CMS 1500 in addition 80% of students to achieve at least 75% on completion of CMS 1500	Program Review Reporting Year: 2016-2017 Target: Target Met 90% of the students achieved a score of 82% on CMS 1500 completion (12/20/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): In order to be able to perform medical billing a student must know how to properly complete a CMS 1500 form.	Enhancement: Students need to be encouraged to keep up with the practice coding/CMS 1500 exercises (12/20/2016)

HTEC 101E:Skill Building in Medical Office Sterile Technique

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC101E_SLO_1 - Demonstrate the local application of heat and cold, use of medical office instruments, application of sterile gloves. SLO Status: Archived SLO Statement	Demonstration - Students will demonstrate sterile techniques with the application of gloves and instruments. Target for Success: 100% students pass with a C or better.	Program Review Reporting Year: 2015-2016 Target: Target Not Met Students will demonstrate sterile technique while don gloves and not breaking sterile technique. (11/30/2016) Reflection (CLICK ON ? FOR INSTRUCTIONS): 24 out of 27 students passed with a C or better. Continue to monitor.	Enhancement: More resources, additional help. Continue to monitor feedback from students. (11/30/2016)
HTEC101E_SLO_2 - Demonstrate the sterilization and disinfection of equipment and instruments and techniques in assisting in minor surgery. SLO Status: Archived SLO Statement Outcome Creation Date: 09/25/2017	Demonstration - Demonstration: Students will demonstrate sterile technique and identify medical equipment used for assisting method. Target for Success: 100% pass with a C or better	Program Review Reporting Year: 2015-2016 Target: Target Not Met Students demonstrate identifying instruments used for sterile technique (11/30/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): Students who did well in soil lab, participated in class engagement activities, came to class prepare did better than those who didn't.	Enhancement: additional resources, more help, and continue to monitor (11/30/2016)

HTEC101E_SLO_3 - Demonstrate the proper techniques in wrapping instruments and in sterile tray set up.

SLO Status: Active

Outcome Creation Date: 09/25/2017

HTEC 101F:Skill Building in Medical Office Diagnostic Tests

Student Learning **Enhancements Assessment Methods** Assessment Data Summaries Outcomes (SLOs) HTEC101F_SLO_1 - Demonstrate Presentation/Performance -**Program Review Reporting Year: 2015-2016** Enhancement: Students need to measuring and assessing heart Students completed a final practical Target: Target Not Met be encouraged to keep up with all rhythms using an electrocardiograph 17 students (of 20) earned a score of 90% or higher on the examination regarding EKG readings, assignments, and EKGs including analyzing normal and measurement and interpretation practical examination. Two students earned a score of 85% right from the beginning of the abnormal electrocardiograms. or higher. One student did not complete the final with instructor. quarter. Getting off to a good Students must complete 30 EKGs examination and therefore failed this course. In addition, start in the course with strong EKG this student did not complete all 30 EKGs. 4 students [of 20] prior to completion of final practical scores is predictive of future did not pass HTEC 91 so consequently failed HTEC 101F. examination. success in the course. Students must pass both HTEC 91 and 101F (07/01/2016) In addition to in class hours with **SLO Status:** Active Target for Success: 100% of student Reflection (CLICK ON? FOR INSTRUCTIONS): Ultimate instructor, lab hours are available will be able to performance the EKG success in the course seems to depend on a variety of throughout the quarter. Students practical correctly. factors, but performing well on the early EKGs and asking are encouraged to ask the for feedback from instructor seems to be correlated with instructor for feedback on and success in the course. confirmation of EKG placement.

(07/19/2016)

HTEC 110:Health Technologies Employment Preparation

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC110_SLO_1 - Illustrate steps involved in seeking employment in medical facilities which include prereartion of resumes and interviewing and preperation for certification examinations.	Exam - Course Test/Quiz - Students will have a series of quizzes, submit their resume, and prep for interview process as well as certification examinations. Target for Success: 100% pass	Program Review Reporting Year: 2015-2016 Target: Target Met out of 7 students in 110 6 were hired right away after externship. a total of 86% out of 100% (11/30/2016) Reflection (CLICK ON ? FOR INSTRUCTIONS): The way this class is designed is to help reinforce and reteach what they know and what they need to work on. This review class has an 86% passing examination rate.	Enhancement: Continue to monitor feedback as to helpful this course is. Possibly look into additional resources and tools for the students. (11/30/2016)

SLO Status: Active

HTEC 50:Introduction to Health Technologies

students should pass

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC50_SLO_1 - Develop the evolution, desirable characteristics and abilities of various roles of health technologies team members as it relates to the health care team. SLO Status: Active	Exam - Course Test/Quiz - Embedded test and assignment questions Target for Success: Seventy-five percent of these students should achieve at least 75% on these questions.	Program Review Reporting Year: 2010-2011 Target: Target Met Refer to Archived from ECMS/HTEC 50 (03/28/2012) Reflection (CLICK ON ? FOR INSTRUCTIONS): Refer to Archived from ECMS/HTEC 50	
	Exam - Course Test/Quiz - Take- Home Exam #1 regarding desirable characteristics and various roles of Health Technology team members Target for Success: 100% Pass rate because this is a take-home exam that all students should pass	Program Review Reporting Year: 2015-2016 Target: Target Met 45 out of 45 who handed in their Exam #1 passed both the desirable characteristics and Health Technology team member roles (09/22/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): Students who met the class requirements and participate in class continue to do well in the take-home assignments and exams.	Enhancement: Students need to be encouraged to complete their assignments, take home exams and the interview with a member of the Health Technology team. Presently, in addition to the course syllabus, weekly course agenda, and review of the following week's Assignments/exams, I will incorporate more reminders and continue to encourage the students contact me if there are any questions. (09/22/2016)
HTEC50_SLO_2 - Develop various methods of coping with loss. SLO Status: Active	Exam - Course Test/Quiz - Embedded exam and assignment questions. Target for Success: Seventy-five percent of these students should achieve at least 75% on these questions.	Program Review Reporting Year: 2010-2011 Target: Target Met Refer to Archived from ECMS/HTEC 50 (03/28/2012) Reflection (CLICK ON? FOR INSTRUCTIONS): Refer to Archived from ECMS/HTEC 50	
	Exam - Course Test/Quiz - • Take- Home Exam #2 re developing various methods of coping with loss Target for Success: 100% Pass rate- this is a take-home exam that all	Program Review Reporting Year: 2015-2016 Target: Target Met 45 out of 45 who handed in (9 did not submit exam) their Exam #2 passed the question regarding developing methods to cope with loss (09/22/2016)	Enhancement: Students need to be encouraged to complete and submit their assignments, take home exams and the interview with a member of the Health

Reflection (CLICK ON ? FOR INSTRUCTIONS): Students who

Technology team. Presently, in

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
		met the class requirements and participate in class usually continue to do well in their take-home assignments and exams.	addition to the course syllabus, weekly course agenda, and review of the following week's Assignments/Exams, I will incorporate more reminders and continue to encourage the students to contact me if there are any quest ions. (09/22/2016)

HTEC 60A:Basic Medical Terminology

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC60A_SLO_1 - Illustrate the word components of medical terminology. SLO Status: Active	Exam - Course Test/Quiz - Embedded test and assignment questions. Target for Success: Seventy-five percent of these students should achieve at least 76% on these questions.	Program Review Reporting Year: 2010-2011 Target: Target Met Refer to Archived from ECMS/HTEC in Documents (03/28/2012) Reflection (CLICK ON ? FOR INSTRUCTIONS): Refer to Archived from ECMS/HTEC in Documents	Enhancement: Refer to Archived from ECMS/HTEC in Documents (03/28/2012)
	Exam - Course Test/Quiz - Exam #1- #7 test the students on the word components (prefixes, suffixes and combining forms) of medical terminology. Each exam consists of 100 multiple choice questions. Target for Success: 70% is the minimum pass rate	Program Review Reporting Year: 2015-2016 Target: Target Met 72 students out of 79 passed this course(91% pass rate). (09/22/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): 91 percent of the class passed this course which means they did understand the word components of the medical terms. I did have a high drop rate in this course perhaps due to the fact that it is an online education course. I feel that videoing the lectures for the students to stream is very helpful as indicated by some students' feedback	Enhancement: I will continue to emphasize that memorizing the word components would really help the students understand the medical terms. I will give more examples of breaking down medical terms into word components. (09/22/2016)
HTEC60A_SLO_2 - Develop medical terms as they relate to the body's structure, diseases of the various body systems, medical specialties and medical specialists. SLO Status: Active	Exam - Course Test/Quiz - Embedded test and assignment questions. Target for Success: Seventy-five percent of these students should achieve at least 76% on these questions.	Program Review Reporting Year: 2010-2011 Target: Target Met Refer to Archived from ECMS/HTEC 60A under "Documents" tab. (03/28/2012) Reflection (CLICK ON? FOR INSTRUCTIONS): Refer to Archived from ECMS/HTEC 60A under "Documents" tab.	Enhancement: Refer to Archived from ECMS/HTEC 60A under "Documents" tab. (03/28/2012)
	Exam - Course Test/Quiz - Exam #2- #7 test the students on the medical terms as they relate to the body's structure, diseases of the various body systems, medical specialties and medical specialists. Each exam consists of 100 multiple choice questions. Target for Success: 70% is the minimum pass rate	Program Review Reporting Year: 2015-2016 Target: Target Met 72 students out of 79 passed this course(91% pass rate). (09/22/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): 91 percent of the class passed this course which means they did know medical terms as they relate to the body's structure, diseases of the various body systems, medical specialties and medical specialists. I did have a high drop rate in this	

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
		course perhaps due to the fact that it is an online education course. I feel that videoing the lectures for the students to stream is very helpful as indicated by some students' feedback	
HTEC60A_SLO_3 - Demonstrate the interpretation of medical abbreviations. SLO Status: Active	Exam - Course Test/Quiz - Embedded test and assignment questions. Target for Success: Seventy-five percent of these students should achieve at least 76% on these questions.	Program Review Reporting Year: 2010-2011 Target: Target Met Refer to Archived from ECMS/HTEC 60A under "Documents" tab. (03/28/2012) Reflection (CLICK ON ? FOR INSTRUCTIONS): Refer to Archived from ECMS/HTEC 60A under "Documents" tab.	Enhancement: Refer to Archived from ECMS/HTEC 60A under "Documents" tab. (03/28/2012)
	Exam - Course Test/Quiz - Exam #1- #7 test the students on the interpretations of medical abbreviations. Each exam consists of 100 multiple choice questions. Target for Success: 70% is the minimum pass rate	Program Review Reporting Year: 2015-2016 Target: Target Met 72 students out of 79 passed this course(91% pass rate). (09/22/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): 91 percent of the class passed this course which means they did know the interpretations of medical abbreviations. I did have a high drop rate in this course perhaps due to the fact that it is an online education course. I feel that videoing the lectures for the students to stream is very helpful as indicated by some students' feedback	Enhancement: I will continue to emphasize that memorizing and understanding the interpretations of medical abbreviations. I will consider adding more questions on the exams regarding interpretations of medical abbreviations. (09/22/2016)

HTEC 60G:Advanced Medical Terminology

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC60G_SLO_1 - Demonstrate the anatomy, physiology, and diseases of the digestive, urinary, female reproductive, male reproductive, nervous, sensory, and integumentary body systems. SLO Status: Active	Exam - Course Test/Quiz - Embedded test and assignment questions. Target for Success: Seventy-five percent of these students should achieve at least 76% on these questions.	Program Review Reporting Year: 2015-2016 Target: Target Met 18 out 20 Students passed with a 70% or better. (11/28/2016) Reflection (CLICK ON ? FOR INSTRUCTIONS): by giving a pretest that students used to study with all but 2 students met target.	Enhancement: students need to be encouraged to keep up with readings and assignments. Remind them to start early. Student need access to computers and internet. Remind them that these are available in the science resource centerand allied health resource center. (11/28/2016)
		Program Review Reporting Year: 2010-2011 Target: Target Met Refer to Archived from ECMS/HTEC 60G under	Enhancement: 18 of 20 students passed with a 70% or better (11/28/2016)
		"Documents" tab. (03/28/2012) Reflection (CLICK ON? FOR INSTRUCTIONS): Refer to Archived from ECMS/HTEC 60G under "Documents" tab.	Enhancement: Refer to Archived from ECMS/HTEC 60G under "Documents" tab. (03/28/2012)
	Exam - Course Test/Quiz - Exam - Course Test - Quiz. Target for Success: 100% with a 70% or better.		
HTEC60G_SLO_2 - Develop case studies that concern diagnostic, conditions, and diseases of systems and/or medical specialties. SLO Status: Active	Exam - Course Test/Quiz - Embedded test and assignment questions. Target for Success: Seventy-five percent of these students should achieve at least 76% on these questions.	Program Review Reporting Year: 2010-2011 Target: Target Met Refer to Archived from ECMS/HTEC 60G under "Documents" tab. (03/28/2012) Reflection (CLICK ON ? FOR INSTRUCTIONS): Refer to Archived from ECMS/HTEC 60G under "Documents" tab.	Enhancement: Refer to Archived from ECMS/HTEC 60G under "Documents" tab. (03/28/2012)
	Focus Group - Focus of five group of people Target for Success: 100% participation - everyone contributes information for case study articles from internet	Program Review Reporting Year: 2015-2016 Target: Target Met all of 20 students added to the group with diseases and case studies (11/28/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): the students all added to case studies with information from their articles	Enhancement: students need to be encouraged to keep up with readings and assignments. Remind them to start early. Student need access to computers and internet. Remind them that these are available in the science resource

center and allied health resource

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
			1

center. (11/28/2016)

HTEC 60H:Advanced Medical Terminology

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
	Embedded test and assignment questions. Target for Success: Seventy-five percent of these students should achieve at least 76% on these	Program Review Reporting Year: 2015-2016 Target: Target Met Assesment by 100 multiple question choice test on the cardiovascular system. (11/22/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): 10 students of 12 earned a score of 85% or higher on the examination. Ultimate success depends on a variety of factors by completing homework, making flashcards, and participating in lectures seem to correlate success in the course.	Enhancement: Students need to be encouraged to keep up with all the readings, homework, and participating in the lectures right from the beginning of the quarter Getting off to a good start with the first examination is predictive of future success in this course. (11/22/2016)
		Program Review Reporting Year: 2010-2011 Target: Target Met Refer to Archived from ECMS/HTEC 60G under "Documents" tab. (03/28/2012) Reflection (CLICK ON? FOR INSTRUCTIONS): Refer to Archived from ECMS/HTEC 60G under "Documents" tab.	Enhancement: Refer to Archived from ECMS/HTEC 60G under "Documents" tab. (03/28/2012)
	Exam - Course Test/Quiz - Students will have 100 questions multiple choice examination Target for Success: 100 percent will pass with a C or better		
	Exam - Course Test/Quiz - Students will identify, define, and interpret word elements and demonstrate the ability to spell, pronounce, and understand the meaning of the medical terminology. Target for Success: 100% pass with a C or better		
HTEC60H_SLO_2 - Develop case studies that concern diagnostic conditions and diseases of systems	Other - Design scenarios that relate to the disease process. Target for Success: Seventy-five	Program Review Reporting Year: 2015-2016 Target: Target Met 10 students earned a score of 85% or higher on	Enhancement: Students need to be encouraged with all readings, homework assignments, getting

and/or medical specialities.

SLO Status: Active

percent of these students should achieve at least 76% on these questions.

examination. One student earned a score of 72% One student earned a score of 45%. Students who are able to do homework, flashcards, participate in lecture and class do better. (11/21/2016)

off to the course with strong examination scores is predictive of future success in this course. (11/21/2016)

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
		Reflection (CLICK ON ? FOR INSTRUCTIONS): Ultimate success depends on a variety of factors, completing homework, participating in the lectures.	
		Program Review Reporting Year: 2010-2011 Target: Target Met Refer to Archived from ECMS/HTEC 60H under "Documents" tab. (03/28/2012)	
		Reflection (CLICK ON ? FOR INSTRUCTIONS): Refer to Archived from ECMS/HTEC 60H under "Documents" tab.	

HTEC 61: Medical Communications

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

HTEC61_SLO_1 - Develop the various mechanical formats and guidelines used to prepare a medical history and Target for Success: 100% of students physical report and design the information which appears in various medical reports.

SLO Status: Active

Exam - Course Test/Quiz - Exam-Course Test/Quiz

to achieve a passing score on the exam of 70% or greater.

Program Review Reporting Year: 2015-2016

Target: Target Not Met

86% of students achieved a passing score of 70% or higher

on the exam (08/27/2016)

Reflection (CLICK ON ? FOR INSTRUCTIONS): Student success on tests is highly dependent on the student's participation in the class. Participation includes attendance discussion with instructor and other classmates doing the in-class open book quiz/assignments. Students who pass the exam had good attendance, turned in the homework weekly and completed the in class assignments

Enhancement: Exams are reviewed each quarter to make sure that the questions are all understandable and deal with items of class instruction. Students need to be encouraged to use the homework and the in class assignments for as study guides for the exam. Students will be encouraged to meet regularly with instructor if they have problems with what and how to study for the exams. (08/27/2016)

HTEC61_SLO_2 - Demonstrate words concerned with keyboarding, proofreading and editing of manuscripts and abstracts.

SLO Status: Active

Exam - Course Test/Quiz - Exam -Course Test/Quiz

Target for Success: 100% of students to achieve a passing score on the exam of 70% or greater.

Program Review Reporting Year: 2016-2017

Target: Target Not Met

80% of students achieved a passing score of 70% or higher

on the exam. (12/05/2016)

Reflection (CLICK ON? FOR INSTRUCTIONS): Student success on tests is highly dependent on the student's participation in the class. Participation includes attendance, discussion with instructor and other classmates and doing the in-class open book quiz/assignments. Students who passed the exam had good attendance, turned in the homework weekly, participated in class and completed the in-class assignments.

Enhancement: Exams are reviewed each quarter to make sure that the questions are all understandable and deal with items of class instruction. Students need to be encouraged to use the homework and the inclass assignments as study guides for the exams. Students should be encouraged to meet regularly with instructor if they have problems with what and how to study for the exams.

(12/05/2016)

HTEC 64A:Basic Clinical Laboratory Procedures

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC64A_SLO_1 - Demonstrate the practice of proper application of OSHA standards during specimen collection. SLO Status: Active	Exam - Course Test/Quiz - 5 to 10 questions are given on a multiple choice exam covering one chapter Target for Success: 100% on all questions	Program Review Reporting Year: 2015-2016 Target: Target Not Met 30/40 students answered correctly (10/03/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): Students who do well on the first exam, do well on remaining chapters. This chapter has more rules and regulations.	Enhancement: Students need to read the text more than once, listen carefully to power point presentations, tutoring is available for students and resources such as the science resource center and instructional office hours. (10/03/2016)
HTEC64A_SLO_2 - Demonstrate the handling and storage of specimens. SLO Status: Archived SLO Statement	Laboratory Project - Each student is given a sterile swab to perform a throat culture. Students must correctly label each swab with patients name, date of collection, time of collection, and source of specimen. Target for Success: 100% of students performing correctly and labeling correctly.	Program Review Reporting Year: 2015-2016 Target: Target Not Met 12.5% fail, 87.5% pass, 5/40 will miss one part labeling. (10/03/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): Students perform better with understanding of task concerning patient care during lab exercise.	Enhancement: Students need to visually see a procedure, check the data before performing a task, and rereading the text several times for success. (10/03/2016)
HTEC64A_SLO_3 - Demonstrate the classification of bacteria and dentification of infectious diseases. GLO Status: Archived SLO Statement	Laboratory Project - Laboratory Assignment, four to five microscopes with gram stain slides to identify organisms according to size and color. Students will also state what infectious disease this organism it will cause. Target for Success: 100% will identify the correct organism according to color and shape. 10% may miss the correct the disease/ 90% will answer the correct disease.	Program Review Reporting Year: 2015-2016 Target: Target Not Met 30 out of 40 students will answer questions correctly on infectious disease. 40/40 will obtain correct answers on color and shape. (10/03/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): Students who do well on the first few quizzes and exams will excel on the next chapters. Microbiology is interesting to most students while we only cover part if the subject.	Enhancement: Students need to read and reread chapters to retain information, listen in class, ask questions on subjects to understand, and use all resources the De Anza has to offer. (10/03/2016)

HTEC 64B:Advanced Clinical Laboratory Procedures

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC64B_SLO_1 - Demonstrate the practice of proper application of OSHA standards. SLO Status: Archived SLO Statement	Exam - Standardized - Specific questions on exam will evaluate understanding and application of the OSHA Blood Borne Pathogen Standard. Target for Success: 100%correct responses from 21 students. Students will demonstrate ability to understand and apply the OSHA Blood Borne Pathogen Standard.	Program Review Reporting Year: 2015-2016 Target: Target Not Met 4 questions selected for the assessment. 1 question = 100% (21 of 21) 1 question = 95% (20 of 21) 2 questions = 91% (19 of 21) (10/03/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): Target remains 100%. Improvement was identified, additional instruction required, presentation of information in a scenario format, and notes to follow with power point is helpful.	Enhancement: Presentation of information of information in a scenario format as well as notes plus power point. Additional questions included on the quizzes as well as the exams. (10/03/2016)
HTEC64B_SLO_2 - Recognize and respond to potential problems encountered during venipuncture that can impact patient care. SLO Status: Active	Exam - Standardized - Response to specific exam questions will indicate knowledge and judgement regarding potential problems affecting patient care. Target for Success: 90% correct responses from 21 students.	Program Review Reporting Year: 2015-2016 Target: Target Not Met 10 questions were selected. 4 questions = 100% (21 of 21 students), 1 question = 91% (19 of 21 students), 1 question = 81% (17 of 21 students), 2 questions = 76% (16 of 21 students), 2 questions = 67% (14 of 21 students) (10/03/2016) Reflection (CLICK ON ? FOR INSTRUCTIONS): 5 of 10 questions resulted in meeting the target of 90%. 5 questions resulted below target. 7 were significantly below. Increased emphasis on presentation of the information with various types of presentation.	Enhancement: Present information in a clinical situation, repeat information at a subsequent time, evaluate the wording of the questions. (10/03/2016)
HTEC64B_SLO_3 - Demonstrate proper procedures for the collection of blood by venipuncture and skin puncture. SLO Status: Archived SLO Statement	Exam - Standardized - Responses to specific questions will indicate understanding of the proper procedure for the collection of blood by by venipuncture. Target for Success: 90% correct responses from students	Program Review Reporting Year: 2015-2016 Target: Target Not Met 10 questions were selected. 2 questions = 100% (21 of 21), 1 question = 95% (20 of 21), 2 questions = 91% (19 of 21), 1 question = 86% (18 of 21), 1 question = 81% (17 of 21), 1 question = 71% (15 of 21), 1 question = 57% (12 of 21), 1 question = 48% (10 of 21) (10/03/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): 5 out of 10 questions met the target of 90%. 5 out of 10 fell below target value. Additional emphasis in presentation required. Additional questions added to quizzes as well as exam.	Enhancement: establish a participation dialogue in which student is providing information to situational scenarios. Add questions to exam and quizzes. Add quizzes so information is repeatedly tested. (10/03/2016)

HTEC64B_SLO_4 - Identify the proper

Student Learning Outcomes (SLOs) Assessment Methods Assessment Data Summaries Enhancements

procedures for the collection of blood by venipuncture and capillary puncture.

SLO Status: Active

Outcome Creation Date: 09/25/2017

HTEC 68:Medical Reception Externship

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC68_SLO_1 - Demonstrate proper medical reception techniques in the clinical environment. SLO Status: Active	Field Placement/Internship - Field Placement/Internship- Medical Receptionist externship Target for Success: 100% of the registered students will complete and pass their medical receptionist externship by the end of the quarter.	Program Review Reporting Year: 2015-2016 Target: Target Not Met 13 out of 15 students completed and performed their Medical Receptionist skills during their externships. (09/24/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): 2 students were not able to extern due to taking classes.	Enhancement: Students need to not schedule classes that will interfere with the externship placement time frame. (09/24/2016)
HTEC68_SLO_2 - Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the doctors office. SLO Status: Active	Field Placement/Internship - Field Placement/Internship Target for Success: 100% of the Medical Receptionist externs will follow medical code of ethics while externing.	Program Review Reporting Year: 2015-2016 Target: Target Met 7 of out 8 students followed HIPPA (confidentiality act) guidelines while externing. (09/24/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): One student was not able to complete their externship during the quarter.	Enhancement: No enhancement needed. The 7 students that actually externed followed the Code Of Ethics in the medical office. (09/24/2016)

HTEC 71:Medical Office Reception

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC71_SLO_1 - Illustrate skills necessary to assist incoming and outgoing patients in the medical reception area of the doctor's office. SLO Status: Active	Exam - Course Test/Quiz - Students submit a drawing of a reception area they create at home. Attached to the drawing is a paragraph detailing further recommendations that could not be illustrated. Target for Success: students will pass with a C or above.	Program Review Reporting Year: 2015-2016 Target: Target Met 28 out of 30 students scored 70% and above that is 93%. Assessment was met with positive income. (11/21/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): the test questions are appropriate to test knowledge and skills identified in the slo	Enhancement: no enhancement is necessary (11/21/2016)
HTEC71_SLO_2 - Demonstrate appropriate communication skills with patients and colleagues. SLO Status: Active	Exam - Course Test/Quiz - Take home assignments involving the practice with family/friends of 5 predetermined scenarios for phone skills. the student will submit 5 written phone messages. Target for Success: 90% of the students will submit the assignment for grading. 80% of the students will receive a grade B or better.	Program Review Reporting Year: 2015-2016 Target: Target Met 100% of the students submitted the assignment. Only 70% received grade B or better. (08/27/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): The students all understood the importance of the assignment as evidenced by the 100% completion rate, however, some of the students did not follow the instructions as outlined in the assignments.	Enhancement: Attaching a "soft copy" of a message template to the assignment would act as a good prompt in guiding the students to the proper organization of a message as well as the required information. The book was cited as reference in the assignment but many students did not follow the suggested format. (06/30/2016)
HTEC71_SLO_3 - Identify and discuss the advantages and disadvantages of the different types of appointment scheduling including demonstrating computer skills. SLO Status: Active	Exam - Course Test/Quiz - 50 question multiple choice exam Target for Success: 90% of the students will score 70% and above on the midterm exam	Program Review Reporting Year: 2015-2016 Target: Target Met 28 of the 30 students scored 70% and abovethat is 93% assessment was met with positive outcome (06/16/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): The test questions are appropriate to test the knowledge and skills identified in the SLO.	Enhancement: No enhancement is necessary (08/27/2016)

HTEC 72:Medical Office Financial Procedures

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC72_SLO_1 - Illustrate diagnostic and procedural coding in the medical facility. SLO Status: Active	Exam - Course Test/Quiz - Course Test/Quiz- Embedded test and assignment questions Target for Success: 100% in addition 80% of students to achieve at least 75% on CPT and ICD 10- coding exercises	Program Review Reporting Year: 2016-2017 Target: Target Met 82% of the students achieved a score of 80% on coding exercises (12/20/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): There is a high correlation between doing well on ICD 10 and CPT coding exercises and doing well in the classroom.	Enhancement: Students need to be encouraged to keep up with the practice coding exercises (12/20/2016)
HTEC72_SLO_2 - Illustrate the guidelines for credit arrangement when using payment for medical services. SLO Status: Archived SLO Statement			
HTEC72_SLO_3 - Illustrate eligibility, benefits guidelines for health insurance companies. SLO Status: Active	Exam - Course Test/Quiz - Embedded test and assignment questions Target for Success: 100% in addition 80% of students to achieve at least 75% on CPT and ICD 10-coding exercises	Program Review Reporting Year: 2016-2017 Target: Target Met 82% of the students achieve a score of 80% on coding exercises (12/20/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): There is a high correlation between doing well on ICD10 and CPT coding exercises and doing well in the class.	Enhancement: Students need to be encouraged to keep up with the practice coding exercises. (12/20/2016)

HTEC 73: Medical Law and Ethics

Student Learning Outcomes (SLOs)

HTEC73_SLO_1 - Illustrate medical ethics. Medical practice act, legal relationship of patient and physician, legal responsibilities of the health technology team member, professional liability, physicians civic duties and arbitration.

SLO Status: Active

Assessment Methods

Presentation/Performance - Group Presentation: Topic to be a medical ethical topic

Target for Success: 100% class participation in the group presentation. Students divided into groups of 3 or more students. Each group will be required to pick an ethical topic. All students in the group must participate in the presentation. Each presentation to be graded based on Preparedness, Content Comprehension, Volume, Clarity, Posture and Eye Contact. Each group will also be graded on their Props, Power point Presentations and/or Handouts. The presentations will be graded with scores between 1 to 4 with 4 being the highest.

Assessment Data Summaries

Program Review Reporting Year: 2015-2016

Target: Target Met

100% of students participated in the group presentations. Scores ran from 3.5 to 3.8 out of total of 4. (07/01/2016) **Reflection (CLICK ON ? FOR INSTRUCTIONS):** There is a need for student to start working together in the group early in each quarter and for each group to split up the work of researching and preparing the presentation.

Enhancements

Enhancement: Students need to be encouraged to work together early. Students need to be introduced to how to work together in a group and how to prepare a presentation. (07/01/2016)

HTEC 74A:Medical Transcription with Advanced Terminology

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC74A_SLO_1 - Demonstrate transcription skills necessary for medical office using actual diction from various medical specialties. SLO Status: Active	Project - Complete work packet on Style and Usage. Target for Success: 100%. This is an open book workbook packet on Style and Usage which includes proper usage of grammar, abbreviations, numbers, stages and grades.	Program Review Reporting Year: 2015-2016 Target: Target Not Met 5% were not able to successful answer the questions as to stages and grades. (10/03/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): Students have studied this activity in HTEC61 and so they should have the knowledge to successfully research and answer these questions.	Enhancement: Implement additional information for this activity during the lectures. Add additional reference search information to the lecture. (10/03/2016)
HTEC74A_SLO_2 - Illustrate the anatomy, physiology and diseases of the various body systems and utilize them in medical transcription. SLO Status: Active	Project - Weekly work assignments covering anatomy, physiology and they can also use references to complete the assignment. Target for Success: 100% of students passed.	Program Review Reporting Year: 2015-2016 Target: Target Met 2 percent of students had difficulty using references. (11/21/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): The use of references is included in HTEC61, so they should have the knowledge to successfully research and answer these questions.	Enhancement: implement additional information as to the use of online references and previous text book references. Demonstrate using online references and provide particular websites for the students. (11/21/2016)

HTEC 75:Medical Office Management

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC75_SLO_1 - Illustrate advanced administrative skills including computerized accounts, management duties of the medical office manager, personnel recruitment and training, financial management, office policy and procedural manuals, and editorial and research duties and meeting arrangements. SLO Status: Archived SLO Statement	Demonstration - Chart evaluation Target for Success: 100% pass. In class demonstration to complete a chart evaluation.		
HTEC75_SLO_2 - Illustrate competence in the implementation of EHR, creating new documentation in an EHR, setting up EHR software using	Target for Success: 80% of students		
clinical and administrative tools, creation of templates for procedures and diagnosis , and importing of various documents into a patient's charts. SLO Status: Active	Demonstration - Chart evaluation. Target for Success: 100% pass. In class demonstration to complete a chart evaluation.	Program Review Reporting Year: 2015-2016 Target: Target Not Met 23 of 26 students were able to successfully complete the chart evaluation (04/30/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): Students need to be encouraged to the read the chapter information thoroughly.	Enhancement: Have the students practice this chart evaluation at least twice to ensure success. (07/19/2016)

02/11/2018 Generated by Nuventive Improve Page 132 of 212

HTEC 76A:Advanced Medical Coding I

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC76A_SLO_1 - Demonstrate knowledge to code diagnoses using ICD-9-CM Coding Systems. SLO Status: Active	Exam - Course Test/Quiz - Course Test/Quiz – Embedded test and assignment questions Target for Success: 100% passed in	Program Review Reporting Year: 2015-2016 Target: Target Met 32 of the 34 students graded 75% or better on this test.	Enhancement: Students need to be encouraged to keep up with the practice coding exercises as it will lead in not only passing the
Outcome Creation Date: 09/11/2013	addition seventy-five percent of these students should achieve at least a 80% on coding exercises.	(09/22/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): There is a high correlation between doing well on coding exercises and doing well in the class.	class but passing the Certified Coding Associate Certification thru AHIMA (09/22/2016)

HTEC 76B:Advanced Medical Coding II

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC76B_SLO_1 - Explain the purpose of ICD-10-CM/PCS coding systems SLO Status: Active	Exam - Course Test/Quiz - Course Test/Quiz - Embedded test and assignment questions Target for Success: 100% passed in	Program Review Reporting Year: 2015-2016 Target: Target Met 27 of the 34 students graded 84% or better on this test.	Enhancement: Students need to be encouraged to keep up with the practice coding exercises as it will lead in not only passing the class but passing the Certified Coding Associate Certification thru AHIMA (09/22/2016)
Outcome Creation Date: 09/11/2013	addition seventy-five percent of these students should achieve at least a 80% on CPT coding exercises.	(09/22/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): There is a high correlation between doing well on CPT coding exercises and doing well in the class.	

HTEC 90G:Basic Patient Care

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC90G_SLO_1 - Differentiate between component parts of the medical asepsis process. SLO Status: Archived SLO Statement	Presentation/Performance - Prsentation & Performance Target for Success: 100% of Students will accurately differientiate between components of the medical asepsis process.	Program Review Reporting Year: 2015-2016 Target: Target Met Assessment by sheath on thermometers, hand washing, and cleaning up work station. (11/15/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): Students who are diligent in the skill lab, show up to class prepared, do well on initial exams exceeds than those who don't. Enhancements always having sheaths, sanitation wipes, and any supplies we need on hand.	Enhancement: Extra opportunities to perform skills. Additional materials and resource and demonstrations would be helpful to enhance learning experience. (11/15/2016)
HTEC90G_SLO_2 - Demonstrate proper application of OSHA standards. SLO Status: Archived SLO Statement	Demonstration - Demonstration, students will demonstrate proper application of OSHA standards. Target for Success: 100% of Students will demonstrate accurately how to apply the use of OSHA standards	Program Review Reporting Year: 2015-2016 Target: Target Met Assessment Data, Students will perform skills lab with other students with instructor supervision. They are evaluated this on a daily basis in class. (11/15/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): 100% of students were able to demonstrate accurately OSHA standards in skills lab each day.	Enhancement: Additional Resources, such as additional help videos, websites, and more skill lab time. (11/15/2016)
HTEC90G_SLO_3 - Demonstrate the regulation and measurement of vital signs. SLO Status: Active	Presentation/Performance - Students will perform proper procedure for measuring temperature, respiration, heart rate, and blood pressure. Target for Success: 95% of students will accurately perform measuring vital signs, while 5 % will be below standard.	Program Review Reporting Year: 2015-2016 Target: Target Met 13 - A 100% - 90% 4 -B 89% - 80% 2 - C 79% - 70% 1 - F 59% Out of 20 students 95% passed, Less than 5% failed (11/15/2016) Reflection (CLICK ON ? FOR INSTRUCTIONS): Students who are diligent with skills lab, show up to class prepared, and do well on initial exams exceed than those who don't. Vital Log checks are crucial for student success.	Enhancement: Extra Opportunities to perform skills. Additional materials and resources would enhance the learning of our students. (11/15/2016)

HTEC 90H:Medical Office Sterile Technique

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC90H_SLO_1 - Demonstrate the local application of heat and cold, use of medical office instruments, application of sterile gloves. SLO Status: Archived SLO Statement	Demonstration - Students will demonstrate sterile technique by application of gloves and kit. Target for Success: 100% pass with a C or better	Program Review Reporting Year: 2015-2016 Target: Target Not Met Assessment by students don gloves and not breaking sterile technique (11/30/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): out of 27 students all passed with a C or better except for 3. Students who come to class, are engaged, and partcipate to better than those who don't.	Enhancement: More skills lab time, resources, and additional help. (11/30/2016)
HTEC90H_SLO_2 - Demonstrate the sterilization and disinfection of equipment and instruments and techniques in assisting in minor surgery. SLO Status: Archived SLO Statement	Demonstration - Students will demonstrate which instrument is which during medical office sterile technique. Target for Success: 100% of students pass with a C or better.	Program Review Reporting Year: 2016-2017 Target: Target Not Met Students have to identify a variety of instruments used for sterile technique for minor surgery. (11/30/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): Students who do well will skills lab, core competencies, come to class are better prepared for the the final exam.	Enhancement: More Resources, More Class time, Additional Staff Help. Continue to monitor results (11/30/2016)

HTEC90H_SLO_3 - Demonstrate the application of sterile gloves, sterilization of instruments that are used in minor surgery.

SLO Status: Active

Outcome Creation Date: 09/25/2017

HTEC 91:Medical Office Diagnostic Tests

Student Learning **Enhancements** Assessment Methods Assessment Data Summaries Outcomes (SLOs) HTEC91_SLO_1 - Illustrate common Exam - Course Test/Quiz - 10 point **Program Review Reporting Year: 2013-2014** Enhancement: Students need to terms used in electrocardiography, take home quiz on common terms Target: Target Not Met be encouraged to keep up with physical therapy and radiology Target for Success: 100% pass (20 Of 26 students got 7 or more questions correct readings and assignments. Remind procedures. 7/10) (03/10/2014) them to start early. **SLO Status:** Active Comments/Notes: because it is a Reflection (CLICK ON? FOR INSTRUCTIONS): There is a high Student need access to computers Planned Assessment Quarters: 2012- take home guiz everyone should be correlation between doing well on early guizzes and doing and internet. Remind them that 13 4-Spring able to pass the quiz. well in the class. 11 students who passed the first quiz were these are available in the Science Outcome Creation Date: 03/10/2014 successful in the course Resource Center and the Allied Health Resource Center. (03/10/2014)**Presentation/Performance** - Written **Program Review Reporting Year:** 2015-2016 **Enhancement:** Quizzes are Target: Target Met Reports available on instructor's websites **Target for Success: Students** Ten students out of 23 earned a score of 9/10 or better. Ten at the start of the quarter. complete a take home Quiz #1 students earned a score of 7/10 or 8/10. Three students Computer and internet access for regarding common terms. This was a earned a score of 6/10 or less. The only 2 students who the students is important for the 10 point quiz earned A's in the course had 10/10 on this early quiz. students to be able to access Ultimate success in the course seems to depend on a course materials early. variety of factors, but performing well in the early guizzes (08/27/2016) seems to be correlated with success in the course. (08/27/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): Students need to be encouraged to keep up with all the readings, assignments, and take home guizzes right from the beginning of the quarter. Getting off to a good start in the course with strong quiz scores is predictive of future success in the course. Exam - Course Test/Quiz - 50 points mid term Target for Success: 100% students received 70 percent or better HTEC91 SLO 2 - Illustrate the Exam - Course Test/Quiz - Take **Program Review Reporting Year: 2016-2017** Enhancement: Encourage structure and electrical conduction home guiz #2. Target: Target Not Met students to come in during office

system of the heart.

SLO Status: Active

Planned Assessment Quarters: 2012-

13 4-Spring

get 70% or better.

Target for Success: 100% of students 14/16 students received a 70% or better scores (11/30/2016)

> Reflection (CLICK ON? FOR INSTRUCTIONS): Overall the students performed well except the few who have had

hours for questions and answers, also to be early and stay late for student questions. Be attentive to

02/11/2018 Generated by Nuventive Improve Page 137 of 212

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
Outcome Creation Date: 03/17/2014		difficulty due to english as their second language. Students had reading and homework assignment to review the anatomy, physiology, and electrophysiology of the heart, and describe the electrical conduction and component of the electrical conduction on the electrocardiogram. Students learned to interpret arrhythmias in class, homework and simulate exercises in class.	students who speak english has a second language. (11/30/2016)
		Program Review Reporting Year: 2013-2014 Target: Target Not Met 19 students out of 26 pass the quiz with 70% or better. (03/17/2014) Reflection (CLICK ON? FOR INSTRUCTIONS): Those that pass went on to pass the course. Those that did not pass had missed two or more classes. They went on to fail the course. Student will be encouraged to keep up with the assignments, readings and to follow the attendance policy.	
HTEC91_SLO_3 - Demonstrate measuring and assessing heart rhythms using an electrocardiograph including analyzing normal and abnormal electrocardiograms. SLO Status: Active	Exam - Course Test/Quiz - Final exam regarding ECG interpretations and measurements using the 8 step method. Target for Success: 85% to 90% of the students completing the course get 70% or better.	Program Review Reporting Year: 2013-2014 Target: Target Met 24 students sat for the final exam. 13 students scored 80% or better and (60%) 22 students received a C or better. 90% of those who finished the class passed the class. 76% of the original students who enrolled in the class, passed. (03/17/2014) Reflection (CLICK ON? FOR INSTRUCTIONS): Student will be encouraged to keep up with all the readings, assignments, and take-home quizzes. Practice of the lab component of this course is very important.	
	Exam - Course Test/Quiz - 50 points mid term Target for Success: 100% students received 70 or better	Program Review Reporting Year: 2016-2017 Target: Target Not Met 14 out of 16 students received 70 % or better scores (12/05/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): In class there was over view of the lesson regarding the heart, physiology and electrophysiology of the heart and electrocardiography arrhythmias. Students had reading and homework assignment to review the anatomy, physiology, and electrophysiology of the heart, and describe the electrical	Enhancement: Encourage students to come in for the office hrs for questions and answer, also be early and stay late for the students questions. Be attentive to students who speak English as their second language. (12/05/2016)

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
		conduction and component of the electrical conduction on the electrocardiogram. The students learned to interpret the arrhythmia in class, homework and simulating exercise in the class. Over all students performed well except few	

language.

students who have difficulty due to English as their second

HTEC 93:Pharmacology for Medical Assistants

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC93_SLO_1 - Demonstrate dosage calculation, drug legislation and standards, drug preperations and information affecting various body systems. SLO Status: Active	Exam - Course Test/Quiz - Exam? Course Test/Quiz Target for Success: 100% of students will pass with a C or better	Program Review Reporting Year: 2015-2016 Target: Target Not Met 35 Students; 6 received an A 100% - 90% 11 received a B 89% - 80% 11 received a C 79% - 70% 4 received a D 69% - 60% 3 received a F 59% and below (11/15/2016) Reflection (CLICK ON ? FOR INSTRUCTIONS): Some students demonstrated lack of knowledge in basic math and found it difficult for dosage calculations.	Enhancement: Students will be encouraged to take tutoring and utilize the smart thinking website. I will have more dosage calculations problems for students who need additional help. (11/15/2016)

HTEC 94:Administration of Medications

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC94_SLO_1 - Illustrate pertinent anatomy and physiology and choice of equipment for injections. SLO Status: Active	Demonstration - Demonstrate the proper site to inject various route for medication administration. Target for Success: 100% will accurately demonstrate the proper medication administration.	Program Review Reporting Year: 2015-2016 Target: Target Met 21 students passed the class with a C or better. (10/24/2016) Reflection (CLICK ON ? FOR INSTRUCTIONS): More help like a teachers assistant would help students get through their shots faster for sign off	Enhancement: More help, more skill lab time, goal met will continue to monitor for review. (10/24/2016)
HTEC94_SLO_2 - Demonstrate proper techniques, hazards and complications, post-treatment and test patient of a minimum of 10 intramuscular, 10 subcutaneous and 10 intradermal injections. SLO Status: Active	Presentation/Performance - demonstration of performance with medication withdrawal for proficiency. Target for Success: 100% of students will accurately demonstrate the techniques and recognize complications.	Program Review Reporting Year: 2015-2016 Target: Target Met 21 Students 100% students passed the class with a C or better (10/24/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): Students performed at least the minimum of 30 shots, class participation, completed all their homework did well than those who didn't.	Enhancement: additional lab time and more models in the classroom (10/24/2016)

HTEC 95A:Medical Assisting Externship

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC95A_SLO_1 - Demonstrate proper Medical Assisting techniques in the clinical environment. SLO Status: Active	Demonstration - Students will perform medical assisting techniques in the clinical environment. Target for Success: 100% of students will demonstrate accurate MA techniques in the clinical environment.	Program Review Reporting Year: 2015-2016 Target: Target Met Supervisor Review at the clinical site (11/21/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): We have a variety of clinical sites to assist with students success rate. Giving them the choice of where they want to go has been helpful.	Enhancement: Refresher of techniques prior to externship. Monitor supervisor review comments + recommendation for a better experience for our students. (11/21/2016)
HTEC95A_SLO_2 - Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the clinical facilities. SLO Status: Active	Demonstration - Demonstration of medicolegal principles and code of ethics in the clinical environment. Target for Success: 100% of students will demonstrate proper code of ethics and medicolegal principles daily.	Program Review Reporting Year: 2015-2016 Target: Target Met Supervisor Review/ Site Review/Student Review (11/21/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): 100% of students are able to recognize alternative perspectives of the delivery of health care with regard to gender, cultural differences, and various working techniques.	Enhancement: Confirm with the students that they understand the content of the externship evaluation packet so that they comprehend the what code of ethics expectations are in the clinical environment. (11/21/2016)

HTEC 95B:Phlebotomy Technician I Externship

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC95B_SLO_1 - Demonstrate proper Phlebotomy Technician I techniques in the clinical environment. SLO Status: Active	Demonstration - Students will demonstrate proper phlebotomy techniques in the clinical environment Target for Success: 100% of students will pass with a C or better while demonstrating accurate and safe techniques in the clinical setting.	Program Review Reporting Year: 2015-2016 Target: Target Met Supervisor Review/Site Review/Student Review (11/21/2016) Reflection (CLICK ON ? FOR INSTRUCTIONS): 100% of students passed with a C or better. Students were able to better identify problems and solutions encountered in the clinical setting.	Enhancement: Continue to monitor feedback. Continue to have our refresher course prior to externship. (11/21/2016)
HTEC95B_SLO_2 - Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the clinical facilities. SLO Status: Active	Demonstration - Students will demonstrate medicolegal principles and code of ethics in the clinical setting. Target for Success: 100% of students will pass with a C or better	Program Review Reporting Year: 2015-2016 Target: Target Met Supervisor Review/Site Review/Student Review (11/21/2016) Reflection (CLICK ON ? FOR INSTRUCTIONS): Students are able to recognize alternative perspectives of the health care delivery.	Enhancement: Going over the Evaluation Packet so students know the expectations of code of ethics and medico-legal principles to have in the clinical environment. (11/21/2016)

HTEC 96A:Medical Assisting Externship

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC96A_SLO_1 - Demonstrate proper Medical Assisting techniques in the clinical environment. SLO Status: Active	Demonstration - Demonstration: Students will perform medical techniques in the clinical environment Target for Success: 100% will pass with a C or better while demonstrating preoper medical techniques in the clinical environment	Program Review Reporting Year: 2015-2016 Target: Target Met Supervisor Review/ Site Review/ Student Review (11/21/2016) Reflection (CLICK ON ? FOR INSTRUCTIONS): 100% of students passed with a C or better. Students are able to recognize different perspectives of the delivery of health care.	Enhancement: Implement feedback into MA curriculum. (11/21/2016)
HTEC96A_SLO_2 - Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the clinical facilities. SLO Status: Active	Demonstration - Students will demonstrate medicolegal principles and code of ethics in the clinical environment Target for Success: 100% of students will pass with a C or better while demonstrating medico-legal principles and code of ethics.	Program Review Reporting Year: 2015-2016 Target: Target Met Supervisor Review/ Site Review/ Student Review (11/21/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): 100% of students will be able to recognize variety of perspectives of health care delivery.	Enhancement: Going over the Evaluation Packet so students know the expectations of code o ethics and medico-legal principle to have in the clinical environment. (11/21/2016)

HTEC 96B:Medical Secretarial Externship

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC96B_SLO_1 - Demonstrate proper Medical Secretary techniques in the clinical environment. SLO Status: Active	Demonstration - Demonstration: Students will properly demonstrate Medical Secretary techniques in the clinical environment. Target for Success: 100% pass with a C or better.	Program Review Reporting Year: 2015-2016 Target: Target Met Supervisor Review, Site Review, Student Review (11/30/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): 100% of students passed with a C or better. Refresher Course has been helpful for the students. Students who pick their own site have a better experience.	Enhancement: More variety of sites. Will continue to monitor review. Going over the expectations would be helpful students before hand. (11/30/2016)
HTEC96B_SLO_2 - Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the clinical facilities. SLO Status: Active	Demonstration - Students will demonstrate medico-legal principles and code of ethics that must be considered in the clinical facilities. Target for Success: 100% of Students pass with a C or better while demonstrating proper medico legal principles and code of ethics in the clinical environment	Program Review Reporting Year: 2015-2016 Target: Target Met Supervisor Review/Site Review/Student Review (11/22/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): 100% of students pass with a C or better. Students are able to recognize a variety of aspects in the delivery of health care. Students are more confident after the externship to handle problems and solutions in the clinical environment.	Enhancement: Continue to have refresher course prior to externship. Go over Evaluation packet with students so they understand expectations in the clinical environment. (11/22/2016)

HTEC 96C:Medical File Clerk Externship

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC96C_SLO_1 - Demonstrate proper Medical File Clerk techniques in the clinical environment. SLO Status: Active	Demonstration - Demonstration: Students will properly demonstrate Medical File Clerk Techniques in the clinical environment Target for Success: 100% Students will pass with a C or better.	Program Review Reporting Year: 2015-2016 Target: Target Met Supervisor Review, Site Review, Student Review (11/30/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): 100% of Students passed with a C or better. Continue monitor feedback. Students who seek out their own site have a better experience overall.	Enhancement: Going over the expectations, having an orientation, and continue to monitor feedback from facilities plus students is helpful. (11/30/2016)
HTEC96C_SLO_2 - Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the clinical facilities. SLO Status: Active	Demonstration - Students will demonstrate medicolegal principles and code of ethics in the clinical environment. Target for Success: 100% of students will pass with a C or better while demonstrating proper code of ethics and medico legal principles.	Program Review Reporting Year: 2015-2016 Target: Target Met Supervisor Review/Site Review/Student Review (11/22/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): 100% a Students pass with a C or better. Students are able to better recognize variety of aspects in the delivery of health care. Students are better prepared for problems and have solutions after being involved in the clinical environment.	Enhancement: Continue to have refresher course prior to externship. Going over the Evaluation packet and going over expectations required in the clinical setting may be helpful before hand. (11/22/2016)

HTEC 96D:Medical Record Clerk Externship

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC96D_SLO_1 - Demonstrate proper Medical Record Clerk techniques in the clinical environment. SLO Status: Active	Demonstration - Demonstration: Students will accurately and safely demonstrate Medical Clerk techniques in the clinical environment. Target for Success: 100% Students pass with a C or better.	Program Review Reporting Year: 2015-2016 Target: Target Met Supervisor Review, Site Review, Student Review (11/30/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): 100 percent of students passed with a C or better. Students who picked out their own sites had a better experience. Continue to monitor and enhance expectations in the clinical environment.	Enhancement: Refresher of Student expectations as well as evaluation. Orientation and refresher course would be helpful (11/30/2016)
HTEC96D_SLO_2 - Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the clinical facilities. SLO Status: Active	Demonstration - Students will demonstrate medicolegal principles and code of ethics in the clinical environment. Target for Success: 100% a students pass with a C or better.	Program Review Reporting Year: 2015-2016 Target: Target Met Supervisor Review/ Student Review/Site Review (11/22/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): 100% of students passed with a C or better. Students are able to better recognize a variety of aspects in the delivery of health care. Students are better prepared for problems and have solutions after the clinical setting environment.	Enhancement: Continue to have refresher course prior to externship. Going over the Evaluation packet and going over expectations required in the clinical setting may be helpful before hand. (11/22/2016)

HTEC 96E:Business Office Clerk Externship

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC96E_SLO_1 - Demonstrate proper Business Office Clerk techniques in the clinical environment. SLO Status: Active	Demonstration - Demonstration: Students will properly demonstrate safe and accurate techniques for Business Office Clerk techniques in the clinical environment. Target for Success: 100% of students will pass with a C or better.	Program Review Reporting Year: 2015-2016 Target: Target Met Supervisor Review, Site Review, Student Review (11/30/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): 100% Students with a C or better. Students who picked out their own site had a better experience. Students are able to better recognize a variety of methods to deliver health care.	Enhancement: Going over expectations and evaluation would be helpful for the students. Continue to monitor feedback from the students as well as clinical facilities for a better over all experience. (11/30/2016)
HTEC96E_SLO_2 - Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the clinical facilities. SLO Status: Active	Demonstration - Students will demonstrate medicolegal principles and code of ethics in the clinical environment Target for Success: 100% of students pass with a C or better	Program Review Reporting Year: 2015-2016 Target: Target Met Student Review/ Supervisor Review/ Site Review (11/22/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): 100% of students pass with a C or better. Students are able to better recognize a variety of aspects in the delivery of healthcare. Students are better prepared for a professional career after externship.	Enhancement: Continue to have refresher course prior to externship. Going over the Evaluation packet and going over expectations required in the clinical setting may be helpful before hand. (11/22/2016)

HTEC 96F:Insurance and Coding Externship

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC96F_SLO_1 - Demonstrate proper Insurance and Coding techniques in the clinical environment. SLO Status: Active	Demonstration - Demonstration: Students will accurately and safely demonstrate proper Insurance and Coding techniques in the clinical environment Target for Success: 100% of students pass with a C or better.	Program Review Reporting Year: 2015-2016 Target: Target Met Student Review, Supervisor Review, Site Review (11/30/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): 100% of students passed with a C or better. Students are able to better recognize a variety of methods in health care delivery.	Enhancement: Continue to monitor feedback. Going over expectations and evaluation would be helpful for students so that they know what to expect. (11/30/2016)
HTEC96F_SLO_2 - Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the clinical facilities. SLO Status: Active	Demonstration - Students will demonstrate medicolegal principles and code of ethics in the clinical environment Target for Success: 100% of students pass with a C or better while demonstrating proper techniques of medico legal principles and code of ethics.	Program Review Reporting Year: 2015-2016 Target: Target Met Supervisor Review/ Site Review/ Student Review (11/22/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): 100% of students passed with a C or better. Students are able to recognize a variety of aspects in the delivery of health care. Students are better prepared to take on problems and have solutions after externship experience.	Enhancement: Continue to have refresher course prior to externship. Going over the Evaluation packet and going over expectations required in the clinical setting may be helpful before hand. (11/22/2016)

HTEC 96G:Medical Transcription Externship

	•	•	
Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC96G_SLO_1 - Demonstrate proper Medical Transcription techniques in the clinical environment. SLO Status: Active	Demonstration - Demonstration: Proper safe and accurate techniques related to Medical Transcription in the clinical environment. Target for Success: 100% Students pass with a C or Better.	Program Review Reporting Year: 2015-2016 Target: Target Met Student Review, Supervisor Review, Site Review (11/30/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): 100% of students passed with a C or better. Students are able to better recognize a variety of health care delivery methods. Continue to Monitor for success and enhancements.	Enhancement: Going over expectations and evaluation packet prior to externship would be helpful for students. Continue to monitor feedback for a better clinical experience for our students. (11/30/2016)
HTEC96G_SLO_2 - Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the clinical facilities. SLO Status: Active	Demonstration - Students will demonstrate medicolegal principles and code of ethics in the clinical environment. Target for Success: 100% of students pass with a C or Better while demonstrating code of ethics and medico legal principles daily.	Program Review Reporting Year: 2015-2016 Target: Target Met Supervisor Review/ Site Review/ Student Review (11/22/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): 100% of students passed with a C or better. Students are able to better recognize a variety of aspects with the delivery of health care. Students are better prepared to take on problems and have solutions after externship experience.	Enhancement: Continue to have refresher course prior to externship. Going over the Evaluation packet and going over expectations required in the clinical setting may be helpful before hand. (11/22/2016)

HTEC 96H:EKG Externship

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC96H_SLO_1 - Demonstrate proper EKG techniques in the clinical environment. SLO Status: Active	Demonstration - Demonstrate course objectives and accurate EKG techniques in the clinical environment. Target for Success: 100% will pass	Program Review Reporting Year: 2015-2016 Target: Target Met Assessment by Supervisor review. (11/15/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): Students who are interested in pursue EKG as a career do better in the clinical setting over all.	Enhancement: More variety of clinical sites with availability to enhance EKG skills. (11/15/2016)
HTEC96H_SLO_2 - Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the clinical facilities. SLO Status: Active	Demonstration - Demonstration: Medico-legal Principals and code of ethics in the clinical facilities Target for Success: 100% success rate with a C or better.	Program Review Reporting Year: 2015-2016 Target: Target Met Supervisor Review/ Site Review/ plus students are with a licensed professional at all times. (11/15/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): 100% of students passes with a C or better. Will continue to monitor.	Enhancement: Enhancement, training about code of ethics and medicolegal principles before entering the clinical site. (11/15/2016)

Assessment: Course/Service Four Column



Dept - (BHES) Medical Laboratory Technician

HTEC 180:Clinical Hematology/Urinalysis/ Coagulation Practicum

Student Learning	
Outcomes (SLOs)	

HTEC 180_SLO_1 - Safely and accurately perform analyical procedures in Clinical Hematology/Urinalysis/Coagulation departments identifying normal and abnormal lab tests and factors affecting results and take appropriate action.

SLO Status: Active

Outcome Creation Date: 10/18/2016

Assessment Methods

Field Placement/Internship - Clinical site placement: Evaluations are done on site by a clinical trainer. Students are rated as proficient or above or below. 75% is considered proficient. Target for Success: Proficient: 75%

Assessment Data Summaries

Program Review Reporting Year: 2014-2015

Target: Target Met

Of the 8 students in clinical rotation during this time; all scored above the proficiently level for this rotation. The average score for all students was 96% well above the proficient mark. (10/18/2016)

Reflection (CLICK ON? FOR INSTRUCTIONS): The students are well prepared to enter the working/training portion of the program. The laboratory work that the students do in class is very helpful to address skill, knowledge and comfort level with clinical testing. We did to keep challenging the students in the students lab so they continue to be prepared and have the confidence to perform

Enhancements

Enhancement: : Emphasizing the laboratory skills and case studies will help prepare the students for their clinical rotations. Having enough equipment and samples for all students to practice is important. (10/18/2016)

HTEC 183:Clinical Microbiology Practicum

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

HTEC183_SLO_1 - Safely and accurately perform analytical procedures in Clinical Microbiology identifying normal and abnormal lab tests and factors affecting results and take appropriate action.

SLO Status: Active

Field Placement/Internship - Clinical site placement: Evaluations are done on site by a clinical trainer. Students are rated as proficient or above or below. 75% is considered proficient. Target for Success: Proficient: 75%

Program Review Reporting Year: 2014-2015

Target: Target Met

Of the 8 students in clinical rotation during this time; all scored above the proficiently level for this rotation. The average score for all students was 96% well above the proficient mark.

(10/18/2016)

Reflection (CLICK ON? FOR INSTRUCTIONS): The students are well prepared to enter the working/training portion of the program. The laboratory work that the students do in class is very helpful to address skill, knowledge and comfort level with clinical testing. We did to keep challenging the students in the student's lab so they continue to be prepared and have the confidence to perform. Learning to use the microscope, stain organisms from culture and recognize normal flora is important

Enhancement: Emphasizing the laboratory skills and case studies will help prepare the students for their clinical rotations. Having enough equipment and samples and media for all students to practice is important.

(10/18/2016)

HTEC 184:Clinical Immunology/ Immunohematology Practicum

Student Learning Outcomes (SLOs)

HTEC184_SLO_1 - Safely and accurately perform analyical procedures in Clinical Immunology/Immunohematology identifying normal and abnormal lab tests and

appropriate action. **SLO Status:** Active

Outcome Creation Date: 10/18/2016

factors affecting results and take

Assessment Methods

Field Placement/Internship - Clinical site placement: Evaluations are done on site by a clinical trainer. Students are rated as proficient or above or below. 75% is considered proficient. Target for Success: Proficient: 75%

Assessment Data Summaries

Program Review Reporting Year: 2014-2015

Target: Target Met

Of the 8 students in clinical rotation during this time; all scored above the proficiently level for this rotation. The average score for all students was 98% well above the

proficient mark. (10/18/2016)

Reflection (CLICK ON? FOR INSTRUCTIONS): The students are well prepared to enter the working/training portion of the program. The laboratory work that the students do in class is very helpful to address skill, knowledge and comfort level with clinical testing. We did to keep challenging the students in the student's lab so they continue to be prepared and have the confidence to perform.

Enhancements

Enhancement: : Emphasizing the laboratory skills and case studies will help prepare the students for their clinical rotations. Having enough equipment and samples and media for all students to practice is important. Keeping the excellent blood banking portion of the course is a value as many students get little exposure in the rotations.

(10/18/2016)

HTEC 185:Clinical Chemistry Practicum

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

HTEC185_SLO_1 - Safely and accurately perform analyical procedures in Clinical Chemistry deparment identifying normal and abnormal lab tests and factors affecting results and take appropriate Target for Success: Proficient: 75% action.

SLO Status: Active

Field Placement/Internship - Clinical site placement: Evaluations are done on site by a clinical trainer. Students are rated as proficient or above or below. 75% is considered proficient.

Program Review Reporting Year: 2014-2015

Target: Target Met

Of the 8 students in clinical rotation during this time; all scored above the proficiently level for this rotation. The average score for all students was 98% well above the proficient mark. (10/18/2016)

Reflection (CLICK ON? FOR INSTRUCTIONS): The students are well prepared to enter the working/training portion of the program. The laboratory work that the students do in class is very helpful to address skill, knowledge and comfort level with clinical testing. We did to keep challenging the students in the student's lab so they continue to be prepared and have the confidence to perform. Having the instruments in class for the students to practices give them confidence in the field. Although many of our techniques are manual or semi-automated the theory is there and important for the students to learn before going out to the clinical sites.

Enhancement: Emphasizing the laboratory skills and case studies will help prepare the students for their clinical rotations. Having enough equipment and samples and media for all students to practice is important. Keeping the excellent blood banking portion of the course is a value as many students get little exposure in the rotations.

(10/18/2016)

HTEC 80:Clinical Hematology Laboratory

Student Learning Assessment Methods Assessment Data Summaries **Enhancements** Outcomes (SLOs) HTEC80_SLO_1 - Practice proper Exam - Course Test/Quiz - direct **Program Review Reporting Year: 2015-2016** Enhancement: 1. Current application of OSHA standards. observation Target: Target Met instruction and monitoring of **SLO Status:** Active **Target for Success: 75%** 90% or greater of students demonstrate student practices with feedback as compliance with OSHA standards for laboratory safety needed are successful in meeting (01/13/2017) this objective. Continue current Reflection (CLICK ON? FOR INSTRUCTIONS): 1. All practices. (01/13/2017) students (100 %) successfully demonstrated compliance with 6 OSHA biohazard safety standards on the midterm practical exam. Students scored 100% on this assessment. This is a mandatory requirement for anyone participating in our MLT laboratory courses, and also for anyone preparing for a career in the laboratory field. Successful demonstration of understanding and application of OSHA safety standards prepares the students for laboratory externships HTEC80_SLO_2 - Use proper Exam - Course Test/Quiz - 2. **Program Review Reporting Year: 2015-2016** Enhancement: 2. Offer more technique and follow written Students were required to Target: Target Met opportunities for students to laboratory procedures to perform All students (100 %) passed assessments on the perform the following during perform automated CBCs on the Complete Blood Count (CBC) with practical exams: Midterm Exam: midterm exam (mean score = 84% for automated CBC and analyzer, and give real-time differential and patelet estimate on a automated CBC with platelet platelet estimate). Fifteen of 16 students (94%) passed feedback to students when minimum of 2 normal blood samples. assessments on the final exam (mean score = 90% for estimate on 1 normal blood sample; practicing differentials. This will SLO Status: Active Final Exam: Automated CBC on a automated CBC, 2 platelet estimates, and 2 manual WBC require an aide to assist with labs, control plus manual differential with differentials). Overall mean score for both exams = 89%. because it is not feasible for one plate estimate on 2 normal samples. (01/13/2017) instructor to monitor multiple Reflection (CLICK ON? FOR INSTRUCTIONS): 2. Students The instructor observed each concurrent activities in lab scored above 75% overall on these assessments. The student's operation of the sessions. Develop or purchase a autoanalyzer and evaluated the higher mean on the midterm assessment reflects that it did library of digital images of not include manual differentials, which requires more skill output from the instrument using a erythrocyte and leukocyte and practice. Performance of manual differentials is not rubric. Platelet estimates and morphology, including multiple differential results were compared within the scope of practice for MLT's working in California, images of normal cells, for but is taught in this course. The mean scores were well to established acceptable ranges.

HTEC80_SLO_3 - Identify abnormal

Exam - Course Test/Quiz - 3. The

Target for Success: 75%

above the required minimum of 75%, demonstrating

estimates on normal blood samples.

competency for this SLO and adequate technical ability for performing CBCs, manual differentials, and platelet

students to practice differentials

(01/13/2017)

Student Learning	
Outcomes (SLOs)	

Assessment Methods

Assessment Data Summaries

Enhancements

CBC results and correlate to possible causes.

SLO Status: Active

final exam included 27 multiple choice questions related to the identification of abnormal CBC results and their correlation to possible causes.

Target for Success: 75%

Program Review Reporting Year: 2015-2016

Target: Target Met

3. Of the 27 related questions, 90-100% of students correctly answered 10 questions, while another 11 questions were answered correctly by 75 – 89% of students. At least 75% of students correctly answered 21 of 27 (78%) of questions. (01/13/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): 3.

Performance met the target for this objective. Correlating abnormal results with possible causes requires high level cognitive skills. Several of the exam questions were challenging and required the assimilation and application of information. Some students were more successful than others in this area.

Enhancement: 3. Expand the number of case studies discussed in class and/or expand homework assignments to give students more practice in developing the higher level cognitive skills required for this objective. (01/13/2017)

HTEC 80A:Clinical Hematology Lecture

score

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

HTEC80A_SLO_1 - Given patient history informationand laboratory results identify the hematologiacl disorder displayed by the patient.

SLO Status: Active

Planned Assessment Quarters: 2016-

17 2-Fall

Outcome Creation Date: 03/19/2017

Several questions were asked on all three exams during the quarter relating to hematological disorders **Target for Success:** 75% passing **Program Review Reporting Year: 2016-2017**

Target : Target Not Met

Questions were asked on each midterm and the final.

1) Midterm one had 2 questions with an average score of 50%; the second exam had 6 questions with an average score of 80%

2)Final had 9 questions with and average score of 72% (03/19/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): There was a significant improvement from the first exam to the second. This could be due to students learning what to focus on for the exams. Out of the 6 questions 2 did not (separately) meet the cut off of 75%. Both of these are at 70%. The final exam had 9 questions and 5 of the 9 questions did not pass (separately). Four of these questions had to do with AML hematological disorders. The rate overall was 72%, still not meeting the target.

Enhancement: Students apparently learn what material to study for the upcoming exams and therefore preform better. AML appears to be a more complex disorder and finer points needed to separate this group. (03/19/2017)

Follow-Up: It would be beneficial to review the AML disorders before the final exam. Perhaps added review during the quarter would help as well. (03/19/2017)

HTEC 81:Clinical Urinalysis Laboratory

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC81_SLO_1 - Practice proper application of OSHA standards. SLO Status: Active Planned Assessment Quarters: 2014-15 2-Fall	Demonstration - Observation of students practicing good standard precautions in the classroom. Including the use of PPE, disinfecting counter tops, and disposal of biowaste. Target for Success: 100% of students will be able practice application of OSHA standards	Program Review Reporting Year: 2014-2015 Target: Target Met 100% of the students practiced proper application of OSHA standards by demonstrating proper wear of personal protective equipment (gloves, lab coats) and showed proper method of disposing biohazard waste and disinfection (02/19/2016) Reflection (CLICK ON ? FOR INSTRUCTIONS): Students were able to understand the importance of lab safety and OSHA standards by properly wearing lab coats & gloves, decontaminating benches before and after lab use, and properly disposing contaminated materials and sharps by mid quarter	
		Program Review Reporting Year: 2014-2015 Target: Target Met 100% of the students practiced proper application of OSHA standards by demonstrating proper wear of personal	Enhancement: Keep emphasizing the importance of always following good safe laboratory practices. (02/19/2016)
	protective equipment (gloves, lab coats) and showed proposition method of disposing biohazard waste and disinfection. (04/24/2015)	Enhancement: Perhaps we should have the students listen to the lecture material online as homework in order to devote more class time to going over cas studies. (04/24/2015)	
	Demonstration - Demonstration of students wearing appropriate PPE during all laboratories Target for Success: 100%		
HTEC81_SLO_2 - Perform routine urinalysis on a minimum of 2 normal urine samples with 100% accuracy to include both physical and chemical analysis. SLO Status: Active	Laboratory Project - This assessment includes both the students ability to demonstrate by performance and test questions to perform 2 normal urine samples with 100% accuracy. Target for Success: 100%	Program Review Reporting Year: 2014-2015 Target: Target Met 100% of the students were able to perform routine urinalysis on a minimum of 2 normal urine samples with 100% accuracy, including both physical and chemical analysis. (04/24/2015)	Enhancement: Perhaps we should have the students listen to the lecture material online as homework in order to devote more class time to going over cas studies. (04/24/2015)

Demonstration - Will show the correct testing procedure to test 2

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
	normal urines with the correct results. Questions will be asked. Target for Success: 75%		
HTEC81_SLO_3 - Identify abnormal urinalysis results and correlate these results with possible causes. SLO Status: Active	Exam - Course Test/Quiz - By given exam questions, students will be able to identify abnormal urinalysis results and correlate these results with possible causes. Target for Success: 75% is a passing score of the exam	Program Review Reporting Year: 2014-2015 Target: Target Met On average, only 83% students were able to correctly correlate these results with possible causes. (04/24/2015)	Enhancement: Perhaps we should have the students listen to the lecture material online as homework in order to devote more class time to going over case studies. (04/24/2015)
	Exam - Course Test/Quiz - Exam questions will be asked to assess students competency in identifying abnormal urine results. The students should be able to relate these abnormal results to possible diseases. Target for Success: 75%		

HTEC 81A:Clinical Urinalysis Lecture

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

HTEC81A_SLO_1 - Given a diagram of Exam - Course Test/Quiz - Given a the kidney, labels its parts, trace the path of blood flow and urine formation to include reabsorption and secretion.

SLO Status: Active

picture of a kidney, students can correctly label the parts and draw the blood flow

Target for Success: 80%

Program Review Reporting Year: 2014-2015

Target: Target Met

95% of the students were able to partially or in its entirety identify the parts of the kidney and trace the path of blood flow and urine formation. 1 of 19 students (5%) was unable to identify the parts of the kidney or trace the path of blood flow and urine formation. (02/19/2016)

Reflection (CLICK ON? FOR INSTRUCTIONS): All of the students demonstrated understanding of kidney structure and urine formation and were able to identify the parts of the kidney and/or trace the path of blood flow and urine formation. However only 70% of the students were able to do so with 100% accuracy. The instructors reviewed the kidney structure & urine formation after the exam with the students.

Enhancement: Follow up with asking the same or similar question on the final exam to see if the students showed improvement in learning the kidney structure and urine formation. (02/19/2016)

HTEC 82:Clinical Coagulation Laboratory

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC82_SLO_1 - Practice proper application of OSHA standards. SLO Status: Active	Demonstration - Students will demonstrate their knowledge of OSHA standards by wearing appropriate personnel protective equipment for all laboratory sessions, which could include, eye wear, lab coats and gloves. Target for Success: 100% of students will meet this requirement by the second laboratory session	Program Review Reporting Year: 2015-2016 Target: Target Met Lab Practical: All 15 students scored 100% on this assignment. They demonstrated and complied to the standards. (02/19/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): Students were able to understand the importance of lab safety through the practice of OSHA standards.	Enhancement: Continue to stress the importance of following good laboratory practices for everyone safety. (02/19/2016)
HTEC82_SLO_2 - Analyze blood samples for Protime (PT) and Activated Partial Thromboplastin Time (APTT) following proper techniques and procedures. SLO Status: Active	Presentation/Performance - Students will demonstrate the ability to perform Protime and Activated Partial Thrombopalstin Time testing in the laboratory during a practical exam. Target for Success: 75% is a passing score for this exam.	Program Review Reporting Year: 2015-2016 Target: Target Not Met Demonstration of laboratory testing was adequate, however, one student failed to meet the 75% on the written questions. (02/19/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): Overall the class succeeded, they demonstrated competency in the classroom and adequate technical skills in the lab performing various coagulation testings.	Enhancement: More hands on practice in the laboratory setting with the instruments will help the students proficiency. (02/19/2016)
HTEC82_SLO_3 - Identify abnormal PT and APTT results and correlate to possible causes. SLO Status: Active	Exam - Course Test/Quiz - Students are asked questions on quizzes and practical final exam. Target for Success: 75%	Program Review Reporting Year: 2015-2016 Target: Target Not Met The Lab mean scores: Midterm: 86% Final: 81.8%. The Mean average score of the entire class was 84.4%. Lab: 14 out of 15 students achieved 75% or above. 5 students with a letter grade of A, 8 students with a letter grade of B, 1 student with a letter grade of C, and 1 students with a letter grade of D. (02/19/2016) Reflection (CLICK ON ? FOR INSTRUCTIONS): Compared to last coagulation class (Fall of 2015) the midterm and final scores in lecture increased significantly by 6% and 3%, respectively, while the quiz scores decreased by only few percentages. In the Lab comparison, the midterm	Enhancement: Need to teach students how to prepare for the final or for any exams, develop their test taking skills. (02/19/2016)

scores increased by 9% while the final scores were even.

02/11/2018 Generated by Nuventive Improve Page 163 of 212

HTEC 82A:Clinical Coagulation Lecture

Student Learning Outcomes (SLOs)

HTEC82A_SLO_1 - Evaluate laboratory data to distinguish between primary and secondary hemostasis disorders and defend your response.

SLO Status: Active

Assessment Methods

Exam - Course Test/Quiz - Questions were asked on via quizzes, midterm and the final to assess students comprehension of hemostasis.

Target for Success: Midterm exams/quizzes: Students preparing

for a career in the area of clinical laboratory

medicine need to score higher than 75% to pass the course.

Assessment Data Summaries

Program Review Reporting Year: 2015-2016

Target: Target Met

The lecture mean scores breakdowns are: Quizzes: 81.5%

Midterm: 91.5% Final: 78.2%

The Mean average score of the entire class was 83.7%.

Lecture: 14 out of the 15 students

achieved the 75% or above requirement. 3 students with

letter grade of A, 9 students

with a letter grade of B and 3 students with a letter grade of

C. (02/19/2016)

Reflection (CLICK ON ? FOR INSTRUCTIONS): Compared to last coagulation class (Fall of 2015) the midterm and final

scores in lecture

increased significantly by 6% and 3%, respectively, while

the quiz scores decreased by

only few percentages. They understood the usage and application of Coagulation

testings and

learned about the homeostatic processes and diseases

related to hemostasis

Enhancements

Enhancement: Since the questions asked on the finals are based on case studies, practice more using case studies to help students understand overall clinical aspects of hemostasis.

? Need to teach students how to prepare for the final or for any exams, develop their test taking skills. (02/19/2016)

HTEC 83:Clinical Microbiology Laboratory

conditions they may be considered

Target for Success: An acceptable

pathogens.

pass rate is 75%

Student Learning **Enhancements Assessment Methods** Assessment Data Summaries Outcomes (SLOs) HTEC83_SLO_1 - Practice proper **Demonstration - Observation of Program Review Reporting Year: 2014-2015 Enhancement:** Stressing the application of OSHA standards students practicing standard Target: Target Met importance of following the No **SLO Status:** Active 100% compliance of wearing PPE by the second laboratory. precautions in the laboratory food and drink rule for all classes classroom. Disposal of hazardous waste was accomplished by the last and importance of cleaning desk **Target for Success: 100%** weeks of the quarter. (04/24/2015) tops. Also, repeat the rules of disposal of material. Questions to be added to exams to help drive the point home. (04/24/2015) HTEC83 SLO 2 - Distinguish between Exam - Course Test/Quiz - Exam **Program Review Reporting Year: 2014-2015 Enhancement:** Adding additional normal flora and pathogenic bacteria questions on the first exam and Target: Target Met slides to view the concept of for selected body sites similar or exact questions asked Two questions were asked on the first exam (#14 and #20). normal flora versus pathogenic **SLO Status:** Active Each question had one miss for a 4% error rate. On the final again on the final exam. Questions bacteria may help those visual concerning the differentiation three guestions were asked. (#16 and #44) were similar to learners. Using case studies as a the first exam. The third question (#57) required the between bacteria that is normal classroom tool may help to solidify student to use critical thinking to determine if the human flora was to be distinguished this concept. (04/24/2015) from pathogenic organisms. organisms listed were normal flora or pathogens. The results for these were (#16 miss of 2for a 10% error, #44 no Questions encompassed the concept misses 100% correct and, and #57 miss 4, 18%) of when certain organisms can be normal flora and under what The questions are above that pass rate.

(04/24/2015)

02/11/2018 Generated by Nuventive Improve Page 165 of 212

HTEC 83A:Clinical Microbiology Lecture

Student Learning Outcomes (SLOs)

HTEC83A_SLO_1 - Given patient history information, specimen source and laboratory results including biochemical profile, media used, gram stain, and other selected identification results identify the pathogenic organism isolated from the patient.

SLO Status: Active

Planned Assessment Quarters: 2014-

15 3-Winter

Outcome Creation Date: 04/16/2015

Assessment Methods

Exam - Course Test/Quiz - Exam questions and case studies used to assess the student critical thinking skills. Given some information, can the student conclude which is a likely organism.

Target for Success: An acceptable pass rate is 75%

Assessment Data Summaries

Program Review Reporting Year: 2014-2015

Target: Target Not Met

Assessment Data Summary: Three questions were asked on the final exam to assess the students ability to apply the knowledge taught in class to determine the likely pathogen. #32 had 3 miss for an error rate of 14%, #65 had 9 misses for an error rate of 41% and question #59 had 3 misses for an error rate of 14%. An additional question was asked; #91 had 10 misses for an error rate of 45%. Only the two questions met the standard. (04/24/2015)

Enhancements

Enhancement: More work is needed to help students think critically. More in-class exercises using case studies, perhaps in groups, with discussion.

Questions built into lectures may help. (04/24/2015)

02/11/2018 Generated by Nuventive Improve Page 166 of 212

HTEC 84:Clinical Immunology/Immunohematology Laboratory

Student Learning Outcomes (SLOs)

HTEC84_SLO_1 - Practice proper application of OSHA standards SLO Status: Active

Assessment Methods

Demonstration -: Direction observation of proper use of Personal Protective Equipment by always using a lab coat and gloves before working with biohazard. Directly observe proper disposal of biohazard in the appropriate waste container.

Target for Success: 100%

Assessment Data Summaries

Program Review Reporting Year: 2015-2016

Target: Target Met

Assessment Data Summary: Students were very good about using their PPE before starting lab. This was 100%. There was some confusion about what is considered non-hazardous waste, biohazardous waste and a sharp. I found waste in the wrong container a few times. (01/17/2017)

Reflection (CLICK ON ? FOR INSTRUCTIONS): Reflection and Analysis:

Overall the students understood how important it is to protect themselves from hazardous materials. Bloodborne pathogens are one of the most common threats to someone in the healthcare field and the clinical laboratory. I never saw a student handle blood carelessly which is extremely important for when they are placed in a laboratory internship. I give a safety talk at the beginning of the quarter, but the proper disposal of waste discussion may need to occur more than once.

Enhancements

Enhancement:

Enhancement/Action: Students respond better to knowledge when they directly use what they learned. Instead of only lecturing about safety, a physical activity involving correct location of waste container for each item would help cement the lesson.

(03/03/2017)

HTEC84_SLO_2 - Use proper technique and follow written laboratory procedures to perform all testing necessary to find a mock patient a compatible unit of blood.

SLO Status: Active

Demonstration - Assessment Data Summary: Students were very good about using their PPE before starting lab. This was 100%. There was some confusion about what is considered non-hazardous waste, biohazardous waste and a sharp. I found waste in the wrong container a few times.

Target for Success: 100%

Program Review Reporting Year: 2015-2016

Target: Target Met

Assessment Data Summary: ABO typing: Overall 91% (14 students 100%, 3 students 50%)

Finding compatible blood: Overall 81% (43: 88%, 44: 88%, 45: 59%, 46: 88%) (03/03/2017)

Reflection (CLICK ON ? FOR INSTRUCTIONS): Reflection and Analysis:

Analysis:

Selecting correct ABO type blood for patients in a hospital is crucially important to the point that giving ABO incompatible blood is considered to be an event that should never happen. Correct ABO typing is supposed to occur at a rate of 100%. Since this was a final exam, they should be able to correctly identify ABO type 100% of the time. 14 of 17 students got 100%. The main problem was

Enhancement:

Enhancement/Action: I would spend a little more time expressly discussing compatible blood and what can be safely transfused. I would also try to the identify students who had trouble with ABO typing and directly observe their technique and reaction reading. (03/03/2017)

02/11/2018 Generated by Nuventive Improve Page 167 of 212

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
		being the commute call a repetition positive. One of the	

being too eager to call a reaction positive. One of the finding compatible blood questions was made difficult (#45) to see if students could catch the minor detail that technically made the blood safe to give, but it may have confused students. Overall the students performed very well.

HTEC 84A:Clinical Immunology/Immunohematology Lecture

Student Learning Outcomes (SLOs)

HTEC84A SLO 1 - Correlate clinical significance of serologic tests with possible disease states

SLO Status: Active

Planned Assessment Quarters: 2015-

16 4-Spring

Outcome Creation Date: 03/17/2017

Assessment Methods

Exam - Course Test/Quiz -

Assessment Method: Final Exam Questions: #14-17 Questions pertained to Hepatitis status based on serological markers

Target for Success: Target for Success: Average pass rate of 75% or greater on the 4 questions

Assessment Data Summaries

Program Review Reporting Year: 2015-2016

Target: Target Met

Assessment Data Summary: The average pass rate was 85% on the 4 questions (14. 85%, 15. 93%, 16. 85%, 17. 78%) (03/18/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): Reflection and Analysis:

The final was a comprehensive test. I believe in finals covering the entire course in order for the student to improve areas of weakness. I will reward improvement by allowing the final grade to take the place of the overall grade. The same type of questions appeared on a midterm, but they were not identical. I did my best to emphasize the importance of interpretation of test results to the students and they were successful.

Enhancements

Enhancement:

Enhancement/Action: Since the students were successful in interpreting these tests results, I could add a couple questions at a slightly higher level of interpretation.

(03/18/2017)

Exam - Course Test/Quiz -

Assessment Method: Final Exam Questions: #14-17 Questions pertained to Hepatitis status based

on serological markers Target for Success: Target for Success: Average pass rate of 75% or greater on the 4 questions

HTEC84A_SLO_2 - Given patient

history and various

immunoheamatolgy testing evaluate the results and correalte them with various disease states.

SLO Status: Active

Exam - Course Test/Quiz -

Assessment Method: Exam practical and written questions. Perform forward and reverse ABO typing and state the blood type (Practical Exam). State whether a patient with a specific blood type could safely receive a stated blood type unit. (Written Exam #43-46)

Target for Success: Target for Success: 90% for performance of **Program Review Reporting Year: 2015-2016**

Target: Target Met

Assessment Data Summary: ABO typing: Overall 91% (14 students 100%, 3 students 50%)

Finding compatible blood: Overall 81% (43: 88%, 44: 88%, 45: 59%, 46: 88%)

(03/18/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): Reflection and Analysis:

Selecting correct ABO type blood for patients in a hospital is crucially important to the point that giving ABO

Enhancement:

Enhancement/Action: I would spend a little more time expressly discussing compatible blood and what can be safely transfused. I would also try to the identify students who had trouble with ABO typing and directly observe their technique and reaction reading. (03/18/2017)

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
	ABO typing. 80% for evaluation of blood unit.	incompatible blood is considered to be an event that should never happen. Correct ABO typing is supposed to occur at a	

never happen. Correct ABO typing is supposed to occur at a rate of 100%. Since this was a final exam, they should be able to correctly identify ABO type 100% of the time. 14 of 17 students got 100%. The main problem was being too eager to call a reaction positive. One of the finding compatible blood questions was made difficult (#45) to see if students could catch the minor detail that technically

made the blood safe to give, but it may have confused students. Overall the students performed very well.

HTEC 85A:Clinical Chemistry I Laboratory

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
HTEC85A_SLO_1 - Practice proper application of OSHA standards. SLO Status: Active	Directly related to Student Learning Outcome (SLO)	Program Review Reporting Year: 2016-2017 Target: Target Met Assessment Data Summary: Winter 2016 – Enrolled students were observed in each laboratory class including the midterm and final exam as to the proper use of personal protective equipment and proper disposal of waste materials including biohazardous materials. There was 100% compliance of this SLO by the second laboratory class. (12/04/2016) Reflection (CLICK ON ? FOR INSTRUCTIONS): In reflecting on this assessment, it is clear that the students are accomplishing the laboratory theory and technic in needed to successfully complete this SLO.	Enhancement: No enhancements needed, safety will continue to be of utmost importance throughout and will continue to be emphasized throughout the course. (12/04/2016)
	Demonstration - Assessment Data Summary: Winter 2016 —A rubric was used to observe enrolled students in each laboratory class including the midterm and final exam practicing good standard precautions in the classroom. This included proper use of PPE, disinfecting counter tops and proper disposal of biohazardous waste. Target for Success: 100%	Program Review Reporting Year: 2016-2017 Target: Target Met Assessment Data Summary: Winter 2017 – Enrolled students were observed in each laboratory class including the midterm and final exam as to the proper use of personal protective equipment and proper disposal of waste materials including biohazardous materials. There was 100% compliance of this SLO by the second laboratory class. During the midterm practical examination, a rubric was used to document student compliance with this SLO. The result was 100% of the students practiced proper application of OSHA safety standards. (06/27/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): 100% safety compliance is a must for anyone planning a career in the clinical laboratory.	Enhancement: No enhancement is needed, however laboratory safety is of utmost importance and will continue to be emphasized throughout the course. (06/27/2017)
		Program Review Reporting Year: 2015-2016 Target: Target Met The instructor used a rubric to document data to support this SLOI. 100% of students practiced proper application of OSHA standards by demonstrating proper wear of personal protective equipment, proper disposal of biohazardous waste and proper disinfecting laboratory countertops. (12/16/2016) Reflection (CLICK ON? FOR INSTRUCTIONS): As a clinical	Enhancement: No specific enhancement of this SLO, but continued emphasis on complying with OSHA standards. (12/16/2016)

laboratorian, safety is of utmost importance, so this SLO will continue to be active, students will continue to be evaluated on their practice of OSHA standards and the target will remain at 100%.

HTEC85A SLO 2 - Use proper techniques to perform serial diltion. **SLO Status:** Active

Planned Assessment Quarters: 2016-

17 3-Winter

Exam - Course Test/Quiz -

Assessment Data Summary: Students were given serial dilution problems in both written form and practical form during class laboratories, quizzes and exams.

Target for Success: 75%

Program Review Reporting Year: 2016-2017

Target: Target Not Met

Assessment Data Summary: Winter 2017 – In Winter 2016, enhancements including employment of an MLT Professional Expert was available to provide additional support to students to achieve success on this SLO. The result was 80% of the students were able to accomplish this SLO. Winter 2017, 50% of the students were successful in performing a serial dilution correctly on the midterm and only 25% were successful performing a serial dilution on the final exam. During the Winter quarter, 2017, the MLT Professional Expert was not available to assist students with extra practice on this SLO. (06/27/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): In reflecting on this assessment with regard to student performance in Winter 2015, 2016 and 2017, it is clear that students require the extra opportunity to practice and understand serial dilutions in order to be successful at the SLO. The concept of serial dilutions was presented and practiced in Lab 1 and practiced again in Lab 2 and additional practice sessions offered to students before appearing as an exam question on the midterm.

Enhancement:

Enhancement/Action: Serial dilutions will continue to be introduced early in the Clinical Chemistry laboratory course with increased class laboratory assignments serving as practice for this SLO. A guestion on the final exam will continue to be included to see if the students have mastered this SLO by the end of the course. The MLT curriculum will continue to include this SLO as this is a technique/skill required for entry level employment in this field.

It is imperative that the MLT program continue to employ an MLT Professional Expert or an opportunity to attend an MLT Skills Laboratory to provide students extra practice for this SLO. It has already been proven that with proper enhancements and actions, students can be successful at achieving this SLO. (06/27/2017)

Program Review Reporting Year: 2015-2016

Target: Target Met

Winter 2016 - In Winter 2015, only 41% of enrolled students achieved success in this SLO. This quarter, Winter 2016, enhancements were implemented which significantly increased students successfully completing this SLO. (12/04/2016)

Enhancement: Serial dilutions will continue to be introduced early in the Clinical Chemistry laboratory course with increased class laboratory assignments serving as practice for this SLO. A question on the final exam will continue to

Reflection (CLICK ON ? FOR INSTRUCTIONS): In reflecting on this assessment, it is clear that students require the extra opportunity to practice and understand serial dilutions in order to be successful at the SLO.

The concept of serial dilutions was presented and practiced in Lab 1 and practiced again in Lab 2 and additional practice sessions offered to students before appearing as an exam question on the midterm .

be included to see if the students have mastered this SLO by the end of the course. The MLT curriculum will continue to include this SLO as this is a technique/skill required for entry level employment in this field.

It is imperative that the MLT program continue to employ additional help to provide students extra practice for this SLO. Another option would be to open an MLT skills laboratory in which the students can practice this type of technical exercise outside of class to help assist students with this concept and technique. With these enhancements and actions, students will continue to be successful at achieving this SLO. (12/04/2016)

HTEC85A_SLO_3 - Using spectrophotometer and proper techniques, dilute a given standard to establish a calibration curve. Analyze and determine the concentration of an unknown sample using the curve.

SLO Status: Active

Exam - Course Test/Quiz - This SLO was accessed by means of a question on 2/5 quizzes and on both the midterm and final course examination.

Target for Success: 75%

Program Review Reporting Year: 2016-2017

Target: Target Met

Assessment Data Summary: Winter 2017 – This SLO was accessed by means of a question on 2/5 quizzes and on both the midterm and final course examination. 61% of the students achieved the SLO assessment target of at least 75% on the midterm question and 86% of the students achieved the SLO assessment target of 75% on the final examination. (06/27/2017)

Reflection (CLICK ON ? FOR INSTRUCTIONS): In reflecting on this assessment, it is clear that the students are accomplishing the laboratory theory and technic in needed to successfully complete this SLO.

Enhancement: This SLO requires critical thinking and can be a difficult concept for students to understand. In order to be prepared for clinical training, the students must have a successful student learning outcome on this concept. Some students need more time and opportunity to grasp this concept and practice this technique. An MLT skills laboratory would be an opportunity for students to work on this concept. Chemistry laboratory exercises will continue to give students the opportunity to practice and paper questions

will continue to be included on several quizzes.

Date of Implementation: ongoing (06/27/2017)

Program Review Reporting Year: 2015-2016

Target: Target Met

Assessment Data Summary: Winter 2016 – This SLO was accessed by means of a question on 2/5 quizzes and on both the midterm and final course examination. 81% of the students achieved the SLO assessment target of at least 75% on the midterm question and 86% of the students achieved the SLO assessment target of 75% on the final examination. (12/04/2016)

Reflection (CLICK ON ? FOR INSTRUCTIONS): In reflecting on this assessment, it is clear that the students are accomplishing the laboratory theory and technic in needed to successfully complete this SLO.

Enhancement: : This SLO requires critical thinking and can be a difficult concept for students to understand. In order to be prepared for clinical training, the students must have a successful student learning outcome on this concept. Some students need more time and opportunity to grasp this concept and practice this technique. Chemistry laboratory exercises will continue to give students the opportunity to practice and paper questions will continue to be included on several guizzes. The employment of the MLT Professional Expert was instrumental in working with students one on one to accomplish this SLO. The employment of such an individual is vital to student success of this SLO. (12/04/2016)

HTEC 85B:Clinical Chemistry II Laboratory

Student Learning Assessment Methods Assessment Data Summaries **Enhancements** Outcomes (SLOs) HTEC85B_SLO_1 - Practice proper **Demonstration - Using a rubric, Program Review Reporting Year: 2016-2017** Enhancement: enhancement is application of OSHA standards students will be observed during Target: Target Met not needed, but SLO will remain **SLO Status:** Active Using a rubric, students were observed and evaluated laboratory classtime as well as due to the extreme importance of Planned Assessment Quarters: 2015exams demonstrating proper during laboratory classtimes and exams regarding proper safety in the clinical laboratory. 16 4-Spring use of personal protective equipment, disinfecting work application of OSHA standards. This (06/29/2017) includes proper use of personal areas and biohazardous waste disposal. 100% of students protective equipment, properly were able to achieve this SLO. (06/29/2017) disinfecting laboratory counter tops Reflection (CLICK ON? FOR INSTRUCTIONS): 100% safety performance is mandatory for anyone entering a career in and proper disposal of biohazardous laboratory science. waste. **Target for Success: 100% Program Review Reporting Year: 2015-2016 Enhancement:** No enhancements Target: Target Met are needed, but it is necessary in Using a rubric, students were observed and evaluated this field to continue to access this during laboratory classtimes and exams regarding proper SLO and continue to expect 100% use of personal protective equipment, disinfecting work compliance (12/16/2016) areas and biohazardous waste disposal. 100% of students were able to achieve this SLO. (12/16/2016) Reflection (CLICK ON ? FOR INSTRUCTIONS): Laboratory safety is of utmost concern for anyone participating in clinical laboratory education. For this reason, this SLO will remain active and students will continue to be evaluated and the target will remain at 100%.

HTEC85B_SLO_2 - Use troubleshooting skills to identify potential errors in laboratory testing.

SLO Status: Active

Planned Assessment Quarters: 2015-

16 4-Spring

Exam - Course Test/Quiz - During a laboratory practical exam, students will be presented with a specific scenario and asked to identify situations that would lead to errors in laboratory testing

Target for Success: 75%

Program Review Reporting Year: 2016-2017

Target: Target Not Met

The midterm laboratory exam included a 12 point guestion giving students a scenario and asking them to identify which situations in the scenario could lead to errors in laboratory testing. Only 7/11 students (64%) were able to successfully perform this task. (06/29/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): Reflecting on this data, it is evident that students need more practice in identifying situations which can lead to laboratory testing errors. We had implemented more practice for the students, but still have not met the target.

Program Review Reporting Year: 2015-2016

Target: Target Not Met

Enhancement: More practice for students was implemented for students Spring 2017, however the target was still not met. We will continue to offer students more opportunities to practice this skill during classromm laboratory sessions. Support could also be

Enhancement: During laboratory classtimes, instructors will provide

used in the MLT skills laboratory.

(06/29/2017)

The midterm laboratory exam included a 10 point question giving students a scenario and asking them to identify which situations in the scenario could lead to errors in laboratory testing. Only 1/12 students (8%) were able to successfully perform this task. The final exam contained 2 of these types of questions. In combination, 67% of the students were able to score a passing grade on these two questions. (12/16/2016)

(12/16/2016)
Reflection (CLICK ON ? FOR INSTRUCTIONS): It is evident that students have not mastered the skill of identifying situations that can lead to erroneous laboratory results.

additional opportunities for students to practice identifying situations that may affect laboratory testing results. (12/16/2016)

HTEC 85B_SLO_3 - Students will familiarize themselves with student laboratory instrumentation and will perform specific laboratory testing to generate data. Students will calculate, analyze and draw conclusions based on their data.

SLO Status: Active Planned Assessment Quarters: 2015-16 4-Spring Laboratory Project - Students will use laboratory classtime to familiarize themselves with student laboratory instrumentation. They will spend several laboratory periods generating data from these instruments. Students will then present their data, calculations and conclusions in the form of a laboratory notebook. A rubric will be used to access acceptability of their reports.

Target for Success: 80%

Program Review Reporting Year: 2016-2017

Target: Target Met

More practice is required.

Students were expected to learn components and basic operation of 7 laboratory instruments. Students used these instruments to generate data, produce calculations, analysis and conclusions regarding this data as related to quality control, correlation, precision, accuracy, carryover and troubleshooting. A rubric was used to access the students ability to meet this SLO. (06/29/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): 92% of the students met or exceeded the target of 80%, with a class mean notebook score = 87%%. Method validation, taught by generating and analyzing data will continue to be taught as it is a concept MLT students must master before entering clinical training.

Enhancement: A powerpoint presentation is given in Lab 2 of the quarter outlining Method Validation. As the instructor, I will revise and improve this lecture and emphasize more clearly the protocol for data generation and analysis. Most points were missed on "conclusions" I will emphasis this more in the weekly laboratory sessions. (06/29/2017)

Program Review Reporting Year: 2015-2016

Target : Target Met

Students were expected to learn components and basic operation of 7 laboratory instruments. Students used these instruments to generate data, produce calculations, analysis and conclusions regarding this data as related to quality control, correlation, precision, accuracy, carryover and troubleshooting. A rubric was used to access the students ability to meet this SLO. 100% of the students met or exceeded the target of 80%, with a class mean notebook score = 85%. (12/16/2016)

Reflection (CLICK ON? FOR INSTRUCTIONS): This is an

Enhancement: The instructors will continue to implement this SLO as learning and understanding Method Validation and its processes are a basic part of laboratory testing and prepares students for clinical training. (12/16/2016)

their ability to use the LIS system to

enter, request and print a requisition

for a patient. Run the appropriate

laboratory tests and enter results

into the LIS in an allotted time.

Target for Success: 75%

important SLO, as it relates all the components in laboratory testing connected with Method Validation. This is typically the last class that students take before entering their clinical training and by being successful at meeting this SLO, they are proven ready to enter the clinical environment.

HTEC 85B_SLO_4 - Given a tube of patient blood, students will enter patient in student lab LIS system, request tests, print requisition and tube label, run given tests, evaluate results, enter results into LIS system, print result report and answer questions regarding the test results.

SLO Status: Active

Planned Assessment Quarters: 2016-

17 4-Spring

Outcome Creation Date: 06/29/2017

Demonstration - During the final exam, students will demonstrate

Program Review Reporting Year: 2016-2017

Target : Target Met

100% of the students were successful at accomplishing this SLO. Their mean score was 24/26. (06/29/2017)

Reflection (CLICK ON ? FOR INSTRUCTIONS): It is of utmost importance that students demonstrate success in the SLO before beginning their clinical training. 100% student success is accountable to many laboratory practice session opportunities for students.

Enhancement: This was the first year for this SLO. As we move forward, the instructors will enhance this SLO by incorporating more required testing or maybe shortening the timeframe. This will further prepare students for the clinical laboratory where productivity and timing is tracked daily. (06/29/2017)

HTEC 85C:Clinical Chemistry I Lecture

Student Learning
Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

HTEC85C_SLO_1 - Identify sources of error in clinal laboratory tesing and classify them as pre-analytical, analytical and pot-analytical.

SLO Status: Active

Exam - Course Test/Quiz - Exam question on the first quiz and similar quetions asked again on subsequent exams to assess comprehension of Transmittance vs Absorbance concept

Target for Success: 75%

Program Review Reporting Year: 2015-2016

Target: Target Met

Quiz #2:

Question 4. In an assay measuring the transmittance (%T) of a sample spectrophotometrically, readings of 70%T for the highest standard and 98% T for the sample would indicate that the analyte concentration in the sample

was_____.
Class size: 41

Answered correctly: 15 / 41 = 36.6%Answered incorrectly: 26 / 41 = 63.4%

Midterm #1:

Question 91. In an assay measuring the transmittance (%T) of a sample spectrophotometrically, readings of 65%T for the highest standard and 48% T for the patient sample would indicate that the analyte concentration in the sample

was_____.
Class size: 41

Answered correctly: 20 / 41 = 48.8%Answered incorrectly: 21 / 41 = 51.2%

Quiz #3:

Question 9. An assay measuring the transmittance (%T) of a sample spectrophotometrically follows Beer's Law. The highest standard had a reading of 45%T, while readings of 80%T for the lowest standard. If a patient sample reading was 85%T, this would indicate that the analyte

concentration in the sample was ______.

Answered correctly: 31 / 41 = 75.6%Answered incorrectly: 10 / 41 = 24.3%

Question 10. In an assay measuring absorbance of a sample spectrophotometrically, readings of 0.648A for the highest standard and 0.162A for the lowest standard. If a patient sample reading was at 0.700A, this would indicate that the

Enhancement: During the 5 weeks, review of this concept was covered after each exam/quiz. (02/19/2016)

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
		analyte concentration in the sample was Answered correctly: 35 / 41 = 85.4% Answered incorrectly: 6 / 41 = 14.6% (02/19/2016) Reflection (CLICK ON ? FOR INSTRUCTIONS): Over the course of 5 weeks, there has been a mastery of the	
		transmittance vs absorbance concept with 85% of the	

students getting the answer correctly.

HTEC 85D:Clinical Chemistry II Lecture

Student Learning Outcomes (SLOs)

HTEC85D_SLO_1 - Given patient history and chemistry laboratory testing results identify normal and abnormal results and correlate with possible disease states.

SLO Status: Active Planned Assessment Quarters: 2015-

16 4-Spring

Assessment Methods

Exam - Course Test/Quiz - Lecture Midterm I: Students were given case study on a patient with urine results.

Lecture Final: Students were given a case study concerning a patient with biliary obstruction to determine which presented lab results were inconsistent.

Target for Success: 75% correct Comments/Notes:

Assessment Data Summaries

Program Review Reporting Year: 2015-2016

Target: Target Met

Lecture Midterm 2: Students were given case study on a patient with liver lab results. The mean score was 95% Lecture Final: Students were given a case study concerning a patient with biliary obstruction to determine which presented lab results were inconsistent: The mean score was 75% (01/12/2017)

Reflection (CLICK ON ? FOR INSTRUCTIONS): The target was met for both midterm and final. This demonstrated that students were able to correctly identify which lab results reflected a biliary obstruction. By the final the students were able to recognize which results would be abnormal in biliary obstruction.

Enhancements

Enhancement: Case studies appear to be a good way to get students to think critically and to put assimilate abnormal laboratory results to a disease process. Continuing and perhaps adding to the number of case studies or level of difficulty of the studies may be tried. (01/12/2017)

Assessment: Course/Service Four Column



Dept - (BHES) Nursing

NURS 50: Career Opportunities in Nursing

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
NURS50_SLO_2 - Determine the personal potential for success in the field of nursing based on emotional, physical and intellectual abilites. SLO Status: Active Planned Assessment Quarters: 2013-14 2-Fall Outcome Creation Date: 12/15/2013	Survey - At end of course students complete a 2 question survey. 1. the class gave me a better understanding of the nursing profession and the scope of nursing practice. 2. The class gave you a better understanding of the emotional, physical and intellectual abilities to be successful in nursing. Target for Success: At least 90% of the students would have a better understanding of what the profession is and does. At least 90% of the students able to identify a combination of factors to be successful as a student nurse and a registered nurse	Program Review Reporting Year: 2013-2014 Target: Target Met 72 students who finished the course in Fall 2013, all stated yes to the 2 questions on the survey (01/09/2014) Reflection (CLICK ON? FOR INSTRUCTIONS): the students were of various educational backgrounds and were overall appreciative of Nursing 50. Their primary goal was to understand the issues and challenges in the nursing profession and be better prepared to move forward in nursing.	Enhancement: 1. Provide actual examples when describing nursing concepts. 2. Continue to use "mock job interviews" with the students 3. Engage students participation during concept presentations (01/09/2014)
	Other - Small Group Discussion Target for Success: 100% of students will participate in small group discussion and be able to verbalize potential for success	Program Review Reporting Year: 2016-2017 Target: Target Met All students completed group reflection discussion and was able to state their own potential for success (06/09/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): Students were able to meet in small groups and discuss their reasons for wanting to join the nursing profession and identify their own potential for success	Enhancement: Continue to have this discussion and monitor (06/09/2017)

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

NURS50_SLO_1 - Differentiate among the various nursing educational programs both the educational preparation and scope of nursing practice.

SLO Status: Active

Planned Assessment Quarters: 2013-

14 2-Fall

Exam - Course Test/Quiz - Midterm exam

Target for Success: 70% of students will achieve 75% or higher on midterm and final exams

Program Review Reporting Year: 2013-2014

Target: Target Not Met

87 students Fall Quarter, 2013 (Section 1, only 1 section offered)

Q4 48/87 correct; Q9 77/87 correct; Q10 71/87 correct; Q11 74/87 correct; Q12 59/87 correct; Q13 76/87 correct; Q21 0/87 correct; Q38 54/87 correct; Q39 73/87 correct Questions 4, 12, 21, 38 did not have 75% getting correct

answer

#4 Technical nurse

#12 requirement for master degree program #21 difference between BSN and other nursing

education (poorly worded)

38 most graduates from types of nursing programs

Generally able to identify the requirements for various entry level education programs and how they differ. Students had the most difficulty with BSN programs.

Enhancement: Suggest more emphasis on BSN requirements, both as entry level and ADN to BSN programs. (01/29/2014)

(01/15/2014)

Reflection (CLICK ON ? FOR INSTRUCTIONS): Generally able to identify the requirements for various entry level education programs and how they differ. Students had the most difficulty with BSN programs.

Exam - Course Test/Quiz - Midterm Exam

Target for Success: 70% of students will achieve 75% or higher on midterm exam

Program Review Reporting Year: 2016-2017

Target: Target Not Met

25 of 64 students achieved score of 75% or higher on

midterm exam. (06/09/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): This is an introductory course and prerequisite for the nursing program. Many students who take this class are in their first quarter of college, and this is potentially their first college level course. The benchmark of 75% is a nursing department requirement to pass courses, so potentially students are not used to meeting this level in order to pass a course.

Enhancement: Incorporate a midterm review session during the class session prior to the midterm. Emphasize the difference various nursing educational programs during lecture. (06/09/2017)

NURS 77 (X-Z): Special Projects in Nursing

Student Learning Outcomes (SLOs)

NURS77_SLO_1 - Achieve a score of 80% or better on sample NCLEX exam.

SLO Status: Active

Assessment Methods

Project - Student will complete a Special Project contract with the Director.

Student will complete on-line NCLEXstyle questions on a weekly basis. Student will complete a spreadsheet weekly of number of questions completed, number correct, time spent, special area of questions (ie. Pediatrics, Advanced Medical-Surgical, etc).

Students will identify areas of weakness.

Target for Success: By end of Special Project, student will achieve 80 % on a comprehensive sample NCLEX exam.

Assessment Data Summaries

Program Review Reporting Year: 2016-2017

Target: Target Met

Students all achieved well above the 80 % benchmark on

the sample NCLEX exam.

Students were able to identify not only areas of weakness (ie. Pediatrics, Advanced Medical-Surgical nursing), but also question formats that they found difficult (ie. prioritization, delegation, select-all-that apply, etc).

Students reported that the Special Project was a good starting place for their review and study for the NCLEX exams required for licensure once they had completed the

De Anza nursing program. (06/10/2017)

Reflection (CLICK ON ? FOR INSTRUCTIONS): For self-motivated students, the Special Projects class is useful to highlight areas requiring review and remediation for success on the NCLEX exam.

Enhancements

Enhancement: Make available more resources for NCLEX-type questions for student use.

(06/10/2017)

NURS 81:Fundamental Nursing (Non Acute/Sub Acute Care)

Student Learning Outcomes (SLOs) NURS81_SLO_1 - Incorporteaching into the plan of the health-deviation of a non-

Assessment Methods

Assessment Data Summaries

Enhancements

NURS81_SLO_1 - Incorporate patient teaching into the plan of care for a health-deviation of a non-acute elderly client.

SLO Status: Active

Project - Group teaching plan project **Target for Success:** 100% of students will be able to present project with grade of 80% of higher as defined by rubric

Program Review Reporting Year: 2016-2017

Target: Target Met

100% of students were able to present their teaching plan projects in class. Based on the teaching plan rubric, students were able to successfully achieve scores of 90% or higher (06/11/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): Students are often nervous about speaking in front of people, especially to patients. This assignment allows them to work collaboratively with their group to present a teaching plan, as well as submit a written brochure in front of their peers.

Enhancement: Continue to use this assignment, but provide group assignments earlier in the quarter so students have ample time to complete assignment. In an effort to bring technology to the teaching plan assignment, consider changing this assignment to a PowerPoint presentation instead of a poster board presentation. (06/11/2017)

NURS81_SLO_2 - Incorporate cultural assessment as part of a holistic approach to assessment of client biopsychosocial healthcare needs.

SLO Status: Active

Other - Cultural assessment paper Target for Success: 100% of students will complete paper with 75% or higher grade as defined by rubric **Program Review Reporting Year: 2016-2017**

Target: Target Met

100% of students achieved 75% or higher as defined by the rubric.

(06/11/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): Students will choose their own person from a different culture to interview. Prior to their interview, they utilize their culture book and review the culture of their interviewee. By doing so allows them to be prepared on the best approach to use when interviewing them. Which methods for eye contact, body language, etc. are appropriate to use for a person of that culture. Students receive detailed instructions and grading rubric beforehand. However, students struggle with APA formatting required for this paper.

Enhancement: Provide sample paper, brief APA workshop prior to start of the assignment. (06/11/2017)

NURS 81L:Fundamental Nursing (Non Acute/Sub Acute Care Clinical)

Student Learning Outcomes (SLOs)

Assessment Methods

quarter

Assessment Data Summaries

Enhancements

NURS81L_SLO_1 - Following college regulations and facility protocols, provide safe and client-centered nursing care for one or two patients in a non-acute care setting.

SLO Status: Active

Other - Demonstrate safe and clientcentered nursing care at all times Target for Success: 90% of students will meet all objectives on the clinical evaluation tool by end of the **Program Review Reporting Year:** 2016-2017

Target: Target Met

100% of students met all the objectives on the clinical evaluation tool by the end of the quarter. (06/11/2017) **Reflection (CLICK ON? FOR INSTRUCTIONS):** This is the first clinical rotation in the nursing program and students are often overwhelmed and nervous. Students are observed by the instructor in the clinical setting while providing client-centered care. After 3 weeks in the clinical setting, the midterm evaluation is used to provide verbal and written feedback. This allows the students the opportunity to continuously improve their performance in the specific

Enhancement: Continue to provide written and verbal feedback using the clinical evaluation tool during midterm evaluations. Consider utilizing weekly anecdotal notes for additional feedback. (06/11/2017)

NURS81L_SLO_2 - Using Orem's model of nursing and the nursing process, determine client-specific plans of care.

SLO Status: Active

Project - Daily nursing care plans, documented care plan, and critical thinking worksheet

Target for Success: 100% of students will obtain >75% on these assignments as defined by the rubric.

Program Review Reporting Year: 2016-2017

Target: Target Met

100% of students obtained >75% on these projects as

defined by their rubric. (06/11/2017)

areas noted by the instructor.

Reflection (CLICK ON? FOR INSTRUCTIONS): Once the student starts their clinical rotation, they begin writing intensive nursing care plans for a real patient(s) for the first time. By utilizing care planning resources, providing lectures and PowerPoint references along with a sample care plan for their reference has greatly improved the success of their nursing care plans. However, students continue to struggle with applying theory they learn about care plans to the clinical setting, along with APA formatting.

Enhancement: Continue with lectures and reference materials. In an effort to make the connection from theory to clinical easier consider offering case studies along with actual videos of patients prior to starting clinical rotation. Practice care plans on those videos/case studies.

Provide a brief workshop on APA format. (06/11/2017)

NURS 81P:Pharmacology I

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
NURS81P_SLO_1 - Using Orem's model of nursing, apply the nursing process to 2 specific groups of medications. SLO Status: Active Pending Revision	Exam - Course Test/Quiz - Students have a weekly quiz, a mid-term exam and a final exam Target for Success: 90%		
NURS81P_SLO_2 - Accurately calculate the correct dose of medication. SLO Status: Active Planned Assessment Quarters: 2016-17 4-Spring	Exam - Course Test/Quiz - Students will be given 2 math quizzes per quarter for medication calculation. Target for Success: Students will achieve 75% on math calculations for medication calculation.	Program Review Reporting Year: 2016-2017 Target: Target Met All students surpassed the target of 75% correct on math calculations. (06/15/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): Instruction for math calculation is limited in this course due to the heavy content level. Despite this, students were well prepared to do the calculations.	Enhancement: Encourage students who have difficulty with math calculations to seek instructor for additional help. Make available resources available in the nursing lab to assist with math calculations (on-line question banks, test bank books). Encourage students to work with peer tutors on math calculations (06/15/2017)
NURS81P_SLO_3 - Demonstrate retention of pharmacologic concepts for non-acute patient conditions. SLO Status: COR Update Necessary Planned Assessment Quarters: 2016-17 4-Spring	Exam - Standardized - weekly quizzes, computerized final exam Target for Success: Students will achieve 75% on exam and test questions related to pharmacology concepts for non-acute patient conditions.	Program Review Reporting Year: 2016-2017 Target: Target Met 10 % of students did not achieve the passing grade. Of these students, none were our generic nursing program students, but were students from other colleges. (06/15/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): Pharmacology I is taken by nursing students at De Anza College and a few	Enhancement: I will encourage students to utilize instructor office hours for clarification of concepts. I will encourage students to utilize peer tutors from upper level nursing students. I will encourage students to use study groups with other nursing

students from other college. Students from the other colleges don not have any nursing background which makes it difficult for them to understand pharmacological conditrions for patient-related conditions.

students. (06/15/2017)

NURS 82:Acute Fundamentals/Medical Surgical I

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
NURS82_SLO_1 - Apply correct nursing care to pre and post op patients. SLO Status: Active	Exam - Course Test/Quiz - Midterm examination with NCLEX style questions Target for Success: 80% of students will achieve 75% or higher	Program Review Reporting Year: 2015-2016 Target: Target Met 95% of students achieved 75% or higher on each of the two midterm examinations. (06/08/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): While the students overall did very well, the common questions that were missing involved application of theoretical concepts. This is a common occurrence in this course as it is the first time the students are answering NCLEX style questions	Enhancement: Continue to utilize NCLEX style questions at end of lecture to review concepts and guide students through how to best answer these questions. (06/08/2017)
	Project - Group Project Target for Success: 100% of students will achieve 75% or higher on group project as defined by rubric		
NURS82_SLO_2 - Plan apropriate nursing care for patients with fluid and electrolyte imbalances. SLO Status: Active	Exam - Course Test/Quiz - Midterm examination with NCLEX style questions Target for Success: 80% of students will achieve 75% or higher	Program Review Reporting Year: 2016-2017 Target: Target Met 95% of students obtained 75% or higher on midterm examination covering fluid and electrolyte imbalances. Average score on exam was 83% (06/08/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): Fluid and electrolyte imbalances is a notoriously difficult content area to master. Students often struggle with differentiating between the different imbalances as many of the signs and symptoms are similar. Students also struggle with prioritization and knowing which intervention to implement first.	Enhancement: Utilize online resources and put YouTube vidoes or other references on Canvas to provide additional avenues for learning. (06/08/2017)
	Other - Case Studies Target for Success: 80% of students will achieve 75% or higher		

02/11/2018 Generated by Nuventive Improve Page 187 of 212

NURS 82L:Acute Fundamentals/Medical Surgical I (Clinical)

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
NURS82L_SLO_1 - Demonstrate the safe administration of parenteral medications. SLO Status: Active	Demonstration - In clinical, demonstrate safe administration of parenteral medications under the supervision of instructor Target for Success: 100% of students will achieve with 100% accuracy by end of quarter	Program Review Reporting Year: 2016-2017 Target: Target Met 100% of students achieve approximately 90-95% accuracy in parenteral medication by the end of the quarter. Some coaching still required (06/08/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): Students do well with the skills of administering the parenteral medication (via subcutaneous, intramuscular, or intravenous piggyback), but will sometimes forget the overall concept of safe medication administration and fail to identify patient, educate, or utilize bar code scanning without being prompted by instructor.	Enhancement: Incorporate demonstration of entire medication administration process during on-campus clinical days so students are able to watch instructors do a "perfect medication pass". Record "perfect medication pass" and post video to instructor website. (06/08/2017)
NURS82L_SLO_2 - Demonstrate the assessment of a pre or post op patient using Orem's theory. SLO Status: Active	Demonstration - Simulation, demonstration during clinical time Target for Success: 100% of students will demonstrate appropriate assessment with 90% by end of quarter	Program Review Reporting Year: 2016-2017 Target: Target Met 100% of students are demonstrating appropriate assessments with 85-90% accuracy. (06/08/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): Students continue to struggle with creating a "flow" when completing head to toe assessments. They often remember aspects of the assessment that they missed once they leave the room.	Enhancement: More time in the lab using high fidelity simulation and immediate feedback from instructor. (06/08/2017)
NURS82L_SLO_3 - Demonstrate the safe and competent care of one patient in the acute care setting. SLO Status: Active	Other - Daily clinical paperwork Target for Success: 100% of students will achieve 75% or higher as defined by rubric on daily clinical paperwork by end of quarter		
	Project - Concept Care Map Target for Success: 100% of students will achieve 75% or higher as defined by rubric	Program Review Reporting Year: 2016-2017 Target: Target Met 100% of students achieved 90% or higher on concept maps as defined by rubric. (06/08/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): Many students initially do not like creating concept maps as they can be viewed as chaotic and unorganized. When they are able to understand the idea and visualize how concept	Enhancement: Utilize more concept maps during post-conference at clinical. Have a student give report on their patient and the group will create a concept map on the white board. (06/08/2017)

maps help to connect ideas and see the bigger picture,

Student Learning Outcomes (SLOs) Assessment Methods	Assessment Data Summaries	Enhancements
--	---------------------------	--------------

many students really enjoy using them.

NURS 82P:Pharmacology II

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

NURS82P SLO 1 - Students will integrate pharmacological concepts in the clinical setting.

SLO Status: Active Pending Revision Planned Assessment Quarters: 2016-

17 4-Spring

NURS82P_SLO_2 - Students will apply

theoretical knowledge about medication interactions during examinations and guizzes.

SLO Status: Active Pending Revision Planned Assessment Quarters: 2016-

17 4-Spring

NURS82P_SLO_3 - Student will develop a teaching plan for medications for a client newly diagnosed with a specific pathology, such as diabetes, infection.

SLO Status: COR Update Necessary

Project - Students will write an analysis paper on medication covered in Pharmacology II.

Target for Success: Students will meet the criteria of the assignment evaluation rubric with 75% accuracy. **Program Review Reporting Year: 2016-2017**

Target: Target Met

All students met the criteria for passing the assignment per the rubric. Some students excelled, going over and above the expectations.

(06/15/2017)

Reflection (CLICK ON ? FOR INSTRUCTIONS): Students are familiar with using rubrics as guidelines for assignment evaluations, and as such, include the required information in the assignment.

Student assignment guidelines are clearly outlined at the start of the course.

Enhancement: Students will be encouraged to see instructor during office hours if they have any questions about the nature of the assignment. Students will be encouraged to have a peer review their assignment to preview it for grammar, accuracy and content should there be any questions. (06/15/2017)

NURS82P_SLO_4 - Students will acute patient conditions.

SLO Status: COR Update Necessary Planned Assessment Quarters: 2016-17 4-Spring

Exam - Course Test/Quiz - Students integrate pharmacological concepts in will achieve 75% on pharmacological concepts related to acute patient conditions.

> Target for Success: Students will achieve 75% on exam questions relating to pharmacological concepts of acute patient conditions.

Program Review Reporting Year: 2016-2017

Target: Target Met

All but one student (out of 68) did not meet the passing criteria of 75%, (06/15/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): Student performance in application of pharmacological concepts improves from the previous Pharmacology course because they are now comfortable with instructor teaching style and expectations.

Enhancement: Students will be counseled to attend instructor office hours for additional help as necessary.

Students will be referred to peer tutors for additional assistance. Student performance will be scrutinized early in the quarter in order to detect areas of weakness. (06/15/2017)

Student Learning
Outcomes (SLOs)

Assessment Methods Assessment Data Summaries Enhancements

02/11/2018 Generated by Nuventive Improve Page 191 of 212

NURS 83:Perinatal Nursing

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
NURS83_SLO_1 - Apply the theoretical knowledge of pregnancy, birth physiology and perinatal care to specific patient care situations. SLO Status: Active	Exam - Course Test/Quiz - Midterm and comprehensive final		
	Exam - Course Test/Quiz - Case Study Quizzes Target for Success: 100% of students achieve >75% combined score	Program Review Reporting Year: 2016-2017 Target: Target Met 100% of students achieved score of at least 75% on five case study quizzes (06/09/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): We were pleased with the level of success. Students had some valid questions about some of the items, but overall felt that the case studies were very helpful.	Enhancement: All case studies are being re-vamped for 2017-2018 to include up do date information and evidence. (06/09/2017)

NURS 83A:Pediatric Nursing

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
NURS83A_SLO_1 - Compare the physiologic, cognitive, and psychosocial stages of a toddler and a preschooler. SLO Status: Active	Exam - Course Test/Quiz - Midterm Target for Success: Students will achieve 75 % on their midterm exam.	Program Review Reporting Year: 2016-2017 Target: Target Met Students achieve 73 - 86 % on their exam questions on development. (06/08/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): Pediatric growth and development information is vast in its scope and application. This is taught in week 2 of a 6 week course and tested primarily on the week 3 midterm. It is an intense and compacted course, and students do well to internalize the information in such a short time.	Enhancement: I will incorporate comparison charts for developmental differences of pediatric patients into my website offerings. (06/08/2017)
	Other - Case Studies Target for Success: Students will achieve 75 % on the questions following the case studies.	Program Review Reporting Year: 2016-2017 Target: Target Met All students completed on-line pediatric case studies, all of which include developmental data and questions. Students read the case studies AFTER reading the assigned readings, listening to lectures and participating in classroom activities. Initial attempts to answer the questions garner scores between 70 and 85 %. (06/08/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): The case studies are a useful tool in assisting the students to assess their own level of understanding. Also, on-line learning is a format that my students are very comfortable with and report that they like. I encourage students to complete the on-line case study questions as many times as they like, until they master the information.	Enhancement: The text I require now has an on-line component that utilizes case study format for evaluation of learning. I will recommend students continue to use this format as a learning tool. (06/08/2017)
NURS83A_SLO_2 - Differentiate the common etiologies of morbidity and mortality in children. SLO Status: Active	Exam - Course Test/Quiz - Examination questions Target for Success: Students will achieve 75 % on questions of morbidity and mortality on exams.	Program Review Reporting Year: 2016-2017 Target: Target Met Questions on my exams indicate that students are very competent in understanding concepts of morbidity and mortality in children, achieving greater than 75 %. (06/08/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): Students seem to find this area of pediatric nursing the easiest to comprehend and internalize since these are the patient conditions that they see in the hospital and are involved in	Enhancement: I will use an in-class activity for frequently seen illnesses in pediatric patients to compare and contrast causes, manifestations and nursing care, in order to facilitate internalizatio of information. (06/08/2017)

their care. The 'real' life situations not only makes the

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
	Other - Case Studies Target for Success: Students will achieve 75 % on case study follow- up questions on morbidity and mortality in children.	information applicable, but relevant to their practice. Program Review Reporting Year: 2016-2017 Target: Target Met Completion of assigned on-line case studies related to morbidity and mortality issues in children has helped my students learn the concepts well. Their exam questions on these topics are well answered across the board. (06/08/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): On-line case studies really are a method of learning that my students prefer. I will continue to use them.	Enhancement: I will look for other on-line sources of case studies related to these topics for my students. I will incorporate case studies into in-class activities. (06/08/2017)

NURS 83AL:Pediatric Nursing (Clinical)

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
NURS83AL_SLO_1 - Construct a concept map for a child diagnosed with head trauma from a motor vehicle accident (MVA). SLO Status: Active Pending Revision	Project - Create concept map	Program Review Reporting Year: 2016-2017 Target: Target Met Students all presented their concept maps which include all aspects of patient care data based on: lab values, patient condition, potential complications, changing signs and symptoms, and nursing/ medical interventions. All students were able to complete the assignment at a basic level, with some students providing a more comprehensive mapping of the patient condition. (06/08/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): Not all students were able to care for a patient who had suffered a head injury, and therefore, found the assignment more difficult as they could not apply information to an experienced clinical situation.	Enhancement: I will continue to use concept mapping as a tool for learning, but I will assign topics/patient conditions that the students will more likely encounter during their clinical rotation (eg. appendicitis, asthma burns). This will better facilitate the transfer of knowledge to the clinical setting in a more 'relevant manner. (06/08/2017)
NURS83AL_SLO_2 - Demonstrate a focused physical assessment of an infant admitted with respiratory distress. SLO Status: Active	Demonstration - Demonstrate assessment on client in clinical setting under supervision of instructor	Program Review Reporting Year: 2016-2017 Target: Target Met All students were able to satisfactorily demonstrate an assessment of a pediatric patient admitted with respiratory distress. Not all patients were infants, as the patient population varies, but the process of doing a systematic and focused assessment was completed within the appropriate parameters. (06/08/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): Some students had an easier time doing the assessment than others based on the reaction of the patient. (ie. some patients are more cooperative than others depending on their age, stranger anxiety, experience with children, etc). All found the one-on-one assisted assessment a valuable learning experience.	Enhancement: Time permitting, I would incorporate performing a focused assessment on the simulation manikin in the nursing lab as a tool for learning. (06/08/2017)
	Other - Daily clinical paperwork		
NURS83AL_SLO_3 - Construct a concept map for a child diagnosed with a common medical illness. SLO Status: COR Update Necessary Planned Assessment Quarters: 2016-	Project - Students will construct a concept map for a child with a medical diagnosis that they encountered in the clinical setting. They will present their concept maps	Program Review Reporting Year: 2016-2017 Target: Target Met Students presented their concept maps which include all aspects of patient care based on: lab values, patient condition, potential complications, changing signs and	Enhancement: I will continue to use concept mapping as a tool for learning. Students like it as a learning tool and so do I. Keeping the topic open, will facilitate

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
17 4-Spring	to each other under instructor supervision, thus enhancing peer knowledge levels and practicing their teaching skills. Target for Success: Present a complete and concise map of patient condition and required nursing care.	symptoms, and nursing/ medical interventions. (06/21/2017) Reflection (CLICK ON ? FOR INSTRUCTIONS): All students were able to complete the assignment at a basic level, with some students providing a more comprehensive mapping of the patient condition.	transfer of knowledge from actual patient situations, making the learning 'real' and relevant for students. (06/21/2017)

NURS 83L:Perinatal Nursing (Clinical)

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
NURS83L_SLO_1 - Employ the nursing process in assisting clients to meet universal, developmental and heath deviations self- care requisites during the perinatal period. SLO Status: Active	Other - Daily clinical paperwork	Program Review Reporting Year: 2016-2017 Target: Target Met All students spent a day in NICU and created a care plan for an infant, including nursing diagnosis, short and long term goals, interventions and evaluations/modifications. (06/09/2017) Reflection (CLICK ON ? FOR INSTRUCTIONS): All students were very successful in finding appropriate nursing diabnoses and the care plans instigated good discussions in postconferences.	Enhancement: Consider adding another care plan for students in a bigger group when not all students can go to the NICU. (06/09/2017)
NURS83L_SLO_2 - Identify QSEN ("Quality and Safety in Education of Nurses") KSA factors (knowledge, skill and attitude areas) in at least two clinical days. SLO Status: Active Planned Assessment Quarters: TBD	Portfolio Review - Students will write reflections of their clinical days corresponding to QSEN KSAs. Target for Success: 100 % of student will write QSEN-based reflections which are specific for their clinical day experiences.	Program Review Reporting Year: 2016-2017 Target: Target Met All students in the Spring 17 (first six weeks) group wrote QSEN-based reflections that were meaningful and specific. (06/09/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): The assignment made students re-examine their clinical day from the perspective of QSEN and allowed them to evaluate their behavior in the context of nursing excellence.	Enhancement: I will decrease the number of QSEN KSAs that students will need to address from 3 to 2 as it seems to be sufficient for students to evaluate their own performance from the QSEN perspective. (06/09/2017)

NURS 83P:Pharmacology III

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
NURS83P_SLO_1 - Incorporate medication evaluation and patient/ family teaching into care of the maternal and child population patients. SLO Status: Active	Project - Group teaching plan	Program Review Reporting Year: 2015-2016 Target: Target Met Per the rubric used for evaluation, students all achieve 17-20 points out of a possible 20. (06/07/2017) Reflection (CLICK ON ? FOR INSTRUCTIONS): Students do not always like group activities due to differing personalities, outside schedules and personal strengths. By allowing them to self-select their own groups, I hopefully have minimized some of this stress.	Enhancement: I will make the assignment known at the first class meeting so students can plant their schedules accordingly. I will make myself available during every office hour to answer any questions that might arise due to the project. I will encourage the students to include this teaching project on their resumes, since patient teaching is such an important part of patient care. (Sometimes if they see the 'future' value in an exercise or project, it seems less odious). (06/07/2017)
NURS83P_SLO_2 - Accurately calculate the correct doses of medications for the maternal and child populations. SLO Status: Active	Exam - Course Test/Quiz - Quizzes, midterm, final exam	Program Review Reporting Year: 2016-2017 Target: Target Met Students routinely achieve 80 % or higher on the calculation questions for medications for maternal and child populations. (06/07/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): Some students really are math phobic. But accurate medication calculations, especially for special patient populations, can make the difference between life and death. I feel the efforts taken to teach these specific math calculations have made the students safer nurses. The experience of USING the math calculations in the clinical setting during their pediatric rotation has reinforced the enormity and seriousness of the task, and the importance of students to develop this skill.	Enhancement: I will include extra practice math calculation questions on my webpage, which are more clinically -based math questions of medications frequently used in their patient care. I can have impromptu pharmacology math 'brown bags' should there be students needing extra attention. (06/07/2017)

NURS 83PL:Pharmacology III Laboratory

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

NURS83PL_SLO_1 - Following universal precautions and nursing standards of care, successfully insert, secure and maintain six (6) intravenous catheters. **SLO Status:** Active

Demonstration - Demonstrate six (6) venipunctures, three (3) butterflies and three (3) angiocath/cathlons, securing and stabilizing the catheters in appropriate manners using the principles of client safety and aseptic technique

Program Review Reporting Year: 2016-2017

Target: Target Met

By the end of the quarter, all students were able to easily insert and stabilize at least 6 catheters correctly, following principles of asepsis. (06/07/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): Students were nervous at the start of the class, and many videotaped the demonstrations for later use. By the end of the class, the procedure became routine like any other practiced skill.

Enhancement: I typed out the procedure steps for students to follow.

I videotaped the procedure while the steps were read. (the videotapes will be made available on my website).

I started to play classical music during the lab procedure- students have commented that they have found it soothing. i plan to use it during every lab. I made more practice kits that

students can utilize to practice the skill during open lab hours. (06/07/2017)

Laboratory Project - Under direct practice, students will become proficient in this skill.

supervision of instructor, insert and secure 6 intravenous catheters on simulated arms using CDC approved methods of universal precautions and nursing standards of care. Target for Success: By the end of the course and following 12 weeks

NURS83PL SLO 2 - Following OSHA protocols, maintain an injury-free environment during intravenous insertion and blood-draw procedures. **SLO Status:** Active

Demonstration - Demonstrate six (6) venipunctures, three (3) butterflies and three (3) angiocath/cathlons, securing and stabilizing the catheters in appropriate manners using the principles of client safety and aseptic technique

Program Review Reporting Year: 2016-2017

Target: Target Met

Students were able to safely perform the skills of IV insertion and blood draw with 100% safety. No injuries or near injuries to report. (06/07/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): I have impressed upon the students the absolute need for safety when dealing with Bloodborne pathogens and needles in the lab (and clinical) setting.

Enhancement: I have started to use a video demonstrating IV insertion which uses some bad techniques. It stimulates a discussion once students can identify the incorrect procedures. They have reported it helpful. I will use it in all future classes. (06/07/2017)

Laboratory Project - Utilizing professional and OSHA protocols, students will insert intravenous catheters and draw blood on simulated patient arms.

Target for Success: Students will maintain a 100% injury free environment while performing blood draws and intravenous insertions on simulated arms.

NURS 84:Medical/Surgical II (Care of the Older Adult)

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
NURS84_SLO_1 - Apply legal and ethical principles to an ethical dilemma. SLO Status: Active Planned Assessment Quarters: 2012-13 4-Spring Outcome Creation Date: 04/08/2013	Other - Three page dilemma paper, evaluated by grading rubric. Target for Success: Using grading rubric, 100% of students to achieve a minimum of 70% of total points, or 28 points out of a possible 40 points.	Program Review Reporting Year: 2016-2017 Target: Target Met 100% of students achieved the target, with the highest score of 40 and the lowest score 35 points. (06/08/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): Students choose from a number of ethical dilemmas available, or can choose to develop a dilemma they experienced in their clinical coursework (subject to instructor approval). Students receive detailed instructions, grading rubric, and have an example paper to reference as desired. These resources, as well as the rigorous admission criteria, seem to contribute to a high rate of success on this SLO.	Enhancement: I will add a culture component to reflect the De Anza College commitment to equity. (06/08/2017)
NURS84_SLO_2 - Utilizing the nursing process, analyze and apply principles of normal aging in designing a plan of care for an older adult experiencing a chronic health problem. SLO Status: Active	Other - Group work and presentation Target for Success: 80% of student groups will demonstrate application of age-related changes in a group share of a plan of care for one of the following: prostate cancer, complications of fracture, and/or fall prevention.		
	Other - small group discussion Target for Success: 80% will be able to design a plan of care		
	Other - small group discussion followed by large group summary Target for Success: 80% will be able to design a plan of care for older adult	Program Review Reporting Year: 2016-2017 Target: Target Met Of the 17 students involved with the small groups and the summary 100% were able to design a plan for an older adult with a chronic health problem (06/08/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): The refection includes deciding to break case study work up into "chunks" and assigning each group certain questions instead of having each group complete all questions. Then large group shared all questions at the end. This makes the activity better fit into the class period, and allow more discussion and collaboration in the larger group, and leads	Enhancement: Will continue to use this same format of several small group discussion. (06/08/2017)

to a more complete plan of care. This has worked better in the latter quarters.

NURS 84C: Critical Thinking in Nursing

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
NURS84C_SLO_1 - Correctly apply critical thiking skills to patient care scenarios. SLO Status: Active	Exam - Course Test/Quiz - Short- answer quiz, evaluated by grading rubric Target for Success: 100% of students will be able to correctly write an inference	Program Review Reporting Year: 2016-2017 Target: Target Not Met 14 or 17 students (82%) were able to correctly write an inference. The writings of the other 3 students demonstrated understanding of the concept of an inference, but their language was less precise. (06/11/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): All students were able to understand the concept of an inference, but not all were able to word it correctly. Perhaps we may have a higher success rate if I break down the task into two components: (a) conceptual understanding, and (b) precise language desired	Enhancement: I plan to revise the SLOAC quiz to a hybrid-type quiz: 4 questions, multiple-choice, that address each of the two areas ("a" and "b" above) followed by one short-answer prompt directing the student to correctly write an inference based on a patient description (i.e., testing the "overall" understanding). (06/11/2017)

NURS 84L:Medical/Surgical II (Care of the Older Adult) - Clinical

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
NURS84L_SLO_1 - Apply age-related changes and developmental tasks to formulate a plan of care for an older adult. SLO Status: Active Planned Assessment Quarters: 2012-13 4-Spring	Other - Written developmental assessment and applying age-related assessment to plan of care. Evaluated by rubric. Target for Success: 100% of students will achieve passing rubric score within 4 submissions.	Program Review Reporting Year: 2016-2017 Target: Target Met 100% of students achieved a passing rubric score within 2 submissions. All but one student achieved a passing score within 2 submissions. (06/08/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): Students on track but some need reminders. Need to emphasize the application of internal age-related changes and not just wrinkles and gray hair! Most often overlooked changes are in the cardiovascular system and musculoskeletal system. Also, some students have difficulty describing the older adult's progression in their developmental stage (Erikson's).	Enhancement: Guidelines and examples will be put up on instructor website (06/08/2017)
	Project - Incorporate age-related changes on written critical thinking worksheet Target for Success: Achieve 100 % completion within in 2 attempts		
NURS84L_SLO_2 - Analyzes comprehensive assessment data to identify real problems and predict and minimize potential problems. SLO Status: Active	Other - Written assignment: Critical thinking worksheet developed utilizing actual clinical experience and patient data. Evaluated with grading rubric. Target for Success: 100% of students will demonstrate achievement within 2 submissions of written assignment.	Program Review Reporting Year: 2016-2017 Target: Target Met 100% achieved. One student required 2 submissions and received coaching by instructor between submissions. (06/08/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): Students struggle with this assignment. It is the first time they are required to gather and analyze comprehensive patient data. However, most meet grading criteria. Students say that having an example to use as a resource and seeking instructor input/proofreading before assignment is due helps. One student requested and received a tutor to work with on the assignment.	Enhancement: Guidelines and examples will be put up on instructor website (06/08/2017)

NURS 85:Advanced Medical-Surgical Concepts

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

NURS85_SLO_1 - Apply the nursing process for adult clients with major respiratory illnesses. **SLO Status:** Active

Exam - Course Test/Quiz - Two inclass exams, standardized final exam and class discussions.

Target for Success: 100% of students will achieve at least 75% cumulative on exams.

Program Review Reporting Year: 2016-2017

Target: Target Met

The target was met. The assessment methods proved to be effective. Average grade for in-class assignments was 86.3% with the median grade at 85, which is well above the minimum passing grade of 75%. (06/10/2017)

Reflection (CLICK ON ? FOR INSTRUCTIONS): Course metrics were shared with the program director. Course evaluations were collated. As per course evaluations, student felt both challenged and supported. Exam results were analyzed using point bi-serial statistical analysis. Due to low enrollment, exam data were collected over several quarters to have a large sample and conduct a more robust analysis. Students generally struggled with the amount of information presented in the course. Examination of the course content over six academic terms revealed a significant content drift. In terms of evaluation, the students struggled with the items evaluating higher levels of knowledge (application, analysis and synthesis). The faculty of record develop decision making tool to help students perform at higher level. The tool proved to be effective.

Enhancement: The course content will be re-evaluated to scale back the amount of required readings and prevent the content drift. The evaluation will be scaled to include one midterm exam and a standardized final test. In order to continue assisting students with exam taking strategies and facilitate formative evaluation, additional two take-home exams will be introduced. (06/10/2017)

NURS85_SLO_2 - Apply the nursing process for adult clients with major cardiac disease.

SLO Status: Active

Exam - Course Test/Quiz - Two inclass exams, a case study, a takehome ECG exam, standardized final examination and class discussions.

Target for Success: 100% of students will achieve at minimum of 75% cumulative on exams, and successful completion of assigned case study.

Program Review Reporting Year: 2016-2017

Target: Target Met

The overall target was met. The assessment methods proved to be effective. Average grade for in-class assignments was 86.3% with the median grade at 85, which is well above the minimum passing grade of 75%. All students completed take home EKG test with a grade > 90%. (06/10/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): Course metrics were shared with the program director. Course evaluations were collated. As per course evaluations, student felt both challenged and supported. As for SLO 1, the exam results were analyzed using point bi-serial statistical analysis. Due to low enrollment, exam data were collected over several quarters to have a large sample and

Enhancement: The course content will be re-evaluated to scale back the amount of required readings and prevent the content drift. The evaluation will be scaled to include one midterm exam and a standardized final test. In order to continue assisting students with exam taking strategies and facilitate formative evaluation, additional two take-home exams will be introduced. (06/10/2017)

conduct a more robust analysis. Students generally struggled with the amount of information presented in the course. Examination of the course content over six academic terms revealed a significant content drift. In terms of evaluation, the students struggled with the items evaluating higher levels of knowledge (application, analysis and synthesis). The faculty of record develop decisionmaking tool to help students perform at higher level. The

NURS85_SLO_3 - Apply the nursing process for adult clients with complications of diabetes and acute renal disease.

SLO Status: Active

Exam - Course Test/Quiz - Two inclass exams, a standardized final exam and class discussions.

Target for Success: 100% of students will achieve at least 75% cumulative on exams.

Program Review Reporting Year: 2016-2017

Target: Target Met

tool proved to be effective.

The overall target was met. The assessment methods proved to be effective. Average grade for in-class assignments was 86.3% with the median grade at 85, which is well above the minimum passing grade of 75%. (06/10/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): Course metrics were shared with the program director. Course evaluations were collated. As per course evaluations, student felt both challenged and supported. As for SLO 1 & 2, the exam results were analyzed using point bi-serial statistical analysis. Due to low enrollment, exam data were collected over several quarters to have a large sample and conduct a more robust analysis. Students generally struggled with the amount of information presented in the course. Examination of the course content over six academic terms revealed a significant content drift. In terms of evaluation, the students struggled with the items evaluating higher levels of knowledge (application, analysis and synthesis). The faculty of record develop decisionmaking tool to help students perform at higher level. The tool proved to be effective.

Enhancement: The course content will be re-evaluated to scale back the amount of required readings and prevent the content drift. The evaluation will be scaled to include one midterm exam and a standardized final test. In order to continue assisting students with exam taking strategies and facilitate formative evaluation, additional two take-home exams will be introduced. (06/10/2017)

NURS 85A:Psychiatric/Mental Health Nursing (Theory)

Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
NURS85A_SLO_1 - Apply own cultural background to concepts of mental health and mental illness. SLO Status: Active	Other - 1-2 page paper examining mental health from their own cultural perspectives. The paper is pass/fail. Target for Success: 100% (Students are able to re-do the paper if not satisfactory)	Program Review Reporting Year: 2016-2017 Target: Target Met 100 percent of students have written the paper without a "redo" except for one student who wrote a general paper about culture and did not reference any "own cultural background or perspectives". This student was successful on the second attempt (06/15/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): This assignment is very satisfactory as it continues to be a successful way to promote student awareness of their own cultural perspectives.	Enhancement: Continue as is. (06/15/2017)
NURS85A_SLO_2 - Design a critical thinking component in relation to the nursing care of a patient with a given psychiatric diagnosis. SLO Status: Active	Project - Group project Target for Success: 85% of students will be successful	Program Review Reporting Year: 2016-2017 Target: Target Not Met 100 percent of students participate but "0" percent are successful (06/16/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): This remains a valid and important method to assess this SLO but clearly it is not working. Clearly more needs to be done to improve student success on this SLO.	Enhancement: I will evaluate and reconsider what the appropriate expectation is for students to (a) know the definition of a critical thinking question and (b) how to design or "come up with" a critical thinking question for a case study. These will be communicated to students. (06/16/2017)
NURS85A_SLO_3 - Demonstrate knowledge of Alcoholics Anonymous meetings and identify professional implications for the nurse. SLO Status: Active	Other - Attend AA meeting and submit typed individual activity report	Program Review Reporting Year: 2016-2017 Target: Target Met 100 percent of students are "technically" successful (06/16/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): My expectation is that students will recognize that professional implications include referring a patient to AA when appropriate. I am disappointed when many of them don't recognize this role of the nurse.	Enhancement: I will modify the format for reporting on the AA meeting to include a specification for the student's awareness of and/or willingness to refer the patient to AA. (06/16/2017)

NURS 85AL:Psychiatric/Mental Health Nursing (Clinical)

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

NURS85AL SLO 1 - Demonstrate the use of the nursing process, from assessment through evalutation, as applied to a patient with a psychiatric and based on the assessment they diagnosis.

SLO Status: Active

Other - Students complete a comprehensive biopsychosocial assessment of each assigned patient develop a nursing care plan with nursing diagnoses, objectives, interventions and evaluations for each nursing diagnosis.

Target for Success: Target for Success: 90% completion rate for each phase of the nursing process without necessity of a "re-do". Current success rate is 75%.

Program Review Reporting Year: 2016-2017

Target: Target Not Met

Thirty percent of students need at least one redo. Ten percent of students need two or even three redo's.

(06/16/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): Students vary greatly in their writing and assessment skills. I work with each student as needed in order to bring them up at least to a minimum level of success on this SLO. Some need far more than others to reach a minimum standard of success.

Enhancement: I will continue to work with each student individually to the degree needed to achieve success. (06/16/2017)

NURS85AL_SLO_2 - Identify concepts Other - Students fill out a form each that link learning in the clinical setting to knowledge gained from the course textbook.

SLO Status: Active

week that I designed entitled "Clinical Conference Planning Form" whereby they identify and describe two theory course (Nsg 85A) concepts from the text that they have observed/experienced during their 85AL clinical experience. **Target for Success:** Target for Success: 95% of students accurately identifying course concepts and writing descriptive clinical examples

Program Review Reporting Year: 2016-2017

Target: Target Not Met

100 percent of students complete the activity describing their experiences but 60 percent are able to describe the theoretical concept. (06/16/2017)

Reflection (CLICK ON ? FOR INSTRUCTIONS): I have been accepting the fact that students don't always identify the concept and I even write the concept for them for what they have described.

Enhancement: Make students more accountable for recognizing the concept for the clinical event described on the form. Allow one re-do for those who don't name the appropriate concept. (06/30/2020)

NURS85AL_SLO_3 - Analyze own personal responses to selected oneon-one or group therapy patient interactions.

SLO Status: Active

Other - Each week of the course, students monitor their own personal subjective responses to clinical experiences and then they select one experience and write a brief analysis of their personal feeling/response. The analysis includes what they might approach similar experiences in the future.

of each.

Program Review Reporting Year: 2016-2017

Target: Target Not Met

Fifty percent success. (06/16/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): Ten percent of students are asked to do a re-do due to severe underperformance on this SLO.

Ten percent of students do an excellent job.

Eighty percent of students are somewhere in between.

Enhancement: Devise a better way to explain the exercise to the students. Modify the format to be followed to reflect a better description of the expected outcome. No longer accept a wide range of responses that may not achieve the objective. (06/30/2020)

Target for Success: Target for Success: 95% achievement of being able to recognize and state a personal emotion/feeling and analyze a possible reason for having experienced that emotion and then being able to articulate a new approach to future similar clinical experiences.

I don't believe all of the students understand the purpose of the assignment even though it is explained in orientation.

I have been accepting a wide range of responses that don't truly achieve the purpose of this SLO.

NURS 85L:Advanced Medical-Surgical Clinical

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

NURS85L_SLO_1 - Analyze the basic and comprehensive assessment of acutely ill adult client to determine the appropriate nursing care.

SLO Status: Active

Presentation/Performance - Daily assessment sheets for every assigned patient, four independent clinical activities, and midterm and final evaluations.

Target for Success: 100% of students receive overall 'Satisfactory' for the course.

Program Review Reporting Year: 2016-2017

Target: Target Met

The overall target was met. Students were evaluated using a standardized evaluation tool that looked into multiple dimensions of nursing practice. (06/10/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): Course data were shared with the department faculty in faculty meetings and weekly with other med-surg instructors. Students agreed that the patient assignments were challenging and that they required high levels of application and integration of knowledge. Overall, the student rated their clinical experiences as satisfactory and they noted that there was correlation between the classroom content and clinical practicums. Students struggled with the amount of patient data required for the safe management of care. In addition, daily assessment sheets were organized using Orem's model, which students did not find useful.

Enhancement: The daily assessment sheet will be adjusted to reflect the move from Orem's model to the systems approach to patient assessment. Additional clinical partnerships will be explored with the existing clinical partners. New clinical partners will be approached in order to provide students with a variety of experiences. (06/10/2017)

NURS85L_SLO_2 - Using the nursing process provide safe and competent care of two patients in the clinical setting.

SLO Status: Active

Presentation/Performance - Daily assessment sheets for every assigned patient, and midterm and final evaluations.

Target for Success: 100% of students receive overall 'Satisfactory' for the course.

Program Review Reporting Year: 2016-2017

Target: Target Met

The overall target was met. Students were evaluated using a standardized evaluation tool that looked into multiple dimensions of nursing practice. (06/10/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): Course data were shared with the department faculty in department meetings and weekly with other med-surg instructors. At the beginning of the academic term, students generally struggled with the assignment involving multiple patients but, with occasional exception, all students were able to successfully provide care to two moderately unstable patients by midterm of the course. Students who struggled were provided additional support.

Enhancement: The daily assessment sheet will be adjusted to reflect the move from Orem's model to the systems approach to patient assessment. Case studies and exercises with the focus on prioritization will be introduced. (06/10/2017)

NURS 86:Leadership/Management in Nursing

110110 00.Leadership/management in 11drshig			
Student Learning Outcomes (SLOs)	Assessment Methods	Assessment Data Summaries	Enhancements
NURS86_SLO_1 - Demonstrate beginning management skills in nursing. SLO Status: Active	Exam - Course Test/Quiz - Short- answer take-home quiz, evaluated by grading rubric. Target for Success: 100% of students will be able to design a nursing unit assignment that demonstrates safety and observes appropriate scopes of practice.	Program Review Reporting Year: 2016-2017 Target: Target Met 17 of 17 students (100%) were able to develop a nursing unit assignment that demonstrated safety and observed appropriate scopes of practice. (06/11/2017) Reflection (CLICK ON? FOR INSTRUCTIONS): All students wrote appropriate and safe nursing assignments, although some underutilized the LVNs in the scenario and overused the RNs. Other students designed nursing assignments that were logistically challenging (e.g., assigning a nurse to care for patients at opposite ends of the nursing unit). These assignments were safe but potentially exhausting for the nurse.	Enhancement: I plan to revise the take-home quiz to include a drawing of the hospital unit and include in the directions the need to consider unit logistics in making the nursing assignments. (06/11/2017)
NURS86_SLO_2 - Demonstrate beginning leadership skills in nursing. SLO Status: Active	Presentation/Performance - Students demonstrate the assigned leadership style (autocratic, democratic, laissez-faire) when	Program Review Reporting Year: 2016-2017 Target: Target Met 17 of 17 students (100%) were able to demonstrate the assigned leadership style. (06/11/2017)	Enhancement: I plan to continue the current scenarios with no changes, but closely monitor for potential changes if the data falls

presented with a clinical scenario. Target for Success: 100% of students will be able to demonstrate the assigned leadership style.

Reflection (CLICK ON? FOR INSTRUCTIONS): All students participated in a lively and animated demonstration of various leadership styles while in a simulated emergency situation.

below 100%. (06/11/2017)

NURS 86L:Leadership/Management Clinical Component

Student Learning Outcomes (SLOs)

Assessment Methods

Assessment Data Summaries

Enhancements

NURS86L SLO 1 - Provide safe and effective nursing care to 75-100% of a performance, based on elements of typical nursing patient assignment in clinical setting

SLO Status: Active

Field Placement/Internship - Clinical clinical evaluation tool, personal observation and interview with preceptor.

Target for Success: 100% of students will safely care for 75-100% of typical RN assignment.

Program Review Reporting Year: 2016-2017

Target: Target Met

17 of 17 students (100%) safely cared for 75-100% of typical RN assignment by the completion of their preceptorship. (06/11/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): Il students met the expected benchmark of safely caring for 75%-100% of a typical RN assignment. Several of the students reportedly reached 100% of the typical RN assignment.

Enhancement: I plan to more closely track and estimate the number of students who reach 100% of a typical RN assignment, as this is predictive of being able to successfully function as a nurse upon graduation. I do not plan to make 100% be the goal, as it is unrealistic in certain specialized areas (such as emergency or critical care) for a student to achieve. (06/11/2017)

NURS86L_SLO_2 - Using Orem's model of nursing, apply the nursing process to assigned clinical setting **SLO Status:** Active

Project - Students prepare and submit a comprehensive nursing care plan (NCP), using the Orem model that includes three correctly worded nursing diagnoses using NANDA-I terminology.

Target for Success: 100% of students submit a comprehensive nursing care plan, using the Orem model that includes three correctly worded nursing diagnoses using NANDA-I terminology

Program Review Reporting Year: 2016-2017

Target: Target Met

17 of 17 students (100%) submitted a comprehensive nursing care plan, using the Orem model that includes three correctly worded nursing diagnoses using NANDA-I terminology. (06/11/2017)

Reflection (CLICK ON? FOR INSTRUCTIONS): All students (100%) developed comprehensive nursing plans, using NANDA-I and the Orem model. This is not surprising since they have been writing NCPs for six quarters.

Enhancement: I plan to continue the current scenarios with no changes, but closely monitor for potential changes if the data falls below 100%. Also I plan to make sure students are informed of the current NANDA-I nomenclature, as it changes every 3 years. Longerterm action (2019?): when the new nursing program curriculum begins in future years I will modify the NCP from an Orem-based theoretical framework to the newly chosen framework. (06/11/2017)