BASIC PROGRAM INFORMATION

Program Review is about documenting the discussions and plans you have for improving student success in your program and sharing that information with the college community. It is also about linking your plans to decisions about resource allocations. With that in mind, please answer the following questions.

Department Name: Athletic Injury Care - Foothill Sports Medicine

Division Name: Kinesiology and Athletics

Please list all team members who participated in this Program Review:

Name	Department	Position
Warren Voyce	Foothill Sports Medicine	Head Athletic Trainer / Program Director
Michelle Schukraft	Foothill Sports Medicine	Assistant Athletic Trainer
Gary Lang	Foothill Sports Medicine	Faculty
Elizabeth Pena	Foothill Sports Medicine	Assistant Athletic Trainer (TEA)

Number of Full Time Faculty: 2 **Number of Part Time Faculty:** 1

Please list all existing Classified positions: *Example: Administrative Assistant I*

Athletic Trainer
Athletic Trainer (TEA)

List all programs covered by this review and indicate the program type:

Athletic Injury Care	☐ Certificate	☒ AA / AS	☐ AD-T	☐ Pathway
	☐ Certificate	☐ AA / AS	☐ AD-T	☐ Pathway
	☐ Certificate	☐ AA / AS	☐ AD-T	☐ Pathway
	☐ Certificate	☐ AA / AS	☐ AD-T	☐ Pathway
	☐ Certificate	☐ AA / AS	☐ AD-T	☐ Pathway

SECTION 1: PROGRAM DATA & ENROLLMENT

1A. Transcriptable Program Data: Data will be posted on Institutional Research's website for all measures except non-transcriptable completion. You must manually copy data in the boxes below for every degree or certificate of achievement covered by this program review.

Transcriptable Program	2013-2014	2014-2015	2015-2016
Athletic Injury Care AS	2	7	2

1B. Non-Transcriptable Program Data: Please provide any non-transcriptable completion data you have available. Institutional Research does not track this data; you are responsible for tracking this data.

Non-Transcriptable Program	2013-2014	2014-2015	2015-2016

Please provide the rationale for offering a non-transcriptable program and share the most recent program completion data available.

1C. Department Level Data:

	2013-2014	2014-2015	2015-2016
Enrollment	**486**	**465**	**407**
Productivity	**334**	**282**	**268**
Course Success	**390 (80%)**	**340 (73%)**	**320 (79%)**
Full-Time Load (FTEF)	**1.8**	**2.1**	**2.0**
Part-Time Load (FTEF)	**0.7**	**0.6**	**0.7**

1D. Enrollment Trend:
Program Enrollment (Over Past 3 Years): ☐ Increase ☐ Steady/No Change ☒ Decrease

1E. Course Success Trends: Please describe course success trends for the following student groups and compare the program-level data with the college-level data.

	Program-Level Trend			College-Level Comparison		
	Increase	Steady/No Change	Decrease	Above	At Level	Below
African American	☐	☒	☐	☐	☐	☒
Asian	☐	☒	☐	☒	☐	☐
Filipino	☐	☒	☐	☐	☐	☒
Latino/a	☐	☐	☒	☐	☐	☒
Native American	☒	☐	☐	☐	☐	☒
Pacific Islander	☒	☐	☐	☐	☐	☒
White	☐	☐	☒	☒	☐	☐
Decline to State	☐	☒	☐	☒	☐	☐

1F. Course Success Demographics: Please compare the program-level course success rate data for the following student groups with the college-level data.

Male:	☐ Above Level	☐ At Level	☒ Below Level
Female:	☒ Above Level	☐ At Level	☐ Below Level
<25 Years Old:	☐ Above Level	☐ At Level	☒ Below Level
>25 Years Old:	☐ Above Level	☒ At Level	☐ Below Level

1G. Equity: One of the goals of the College's Student Equity plan is to close the performance gap for disproportionately impacted students, including African-American, Hispanic/Latino, and Filipinos/Pacific Islanders. If the course success rates for these students (or other groups not listed above, such as foster youth, veterans, and students with disabilities) is below that of the College, what is your program doing to address this?

This is one of the great things about Program Review; it gives us the opportunity to look at and evaluate data on a regular basis to identify areas of need. I did not even realize the challenges our program was having in promoting the success of these At-Risk Populations until I evaluated the data this year. This will become a focus for our program moving in to the next review cycle. Some ideas to address this

challenge include:
* The addition of Duel Enrollment sections at Mountain View High School provides more access to At Risk students. Efforts are in progress to support those students and promote their success.
* Coordinating with the Kinesiology Department to develop resources to aid At-Risk students, including a developing a local academic resource center, offering tutoring and increasing access to academic counseling and support.
* Developing mentoring within the Sports Medicine Program to foster peer-to-peer collaboration and success.

1H. Course Enrollment: If there are particular courses that are not getting sufficient enrollment, are regularly cancelled due to low enrollment, or are not scheduled, discuss how your program is addressing this.

Enrollment is a primary focus for the Foothill College Sports Medicine Program. Data indicates a decrease in enrollment in both the Core Courses and the Internship Program. This is a major concern. Aggressive measures are being employed to increase enrollment across the board, including:
* Addition of Mountain View High School sections of KINS 16A, KINS 16B and KINS 15.
This will immediately add enrollment to the program
* Active rectruitment at local high school and Career and Technical Education Programs
Hope to infuse new student into the program
* Evaluation of how changes in certification requirements (moving from minimum Bachelor's Degree to Entry-Level Master's Degree) will effect community college sports medicine programs
May create a new population of college students looking for training and education in prepartion for application to Entry-Level Master's Program
* Increased interaction between the Core Courses and the Internship Program to increase enrollment in both through guest lecture opportunities between instructors.
* Increased focus on encouraging students to take more than one course within the program.
* As the Personal Trainer Certificate Program gets started and the Adaptive Physical Education Program is re-vamped, collaboration and interaction with those programs to promote cross-over of students between programs.
* The advent of the Kinesiology for Tranfer Degree (KIN AA-T) has drawn students to complete that degree to earn it's benefits, including students enrolled in our program. This may have decreased enrollment in our classes as students focussed on completed the KINS AA-T requirements.
We view the KIN AA-T as a huge positive for our students. Students completing the KINS AA-T can access the benefits of a Transfer Degree. However, they may continue to take our curriculum to prepare them for their field of study. We will work to encourage theses students to continue to take our curriculum and to apply for both degrees to further improve their transfer application and to increase the number of completers for our program.

1I. Productivity: Although the college productivity goal is **535**, there are many factors that affect productivity (i.e. seat count / facilities / accreditation restrictions).

Program Productivity Trend: ☐ Increase ☐ Steady/No Change ☒ Decrease
Program Productivity (Compared to College): ☐ Above Goal ☐ At Goal ☒ Below Goal

Please discuss what factors may be affecting your program's productivity.

Productivity is always a challenge for the Foothill College Sports Medicine Program. This program serves 2 purposes at Foothill College: As an educational program for students interested in sports medicine and

to provide medical services for Foothill College Intercollegiate Athletics. The interaction of these two important roles leads to an anomole in regards to Productivity. The KINS 62 Courses are the Clinical Experiences in Sports Medicine internship classes. Students in these classes assist in providing medical services for intercollegiate athletics. This service is critical to ensuring the safety of the student-athletes and limiting the liability of the college. Without the service of these students, intercollegiate athletics could not exist. As such, lower enrolled courses exist, lowering productivity. Efforts are being made on a regular basis to increase this enrollment and increase productivity while providing better medical care for athletics.

If your program's productivity is below that of the College, please discuss your program objectives aimed at addressing this.

* Continuing to implement active measures to increase enrollment in all classes, including high school and CTE program recruitment and marketing to interested student populations
* Continue to evaluate the Faculty Position of Head Athletic Trainer to identify if there are different ways in which to organize the position to allow for an appropriate balance of instruction and medical care.

SECTION 2: COURSE COMPLETION & PROGRAM IMPROVEMENT

2A. Institutional Standard: This represents the lowest course completion (success) rate deemed acceptable by the College's accrediting body (ACCJC). The institutional standard is **57%**.

Program Level Course Completion:	☒ Above Standard	☐ At Standard	☐ Below Standard
Targeted Student Course Completion:	☒ Above Standard	☐ At Standard	☐ Below Standard
Online Student Course Completion:	☒ Above Standard	☐ At Standard	☐ Below Standard
In-Person/Hybrid Course Completion:	☒ Above Standard	☐ At Standard	☐ Below Standard

2B. Institutional Effectiveness (IEPI) Goal: This represents an aspirational goal for course completion (success) rates; all programs should strive to reach/surpass this goal. The IEPI goal is **77%**.

Program Level Course Completion:	☐ Above Goal	☐ At Goal	☒ Below Goal
Targeted Student Course Completion:	☐ Above Goal	☐ At Goal	☒ Below Goal
Online Student Course Completion:	☐ Above Goal	☐ At Goal	☒ Below Goal
In-Person/Hybrid Course Completion:	☒ Above Goal	☐ At Goal	☐ Below Goal

Please comment on your program's efforts to continually improve course completion (success) rates, especially for students with basic skills needs.

Student success is always a focus in our program. Though we are above the Institutional Standard, it is clear that further effort is needed to exceed the Institutional Effectiveness Goal in all areas. The data seems to point toward success in our In Person/Hybrid courses, but challenges in our Online sections. Greater focus will be put on our Online sections to promote success, while continuing to foster success in our In Person courses.

If your program's course completion (success) rates are below the institutional standard (see above), please discuss your program objectives aimed at addressing this.

Courses are above the Institutional Standard. However, in evaluating the data it is evident that we need to improve in our online course success to surpass the IEPI. Focus will be included in this next cycle in improving our Online instruction and increasing our Online Course Success.

2C. Faculty Discussion: Does meaningful dialogue currently take place in shaping, evaluating, and assessing your program's Student Learning Outcomes (SLOs)? ☒ Yes ☐ No

Does meaningful dialogue currently take place around equity and course success rates? ☒ Yes ☐ No

If yes, in what venues do these discussions take place? (Check all that apply)
☒ Department Meetings ☒ Opening Day ☒ Online Discussions ☒ Other:

If no, please discuss what is missing and/or the obstacles to ensuring meaningful dialogue takes place.

Even with challenges in instructors' schedules and online and in-person coordination, tremendous collaboration has occurred within our program. We will continue to meet, discuss and implement change in our program to ultimately benefit our students. Discussions in this cycle will focus on areas on need identified in this Program Review, including student equity and course success.

2D. Course-Level: How has assessment and reflection of course-level Student Learning Outcomes (CL-SLOs) and course completion data led to course-level changes?

Assesments and Refelctions on Course Level SLOs continue to provide valuable feedback on the success occuring in each course, the quality of the measurements of that success and the resources needed to continue or improve the success as we move forward. As the majority of SLOs are being met, little change is needed.

* A continued focus on increased instruction time in KINS 62 A-E is a focus in the next cycle.
* This cycle we will focus on revising the SLOs to update their accuracy in measuring course success, the targets for student success, and the methods of assesment.
* It was repeatedly noted in the Course Level SLOs that the state of the 2831 classroom floor and tables is an obstacle to course success and even enrollment. The horrible condition of the flooring and tables where many of the laboratory activities are performed is unfit for students to work on and may even deter students from taking the classes. This classroom is used across many programs and updating and refurbishing it is of great importance to the success of those programs.

If your program's CL-SLOs are not being met, please indicate your program objectives aimed at addressing this.

* Increased instruction time with the addition of weekly educational sessions for KINS 62A-E will be added.
* Increased focus on At-Risk student success.

2E. Program-Level: How has assessment and reflection of program-level Student Learning Outcomes (PL-SLOs) led to certificate/degree program changes and/or improvements?

Program Level SLOs continue to highlight the tremndous success our students are having at meeting the 2 major goals of our program: To provide students with a strong foundation in knowledge and experience in a variety of sports medicine fields and to provide the highest level of medical care for Foothill College Intercollegiate Athletes.

Over the course of this 3 year cycle it has been planned to add a transcriptable Certificate in Sports Medicine. In that time, a fundamental change has occurred in the educational requirements for Certified Athletic Trainers. Students wishing to become Certified Athletic Trainers will soon have to complete an Entry-Level Master's Program at an accredited university (currently there are accredited Bachelor's Degree Programs). This change was approved in 2015, but will not go in to full effect until

2021. The submission for a Certificate was delayed in order to evaluate the new direction of the athletic training profession and better match the needs of students interested in pursuing that career. Further investigation in to the role of the Community College athletic training education program in to this new educational direction of the profession are ongoing. I believe this will further highlight the need for a Certificate. As such, the development, submission and completion of this Certificate is a major focus going in to the next 3 year cycle.

What is being done at the program-level to assist students in achieving degree/certificate completion and/or transferring to a four-year institution?

* Degree completion and transfer is a major focus of the Foothill Sports Medicine Program. As most Sports Medicine fields require an advanced degree, the majority of our students transfer on to further education.
* Students maintain regular updates on their career and educational goals. Faculty and staff, with assistance from Counseling, facilitate and direct the students toward meeting those goals.
* Faculty and staff are constantly fostering relationships with sports medicine programs, including Athletic Training Education Program, Physical Therapy schools, Chiropractic Colleges, and more.
* One area that has developed in the last 2 years is the addition of the Kinesiology AA-T Degree at Foothill. As many Sports Medicine education programs are housed under Kinesiology Programs at the 4 year level, this new Transfer Degree creates great opportunities for our students. We are encouraging them to take advantage of completing the KINS AA-T. However, this can take away from student completing the Athletic Injury Care AS Degree. We have already seen this, with 2015-16 degree numbers (KINS AA-T 10, AIC AS 2), some of whom are students in the Foothill Sports Medicine Program. As we move forward, we will be encouraging students to apply for both degrees when they meet the requirements. Having both the Athletic Injury Care AS and the Kinesiology AA-T degrees will increase the students' marketability and options at the 4 year level.

If your department has a Workforce/CTE program, please complete Section 2F.
If your department does not have a Workforce/CTE program, please skip to Section 3.

2F. Workforce/CTE Programs: Refer to the program review website for labor market data.

What is the regional three-year projected occupational growth for your program? 14.7%

What is being done at the program-level to assist students with job placement and workforce preparedness?

* Job Placement - We are frequently contacted with job opportunities related to sports medicine, including physical therapist aides and personal trainers. Opportunities are presented to quailified students who are a good match for the position. Recommendations are made to employers highlighting the students' skills, experiences and qualifications.
* Workforce Preparedness - One of the highlights of the Foothill College Sports Medicine Program is the extensive internship opportunities offered (KINS 62A-E). Students work in a hands-on environment providing medical services for Foothill intercollegiate athletics. This experience directly prepares students for careers in athletic training, physical therapy, strength and conditioning and medicine.

If your program has other program-level outcomes assessments (beyond SLOs and labor market data), discuss how that information has been used to make program changes and/or improvements.

One of the great challenges of our program is develop metrics showing the long-term success of our students. As most Sports Medicine professions require further education and training, and students follow a variety of career and educational paths, it is very difficult to accurately identify when students complete a program and reach their career aspirations. We are constantly looking for ways to track our students and celebrate their successes. Email surveys, alumni communications and personal contact have led us to identify many achievements in the last 3 years. (see Summary in Section 4B) We will continue to gather data from multiple sources and evaluate that data to provide evidence of the great successes our program is having.

SECTION 3: SUMMARY OF PROGRAM OBJECTIVES & RESOURCE REQUESTS

3A. Past Program Objectives: Please list program objectives (not resource requests) from past program reviews and provide an update by checking the appropriate status box.

Grow Athletic Trainer Intern position in to a Full Time Classified Position	Year: 2014-2016	☐ Completed	☒ Ongoing	☐ No Longer a Goal
Increase enrollment and completion rates of the Athletic Injury Care AS Degree	Year: 2014-2016	☐ Completed	☒ Ongoing	☐ No Longer a Goal
Develop Advisory Panel	Year: 2014	☐ Completed	☒ Ongoing	☐ No Longer a Goal
Increase / maintain medical services for intercollegiate athletics	Year: 2014-2016	☐ Completed	☒ Ongoing	☐ No Longer a Goal
Develop Transcriptable Certificate in Sports Medicine	Year: 2015	☐ Completed	☒ Ongoing	☐ No Longer a Goal
Collect data on students completing the program	Year: 2015	☐ Completed	☒ Ongoing	☐ No Longer a Goal
Generate injury tracking and treatment data	Year: 2015	☐ Completed	☒ Ongoing	☐ No Longer a Goal
	Year:	☐ Completed	☐ Ongoing	☐ No Longer a Goal

Please comment on any challenges or obstacles with ongoing past objectives.

* Limited budgets and available Classified Positions have prevented us from moving our Part-Time Intern Position to a Full Time Classified Position. As Athletics grows it's programs and adds sports, teams and athletes, having another Full Time Classified Position will be critical to maintain the appropriate level of medical services for Athletics and to maintain the safety of the athletes.
* Efforts are ongoing to find ways to increase enrollment and degree completion

While there are some obstacles to achieving all of the goals set out for the Foothill College Sports Medicine Program, in general we are meeting and exceeding those goals!

Please provide rationale behind any objectives that are no longer a priority for the program.

Previous goals are all ongoing and continue to focus on program growth and increased medical services for Foothill College Athletics.

3B. New Program Objectives: Please list all new program objectives discussed in Sections 1-2; do not list resource requests in this section.

Program Objective	Implementation Timeline	Progress Measures
Example: Offer 2 New Courses to Meet Demand	*Winter 2016 Term*	*Course Enrollment*
1) Grow Athletic Trainer Intern Position in to a Full-Time Classified Position	5 years	Increased staffing
2) Maintain appropriate level of medical services for Foothill College Athletics	Ongoing	Injury Tracking Data Coaches Feedback
3) Increase course enrollments	Ongoing	Increased enrollment
4) Completion of development of Transcriptable Certificate	Fall 2018	Certificart Approval
5) Increase interaction between Core Classes and Internship Program	Fall 2017	Increased course enrollment and success
6) Increase focus and support for At-Risk Groups	Fall 2017	Increased success for At-Risk Groups
7) Increase focus on support for Online classes	Fall 2017	Increased Success in Online classes
8) Increase growth of Duel Enrollment Programs with local high schools	Fall 2020	Addition of more Duel Enrollment classes

3C. EMP Goals. Please refer to the Educational Master Planning (EMP) website for more information. Indicate which EMP goals are supported by your program objectives (Check all that apply).
☒ Create a culture of equity that promotes student success, particularly for underserved students.
☒ Strengthen a sense of community and commitment to the College's mission; expand participation from all constituencies in shared governance.
☒ Recognize and support a campus culture that values ongoing improvement and stewardship of resources.

3D. Resource Requests: Using the table below, summarize your program's unfunded resource requests. Refer to the Operations Planning Committee (OPC) website for current guiding principles, rubrics and resource allocation information. Be sure to mention the resource request in your narrative above when discussing your program so the request can be fully vetted.

Resource Request	$	Program Objective (Section 3B)	Type of Resource Request			
			Full-Time Faculty/Staff Position	One-Time B-Budget Augmentation	Ongoing B-Budget Augmentation	Facilities and Equipment
Full Time Classified Athletic Trainer Position	$60K	#1, #2	☒	☐	☐	☐
Athletic Trainer Intern Position	$20K	#2	☐	☒	☒	☐
Refurbish 2831 Classroom (Floor, tables)	$50K	#3, #5, #6	☐	☐	☐	☒
			☐	☐	☐	☐
			☐	☐	☐	☐
			☐	☐	☐	☐

			☐	☐	☐	☐
			☐	☐	☐	☐
			☐	☐	☐	☐
			☐	☐	☐	☐

3E. Unbudgeted Reassigned Time: Please list and provide rationale for requested reassign time.

3F. Please review the resource requests that were granted over the last three years and provide evidence that the resource allocations supported your objectives and led to student success.

Funding for the Athletic Trainer Intern Position has been secured each year. This position is critical to maintain the level of medical services for the student-athletes, ensuring their safety. This position also is important to provide the approriate levels of supervision for students in the Foothill Sports Medicine Program. The great successes that the Foothill College Sports Medicine Program is achieving are directly related to this position; without the position it would not be possible to run our program effectively.

SECTION 4: PROGRAM SUMMARY

4A. Prior Feedback: Address the concerns or recommendations made in prior program review cycles, including any feedback from the Dean/VP, Program Review Committee (PRC), etc.

Concern/Recommendation	Comments
Analysis should include discussion of differences in student demographics	Disaggregation of the Athletic Injury Care courses from the general Kinesiology Division data has allowed us to more accurately reflect on our student demongraphic data (Thank you Research Department!)
Infuse enrollment	This is an ongoing focus of our program. The addition of the Duel Enrollment program with Mountain View High School has added students to our program and will hopefully encourage students to continue their education with our program as they move to the college level.

4B. Summary: What else would you like to highlight about your program (e.g. innovative initiatives, collaborations, community service/outreach projects, etc.)?

The Foothill College Sports Medicine Department continues to be recognized as one of the best programs in the California Community College System! * Students continue to provide an outstanding level of medical services for Foothill College Athletics * Students have completed Four Year School Athletic Training Education Programs and passed the national certification exam to become Certified Athletic Trainers * Students have gained entrance in to Master's Degree Programs * Students have gained entrance in to Physical Therapy School * Students have gained entrance in to Chiropractic College * Students have been recognized as Scholar Athletes, maintaining a 3.0 GPA or above while particpating in our program * Students have presented at National Honor Society of Sports Medicine Seminars

* Students have completed externships with the San Francisco Giants, including working on a staff that won the 2014 World Series Championship!

We look forward to improving on these success and develop new ones as we continue to look for new and exciting ways to grow!

SECTION 5: LEARNING OUTCOMES ASSESSMENT SUMMARY

5A. Attach 2015-2016 Course-Level Outcomes: Four Column Report for CL-SLO Assessment from TracDat. Please contact the Office of Instruction to assist you with this step if needed.

5B. Attach 2015-2016 Program-Level Outcomes: Four Column Report for PL-SLO Assessment from TracDat. Please contact the Office of Instruction to assist you with this step if needed.

SECTION 6: FEEDBACK AND FOLLOW-UP

This section is for the Dean/Supervising Administrator to provide feedback.

6A. Strengths and successes of the program as evidenced by the data and analysis:

The Athletic Injury Care department is an integral part of the Athletics Program at Foothill College. The faculty and staff are dedicated and work at nights and weekends in addition to their regular schedule to ensure that our student athletes are properly supported and cared for. The department recently began a relationship with the MVLA school district and offered courses at Mountain View high school in the fall and winter of 2016/17. We hope this will be an ongoing program as it gives students a pathway into a degree and will increase enrollment in Kinesiology courses as some MV high school students will hopefully continue their education at Foothill.

More recently, the Athletic Injury Care department has been identified as a CTE (Career Technical Education) program. This is will free State funding for equipment, the creation of new curricula, and the placement of (paid) student interns in local businesses to gain important practical work experience.

Finally, the AS-T in Kinesiology will provide opportunities for our students to move through the program in two years. The popularity of the KINS AS-T this year is evidence that students are taking advantage of this new degree path.

6B. Areas of concern, if any:

The overall success rate increased slightly this year, but there is still a considerable achievement gap for underrepresented student populations. The department proposes more individual mentoring, which will help, but we should also look at how to fully support the increasing number of online students as well. It is recommended that the faculty work to place successful KINS/Athletic Injury Care students in the TLC at regular times to provide tutorial support. The faculty should also review their online courses for accessibility and Universal Design updates; the transition to Canvas provides a timely opportunity to review all online courses.

As noted in the PR, productivity is an eternal issue with this department. Given the nature of the support Athletic Injury Care provides for the college's teams, one full-time load and one part-time load are

almost exclusively devoted to this endeavor. The CTE designation will help attract more students and the creation of a logical two-year schedule (published and accessible to counselors and students) will allow for more students to plan their degree path.

The AIC facilities do require updating. As noted in several other PRs, the sole KINS/ATHL classroom, room 2831, is in need of new carpets, paint, and AV equipment and the AIC room itself, is due for new paint and updated equipment.

6C. Recommendations for improvement:

The Athletic Injury Care department is committed to becoming a CTE program. This will bring in State funds for equipment and internships. The department has also proposed renaming themselves (Sports Medicine) which will put them in line with most programs across the country. We need to aggressively market this name change to attract more students to Foothill.

I would like to see a concrete plan of action to address the achievement gap for AIC students (especially for online sections). Tutorial support would be a good start, but the transition to Canvas should be embraced as an opportunity to review and improve all online course offerings.

There was some conversation several years ago about establishing a Director level position (twelve-month contract) for the head of the AIC department. This is something the college and AIC department might want to talk about at some point in the near future. It would certainly help the department's productivity with no impact on the scope of services offered to our teams.

We do need to do a better job tracking our AIC students as they move on from Foothill to four-year institutions, graduate school, and employment in the discipline. This should also be seen as part of our marketing drive to increase awareness about the excellence of the Foothill College AIC program. As noted in the PR, we have students who have gone on to great success; we need to be able to share stories about this success with our community.

6D. Recommended Next Steps:

- ☒ Proceed as Planned on Program Review Schedule
- ☐ Further Review / Out-of-Cycle In-Depth Review

This section is for the <u>Vice President/President</u> to provide feedback.

6E. Strengths and successes of the program as evidenced by the data and analysis:

This program has significant potential to meet the needs of a growing number of students. I commend the work being done to look at the data and the curriculum. The faculty are committed to student success and improving the program.

6F. Areas of concern, if any:

I concur with the Dean's assessment, especially regarding productivity and success rates.

Enrollment Trends
(Special Grouping) FH > Kinesiology and Athletics > Athletic Injury Care-FH

	2012-13	2013-14	2014-15	2015-16	4-yr %Inc
Unduplicated Headcount	46	343	308	299	550.0%
Enrollment	46	486	465	407	784.8%
Sections	1	30	33	29	2,800.0%
WSCH	184	2,449	2,298	2,186	1,088.3%
FTES	4	55	51	48	1,066.2%
FTEF	0.1	2.4	2.7	2.7	2,960.3%
Productivity	689	334	282	268	-61.2%

Enrollments

Ethnicity	2012-13	2013-14	2014-15	2015-16
African American	2	49	57	35
Asian	15	100	87	92
Filipino	8	49	48	37
Latino/a	12	119	124	104
Native American		1	2	4
Pacific Islander		9	4	14
White	9	141	118	104
Decline to State		18	25	17
Total	46	486	465	407

Success rates by class and student

Ethnicity	2012-13	2013-14	2014-15	2015-16
African American	50%	61%	64%	60%
Asian	67%	90%	83%	89%
Filipino	88%	76%	77%	86%
Latino/a	83%	80%	68%	69%
Native American		0%	50%	75%
Pacific Islander		33%	75%	57%
White	78%	85%	73%	83%
Decline to State		89%	84%	94%
Total	76%	80%	73%	79%

6G. Recommendations for improvement:

It looks like the department has already identified a number of actions steps / plans, such as renaming to Sports Medicine that would help strengthen the program. Working with Institutional Research to learn more about the outcomes of students after they leave Foothill could help inform the curriculum. Examining the educational pathways for students and clearly articulating the pathways would assist students.

The department might consider putting together a formal action plan – perhaps on page of items - to be completed to help focus its work.

6H. Recommended Next Steps:

☒ Proceed as Planned on Program Review Schedule
☐ Further Review / Out-of-Cycle In-Depth Review

Upon completion of Section 6, the Program Review document should be returned to department faculty/staff for review, then submitted to the Office of Instruction and Institutional Research for public posting. Please refer to the Program Review timeline.

Unit Course Assessment Report - Four Column

Foothill College

Program (KA-PHYS) Athletic Injury Care - Physical Education AS

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
Department - Biology (BIOL) - BIOL 40A - HUMAN ANATOMY & PHYSIOLOGY I - SLO #1: Cells - The student can analyze and evaluate the relationship between cell structure and function, and the mechanisms in place to maintain homeostasis at the cellular level. (Created By Department - Biology (BIOL)) **Start Date:** 07/02/2015 **End Date:** 07/01/2017 **Course-Level SLO Status:** Active	**Assessment Method:** Embedded question on an exam (Bio A) **Assessment Method Type:** Exam - Course Test/Quiz **Target:** 80% of the class will correctly answer the question on the exam (Bio 40A)		
Department - Biology (BIOL) - BIOL 40A - HUMAN ANATOMY & PHYSIOLOGY I - SLO #2: Integumentary System - The student can analyze and evaluate the relationship between integumentary system structure and function, and the role of the integumentary system in maintaining homeostasis in the human body. (Created By Department - Biology (BIOL)) **Start Date:** 07/02/2015 **End Date:** 07/01/2017 **Course-Level SLO Status:** Active	**Assessment Method:** Embedded Question on an exam (Bio 40A) **Assessment Method Type:** Exam - Course Test/Quiz **Target:** 80% of the class will correctly answer the question on the exam (Bio 40A)		
Department - Biology (BIOL) - BIOL 40A - HUMAN ANATOMY & PHYSIOLOGY I - SLO #3: Skeletal System - The student can analyze and evaluate the relationship between skeletal system structure and function, and the role of the skeletal system in maintaining homeostasis in the human body. (Created By Department - Biology	**Assessment Method:** Embedded question on an exam (Bio 40A) **Assessment Method Type:** Exam - Course Test/Quiz **Target:** 80% of the class will correctly answer the question on the exam (Bio40A)		

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
(BIOL)) **Start Date:** 07/02/2015 **End Date:** 07/01/2017 **Course-Level SLO Status:** Active			
Department - Biology (BIOL) - BIOL 40A - HUMAN ANATOMY & PHYSIOLOGY I - SLO #4: Muscular System - The student can analyze and evaluate the relationship between muscular system structure and function, and the role of the muscular system in maintaining homeostasis in the human body. (Created By Department - Biology (BIOL)) **Start Date:** 07/02/2015 **End Date:** 07/01/2017 **Course-Level SLO Status:** Active	**Assessment Method:** Embedded question on an exam (Bio 40A) **Assessment Method Type:** Exam - Course Test/Quiz **Target:** 80% of the class will correctly answer the question on the exam (Bio40A)		
Department - Biology (BIOL) - BIOL 40A - HUMAN ANATOMY & PHYSIOLOGY I - SLO 2 - Structure and function - The student can identify the importance of structure/ function relationship. (Created By Department - Biology (BIOL)) **End Date:** 07/01/2015 **Course-Level SLO Status:** Inactive	**Assessment Method:** Embedded question on an exam (Bio 40A) **Assessment Method Type:** Exam - Course Test/Quiz **Target:** 80% of the class will correctly answer the question on the exam (Bio 40A).	04/20/2015 - How changes in structure and function of bone tissue contributes to the disease state of osteoporosis was a question that was successfully answered by 78% of students. Results are just slightly under the target set at 80%. [Bio 40A, Winter 2015, Lopez: YR 2014-2015] **Result:** Target Not Met **Year This Assessment Occurred:** 2014-2015 **Resource Request:** One possible resource request would be histology slide showing osteoporosis or poster describing disease may be helpful for discussion in lab 01/21/2015 - The class scored 78% correct for the	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		question on structure and function. This was slightly less than the target of 80% and seems to be a consistent problem for the class. The concept on the surface seems straight forward and I think most students understand the basic concept. However, when confronted with specific questions about this idea they have a harder time connecting the dots. I intend to add a section in my ETUDES course which specifically addresses this issue to help students better understand how the general concept applies to specific sets of facts and to human body in particular. I also intend to emphasis these kinds of connections more directly in my lecture. MM-BIO40A-F14 **Result:** Target Not Met **Year This Assessment Occurred:** 2013-2014	
		11/23/2014 - 78% of the students answered the question correctly concerning Structure and Function of Bone Tissue in growth of long bones. Results are slightly under the target set at 80%. Some students were unable to determine how changes in the structural features of bone tissue disrupted normal long bone growth function. [Bio 40A, Winter 2014, Lopez: YR 2013-2014] **Result:** Target Not Met **Year This Assessment Occurred:** 2013-2014 **Resource Request:** Lab models and histology of bone tissue development **Resource Request:** Lab models and histology of bone tissue development **GE/IL-SLO Reflection:** The process of long bone growth involves many steps and is covered in the lecture. Will emphasize in lab and lecture how alterations in these steps can dramatically alter function. Would like to see if histology	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		slides of long bone growth development are available for use in lab (or models) to incorporate this concept in lab as well as lecture. [Bio 40A, Winter 2014, Lopez: YR 2013-3014] **GE/IL-SLO Reflection:** The process of long bone growth involves many steps and is covered in the lecture. Will emphasize in lab and lecture how alterations in these steps can dramatically alter function. Would like to see if histology slides of long bone growth development are available for use in lab (or models) to incorporate this concept in lab as well as lecture. [Bio 40A, Winter 2014, Lopez: YR 2013-3014]	
		10/13/2014 - More than 80% of the class was able to correctly identify the relationship between form and function. (Melia Bio 40A) **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	
Department - Biology (BIOL) - BIOL 40A - HUMAN ANATOMY & PHYSIOLOGY I - SLO 1 - Homeostasis - The student can identify how the integumentary and skeletal system contributes to homeostasis (Created By Department - Biology (BIOL)) **End Date:** 07/01/2015 **Course-Level SLO Status:** Inactive	**Assessment Method:** Embedded question on an exam (Bio 40A). **Assessment Method Type:** Exam - Course Test/Quiz **Target:** 80% of the class will correctly answer the question on the exam (Bio 40A).	04/20/2015 - For the question on homeostasis for the integumentary system 92% of the class were able to successfully answer this exam question on how the integumentary system contributes to homeostasis. [Bio 40A, Winter 2015, Lopez/ YR 14-15] **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 **Resource Request:** Although target meet this topic would benefti	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		from histology slides for skin tissue to request for labs and STEM center	
		01/21/2015 - For the questions on homeostasis for both the skeletal system and the integumentary system the class exceeded the goal of 80%. For the skeletal system 90% of the class was able to identify how this system contributes to homeostasis. For the integumentary system 97% of the class was able to identify how this system contributes to hemeostasis of the human body. MM-BIO40A-F14 **Result:** Target Met **Year This Assessment Occurred:** 2014-2015	
		11/23/2014 - Students were able to successfully determine the role of skin in maintaining homeostasis. 94% of the students correctly answered this exam question on how the integumentary system contributes to homeostasis. [Bio 40A, Winter 2014, Lopez] **Result:** Target Met **Year This Assessment Occurred:** 2013-2014 **Resource Request:** Histology slides of skin are limited in the lab and PSME center **GE/IL-SLO Reflection:** Students were able to indentify the role of skin of the intergumentary system in maintaining various features of homeostasis. Although target met for SLO #1 it would be helpful for structure and function and homeostasis question concerning the skin to include more histology slides in lab and in PSME center in the future. [Lopez Bio 40A Winter 2014]	
		10/13/2014 - This assessment is for Bio 40A Fall	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		2013. This SLO was addressed by two different questions, one for the integumentary system and one for the skeletal system. Students answered the question for how the skin contributes to homeostasis with 78% of the class answering the question correctly. For the question on how the skeletal system contributes to homeostasis 76% of the class choose the correct answer. The class was not able to meet the target percentage of 80% for both questions. This indicated that more work needs to be in the lab and lecture connecting what is learned about these two systems with the concept of homeostasis. Students did well with questions concerning the mechanics of how these two systems work but did not connect their understanding to the larger picture of homeostasis. To help students make this connection I would recommend bringing into the lab exercises that address this issue directly. This would require more lab supplies and some new equipment. I will also address this disconnect by re-framing and putting more emphasis on the discussion of homeostasis in both lecture and lab. (Melia Bio 40A) **Result:** Target Not Met **Year This Assessment Occurred:** 2013-2014 **Resource Request:** Money for disposable lab supplies, slides and models.	
Department - Biology (BIOL) - BIOL 40B - HUMAN ANATOMY & PHYSIOLOGY II - SLO #1: Nervous System - The student can analyze and evaluate the relationship between nervous system structure and	**Assessment Method:** Embedded question on an exam (Bio 40B) **Assessment Method Type:** Exam - Course Test/Quiz **Target:**	06/24/2016 - 82% of class correctly indicated physiologic effects of parasympathetic stimulation. 88-98% of class correctly matched sensory modalities with their receptors. No numerical date for exam 1, but students	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
function, and the role of the nervous system in maintaining homeostasis in the human body. (Created By Department - Biology (BIOL)) **Start Date:** 07/02/2015 **End Date:** 07/01/2017 **Course-Level SLO Status:** Active	80% of the class will correctly answer the question on the exam (Bio40B)	consistently do not answer the resting membrane potential questions adequately-perhaps because it's asked as a written (short answer). -EK **Result:** Target Met **Year This Assessment Occurred:** 2015-2016	
Department - Biology (BIOL) - BIOL 40B - HUMAN ANATOMY & PHYSIOLOGY II - SLO #2: Cardiovascular System - The student can analyze and evaluate the relationship between cardiovascular system structure and function, and the role of the cardiovascular system in maintaining homeostasis in the human body. (Created By Department - Biology (BIOL)) **Start Date:** 07/02/2015 **End Date:** 07/01/2017 **Course-Level SLO Status:** Active	**Assessment Method:** Embedded question on an exam (Bio 40B) **Assessment Method Type:** Exam - Course Test/Quiz **Target:** 80% of the class will correctly answer the question on the exam (Bio40A)		
Department - Biology (BIOL) - BIOL 40B - HUMAN ANATOMY & PHYSIOLOGY II - SLO #3: Respiratory System - The student can analyze and evaluate the relationship between respiratory system structure and function, and the role of the respiratory system in maintaining homeostasis in the human body. (Created By Department - Biology (BIOL)) **Start Date:** 07/02/2015 **End Date:** 07/01/2019 **Course-Level SLO Status:** Active	**Assessment Method:** Embedded question on an exam (Bio 40B) **Assessment Method Type:** Exam - Course Test/Quiz **Target:** 80% of the class will correctly answer the question on the exam (Bio40B)		
Department - Biology (BIOL) - BIOL 40B - HUMAN ANATOMY & PHYSIOLOGY II -	**Assessment Method:** Embedded question on an exam (Bio 40B).	06/24/2016 - 70-72% of students correctly	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
SLO 1 - Homeostasis - The student can identify how the nervous system and cardiovascular system contributes to homeostasis. (Created By Department - Biology (BIOL)) **End Date:** 07/01/2015 **Course-Level SLO Status:** Inactive	**Assessment Method Type:** Exam - Course Test/Quiz **Target:** 80% of the class will correctly answer the question on the exam (Bio 40B).	indicated compensatory mechanisms for BP changes (target not met) 92% answered correctly regarding erythropoiesis 90% understood physiologic mechanisms affecting cardiac output 88-96% understood respiratory mechanisms/Bohr effect. -EK **Result:** Target Met **Year This Assessment Occurred:** 2015-2016	
		04/09/2015 - For both systems the class was able to correctly identify how each system contributed to homeostasis by a margin of 85%. (MM W15) **Result:** Target Met **Year This Assessment Occurred:** 2014-2015	
		10/08/2014 - For homeostasis involving the cardiovascular system and nervous system; 71% of the class got this question correct, which was below the target of 80%. I will reassess the knowledge presented in lecture concerning how an increase in Blood Pressure affects other systems for example how the Autonomic Nervous responds to the increase in blood pressure. (J. Lopez Sp'14) **Result:** Target Not Met **Year This Assessment Occurred:** 2013-2014 **Resource Request:** More Models, histology slides, films to depict the Cardiovascular and Nervous System **Resource Request:** More Models, histology slides, films to depict the Cardiovascular and Nervous System	10/08/2014 - Look for alternative ways in lab with models, slides and film to bring in the dynamics of interactions between Cardiovascular System and Nervous System for better grasp of concept of homeostasis involving these systems. Look for materials to add to PSME center for student use. Will continue to lecture on these topics and assess lecture content for comprehension by students. (J. Lopez, 40B , Sp'14)
		04/11/2014 - In order to correct for a decrease in blood pressure:	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		A) Parasympathetic stimulation increases and sympathetic stimulation decreases B) Stroke volume and heart rate increase C) Blood vessels dilate to increase vascular resistance D) A and B are correct E) A and C are correct 92% of the classs correctly answered this question. The uqestion was possibly too simple by the arrangement of the options since most students have mastered the basic roles of the sympathetic and parasympathetic nervous systems so that A was easily assessed as incorrect ruling out 3 possible answers. The question will be reqorded in future. HB Winter 2014 **Result:** Target Met **Year This Assessment Occurred:** 2013-2014 **GE/IL-SLO Reflection:** This question adresses the critical thinking requirement.	
		04/06/2014 - 92% of students could adequately explain how the nervous system contributes to homeostasis when responding to a written exam question. 85% of students provided a satisfactory answer to a similar question about the cardiovascular system, while several additional students provided partial or incomplete answers. (RB W14) **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	
Department - Biology (BIOL) - BIOL 40B - HUMAN ANATOMY & PHYSIOLOGY II -	**Assessment Method:** Embedded question on an exam (Bio 40B).	06/24/2016 - 98% understood importance of erythrocyte shape & hemoglobin/oxygen binding.	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
SLO 2 - Structure and function - The student can identify the importance of structure/ function relationship. (Created By Department - Biology (BIOL)) **Start Date:** 07/01/2015 **Course-Level SLO Status:** Inactive	**Assessment Method Type:** Exam - Course Test/Quiz **Target:** 80% of the class will correctly answer the question on the exam (Bio 40B).	78% correctly recalled the significance of arterial elastic tissue. (target not met) No numerical data, but most students understand the reason for the difference in ventricular myocardial thickness & anastomoses.(short answer question). -EK **Result:** Target Met **Year This Assessment Occurred:** 2015-2016	
		06/24/2016 - 74-92% of students correctly identified various functions of brain regions in terms of sensations, ANS control, & motor functions. -EK **Result:** Target Met **Year This Assessment Occurred:** 2015-2016	
		04/09/2015 - The class was able to correctly identify the importance of the structure/function relationship by a margin of 82%. MM W15 **Result:** Target Met **Year This Assessment Occurred:** 2014-2015	
		10/08/2014 - 83% of the class correctly matched the structure/function relationship of blood flow through veins and role of; valves in veins, skeletal muscle, and blood pressure. (J Lopez, 40B, Spring2014) **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	
		04/06/2014 - 92% of the students correctly answered a multiple choice question addressing the structure-function relationship, but only 76% of the students provided a concise and well articulated answer to a short essay prompt on the final exam. On this question, several more, while unable to fully explain the concept, may not have	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		understood the question completely, but could provide some details to explain the relationship. I think they may have not fully grasped what type of answer I was looking for, and I will try re-wording the question in the future to see if the results are better. (RB W14) **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	
Department - Biology (BIOL) - BIOL 40C - HUMAN ANATOMY & PHYSIOLOGY III - SLO 1 - Homeostasis - The student can identify how the urinary system and endocrine system contributes to homeostasis. (Created By Department - Biology (BIOL)) **Start Date:** 03/03/2014 **End Date:** 07/09/2015 **Course-Level SLO Status:** Inactive	**Assessment Method:** Embedded question on an exam (Bio 40C). **Assessment Method Type:** Exam - Course Test/Quiz **Target:** 80% of the class will correctly answer the question on the exam (Bio 40C).	10/12/2015 - 84% of the students were able to identify how the urinary system and the endocrine contribute to homeostasis (MM SP15 40C) **Result:** Target Met **Year This Assessment Occurred:** 2014-2015	
		10/13/2014 - For both of these questions students failed to reach the standard of 80% set for this SLO. There were two questions designed to test for the question of homeostasis. One question was specific for how the urinary system contributes to homeostasis and a second question looked at the connection between homeostasis and the endocrine system. The interesting thing is that students did very well in understanding how both of these systems work - the nuts and bolts of the systems work - but failed to understand the bigger picture of how each system contributes to the larger picture of homeostasis. More emphasis needs to be placed on making this connection to the students in both lecture and lab. In lab new exercises should be designed to help focus student's minds on this connection. This would require more money for some models and equipment. **Result:**	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		Target Not Met **Year This Assessment Occurred:** 2013-2014 **Resource Request:** Monsy for lab equipment and supplies	
		04/02/2014 - There were a significant number if homeostasis questions on exam 2 regarding the negative feedback control of the hypothalamic-pituitary axis & the target organs, hormone receptors, regulation of GFR, renal reabsorption, & electrolyte balance. At least 80% of students answered 4 of these questions correctly. Fewer than 80% of students did not answer the remaining 6 correctly. I think several students still don't connect the dots regarding negative feedback. Other students simply forget the primary actions of some hormones and therefore, incorrectly identify the body's compensatory mechanisms to changes in blood chemistry. For "Result", the target was less than half met. **Result:** Target Not Met **Year This Assessment Occurred:** 2013-2014	
Department - Biology (BIOL) - BIOL 40C - HUMAN ANATOMY & PHYSIOLOGY III - SLO 2 - Structure and function - The student can identify the importance of structure/ function relationship. (Created By Department - Biology (BIOL)) **End Date:** 07/09/2015 **Course-Level SLO Status:** Inactive	**Assessment Method:** Embedded question on an exam (Bio 40C). **Assessment Method Type:** Exam - Course Test/Quiz **Target:** 80% of the class will correctly answer the question on the exam (Bio 40C).	10/12/2015 - 87% of the students were able to identify how form and function are related and the importance of this relationship. (MM SP15 40C) **Result:** Target Met **Year This Assessment Occurred:** 2014-2015	
		10/13/2014 - For this SLO the 83% of the class was able to identify the importance of form and structure and the connection between the two ideas. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		04/03/2014 - BIOL 40C SLO 2 - Structure and function: The student can identify the importance of structure/ function relationship. The following four exam questions were selected for SLO review. 88% of students answered correctly: During deglutition, the soft palate and epiglottis… a. secrete saliva b. help propel food along the esophagus c. block airways d. guide the wad of food into the trachea e. help chemically digest food particles 87% of students answered correctly: During peristalsis in the esophagus, which layer of the muscularis contracts behind the ingested food material? a. the oblique layer b. the circular layer c. the longitudinal layer 79% of students answered correctly: Where in the GI tract does the MOST absorption occur? a. mouth b. stomach c. small intestine d. large intestine e. rectum 92% of students answered correctly: Which of the following contributes to the large surface area of the small intestine? a. ileocecal sphincter (valve) b. brush-border enzymes c. contraction and relaxation of the muscularis (smooth muscle) d. circular folds (plicae), villi, and microvilli e. the hepatopancreatic ampulla	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		The target of 80% was exceeded for all but one question. Only 79% of students correctly identified the small intestine as the organ where the greatest amount of absorption occurs. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	
		04/02/2014 - On exam 3, there were 2 fill-in questions regarding the importance of the scrotal muscles and the role of the ciliated epithelium in the uterine tubes. Most of the students answered them correctly. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	
Department - Biology (BIOL) - BIOL 40C - HUMAN ANATOMY & PHYSIOLOGY III - SLO #1: Digestive System - The student can analyze and evaluate the relationship between digestive system structure and function, and the role of the digestive system in maintaining homeostasis in the human body. (Created By Department - Biology (BIOL)) **Start Date:** 07/02/2015 **End Date:** 07/01/2019 **Course-Level SLO Status:** Active	**Assessment Method:** Embedded question on an exam (Bio 40C) **Assessment Method Type:** Exam - Course Test/Quiz **Target:** 80% of the class will correctly answer the question on the exam (Bio40C)	06/24/2016 - 88% correctly indicated how ANS affects GI activity. 84% understood GI motor functions & communications with nervous system. 86% correctly identified colon functions. 70-72% correctly identified small intestine & colon transport/absorption. (target not met) 84-98% identified digestive phases & their stimuli. comprehension of metabolism & metabolic adaptations ranged from 40-92% -EK **Result:** Target Met **Year This Assessment Occurred:** 2015-2016	
		04/01/2016 - Across several exam questions, on average 82% of students were able to identify structure-function relationships (including layers of the GI muscularis, surface area of the GI tract, hepatic portal system). 96% of students correctly identified the role of the digestive system in maintaining homeostasis. (W16-LB) **Result:** Target Met	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		Year This Assessment Occurred: 2015-2016	
		03/31/2016 - 92% of the class correctly answered this question concerning the structure function relationship for the digestive system and relationship to homeostasis. J Lopez Bio 40C Fall 2015 **Result:** Target Met **Year This Assessment Occurred:** 2015-2016	
Department - Biology (BIOL) - BIOL 40C - HUMAN ANATOMY & PHYSIOLOGY III - SLO #2: Urinary System - The student can analyze and evaluate the relationship between urinary system structure and function, and the role of the urinary system in maintaining homeostasis in the human body. (Created By Department - Biology (BIOL)) **Start Date:** 07/02/2015 **End Date:** 07/01/2019 **Course-Level SLO Status:** Active	**Assessment Method:** Embedded question on an exam (Bio 40C) **Assessment Method Type:** Exam - Course Test/Quiz **Target:** 80% of the class will correctly answer the question on the exam (Bio40C)	06/24/2016 - about 72% (ave.) of students correctly answered at least 9 renal physiology/acid -base balance questions. -EK **Result:** Target Not Met **Year This Assessment Occurred:** 2015-2016	
		04/01/2016 - Across several exam questions, on average 83% of students correctly identified how the urinary system contributes to homeostasis (elimination of wastes from blood, regulation of blood volume & osmolarity, regulation of blood ion concentration, blood pH). Only 74% identified that the kidneys contribute to blood pH homeostasis. This may be due to the fact that we spent more time on how the respiratory system and proteins buffer changes in blood pH, and just briefly covered the role of the kidneys. One student purchased a fresh kidney (pig?) from a local grocery store. She video-recorded her dissection and structures were MUCH clearer than in the preserved kidneys we use in class. According to the student, the kidney cost less than one dollar and the store sold them in bulk. (W16-LB) **Result:** Target Met **Year This Assessment Occurred:** 2015-2016	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		Resource Request: Fresh pig kidneys from local grocery store- but get John's input on that	
		03/31/2016 - 78% of the class correctly analyzed the structure function relationship of the urinary system in maintaining homeostasis. Close to target, but target of 80% not met. I will emphasis aspects of the kidney specifically during lecture and lab especially dissection of kidney. J Lopez Bio 40C Fall 2015 **Result:** Target Not Met **Year This Assessment Occurred:** 2015-2016 **Resource Request:** Human Anatomy Atlas; site license for valuable depiction of stuctures **Resource Request:** Human Anatomy Atlas; site license for valuable depiction of stuctures **Resource Request:** Human Anatomy Atlas; site license for valuable depiction of stuctures	
Department - Biology (BIOL) - BIOL 40C - HUMAN ANATOMY & PHYSIOLOGY III - SLO #3: Lymphatic System - The student can analyze and evaluate the relationship between lymphatic system structure and function, and the role of the lymphatic system in maintaining homeostasis in the human body. (Created By Department - Biology (BIOL)) **Start Date:** 07/02/2015 **End Date:** 07/01/2019 **Course-Level SLO Status:** Active	**Assessment Method:** Embedded question on an exam (Bio 40C) **Assessment Method Type:** Exam - Course Test/Quiz **Target:** 80% of the class will correctly answer the question on the exam (Bio40C)	06/24/2016 - an average of 87% of students answered at least 5 questions immune function correctly. -EK **Result:** Target Met **Year This Assessment Occurred:** 2015-2016	
		04/01/2016 - 78% of students identified how the lymphatic system contributes to homeostasis by draining excess interstitial fluid. The question involved the disorder elephantitis. (W16-LB) **Result:** Target Not Met **Year This Assessment Occurred:** 2015-2016	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		03/31/2016 - 93% of the class correctly identified the relationship between the lymphatic system structure and function with homeostasis mechanisms. J Lopez Bio 40C Fall 2015 **Result:** Target Met **Year This Assessment Occurred:** 2015-2016	
Department - Biology (BIOL) - BIOL 40C - HUMAN ANATOMY & PHYSIOLOGY III - SLO #4: Endocrine System - The student can analyze and evaluate the relationship between endocrine system structure and function, and the role of the endocrine system in maintaining homeostasis in the human body. (Created By Department - Biology (BIOL)) **Start Date:** 07/02/2015 **End Date:** 07/01/2019 **Course-Level SLO Status:** Active	**Assessment Method:** Embedded question on an exam (Bio 40C) **Assessment Method Type:** Exam - Course Test/Quiz **Target:** 80% of the class will correctly answer the question on the exam (Bio40C)	06/24/2016 - an average of 76% of students understood a series of at least 8 questions on hormone interaction & feedback regulation, including specific physiologic examples. -EK **Result:** Target Not Met **Year This Assessment Occurred:** 2015-2016	
		04/01/2016 - Across several exam questions, on average 84% of students correctly identified how the endocrine system contributes to homeostasis (communication between systems, growth, development, metabolism). 78% of students correctly identified comparisons and contrasts between the endocrine and nervous system. 82% of students identified the structure-function relationship of the hypophyseal portal system. (W16-LB) **Result:** Target Met **Year This Assessment Occurred:** 2015-2016	
Department - Biology (BIOL) - BIOL 40C - HUMAN ANATOMY & PHYSIOLOGY III - SLO #5: Reproductive System - The student can analyze and evaluate the relationship between reproductive system structure and function, and the role of the reproductive system in maintaining homeostasis in the	**Assessment Method:** Embedded question on an exam (Bio 40C) **Assessment Method Type:** Exam - Course Test/Quiz **Target:** 80% of the class will correctly answer the question on the exam (Bio40C)	06/24/2016 - an ave. of 80% of the class answered homeostasis questions correctly, mainly addressing hormonal regulation. no numerical data-most students understood the role of the ciliated epithelium in the uterine tubes, role of scrotal muscles, effects of estrogen, and vascular importance of the endometrium (all short	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
human body. (Created By Department - Biology (BIOL)) **Start Date:** 07/02/2015 **End Date:** 07/01/2019 **Course-Level SLO Status:** Active		answer questions). -EK **Result:** Target Met **Year This Assessment Occurred:** 2015-2016	
Department - Biology (BIOL) - BIOL 45 - INTRODUCTION TO HUMAN NUTRITION - BIO 45 CL-SLO Food Labels - Upon successful completion of the course, students will be able to interpret food labels, explain the rationale for the information, and teach a potential patient how to use the labels to make informed dietary choices. (Created By Department - Biology (BIOL)) **Course-Level SLO Status:** Active	**Assessment Method:** Exam **Assessment Method Type:** Exam - Course Test/Quiz	06/25/2014 - More than 95% of students are able to correctly answer quiz and exam questions regarding food labels. However, I realize that quizzes and exams aren't probably the most authentic assessment of their understanding of these food label concepts. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	06/25/2014 - Would like to develop a more authentic assessment of student ability to interpret and apply a food label. Consider adding a discussion forum assignment?
Department - Biology (BIOL) - BIOL 45 - INTRODUCTION TO HUMAN NUTRITION - BIO 45 CL-SLO DGAs - Upon successful completion of the course, students will be able to utilize the dietary Guidelines for Americans to plan a diet for both healthy individuals as well as individuals at increased risk for chronic illnesses such as heart disease and type 2 diabetes. (Created By Department - Biology (BIOL)) **Course-Level SLO Status:** Active	**Assessment Method:** Students participate in a quarter-long written analysis project in which they analyze their dietary intake (period of five days). Prompts are included asking students to address how modifications/analysis might vary if they had heart disease or diabetes. **Assessment Method Type:** Case Study/Analysis **Target:** More than 85% of students will consistently suggest appropriate modifications.		
	Assessment Method: One of the midterm exams asks several questions requiring the students to recall and apply the DGAs **Assessment Method Type:** Exam - Course Test/Quiz **Target:** About 85% of students will answer these questions with 90% accuracy.		

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
Department - Biology (BIOL) - BIOL 45 - INTRODUCTION TO HUMAN NUTRITION - BIO 45 CL-SLO Dietary Analysis & Planning - Upon successful completion of the course, students will be able to utilize dietary analysis software to analyze current dietary intake and subsequently make suggestions for appropriate dietary modifications, and explain the rationale for these recommendations. (Created By Department - Biology (BIOL)) **Course-Level SLO Status:** Active	**Assessment Method:** Students participate in a quarter-long written analysis project where they analyze their own five-day intake. Weekly written assignments prompt them to make appropriate suggestions to modify their intake to reduce their risk for diet-related disease. **Assessment Method Type:** Case Study/Analysis	06/25/2014 - 100% of students who completed Bio 45 were able to keep a food diary and utilize the NCP-O software to generate data about their nutrient intake. Broadly speaking, students demonstrate at least minimum competence in analyzing their intake based on the foundational knowledge in the course. However, noticing trends over time: each quarter students have similar challenges. Difficulty reading the NCP-O reports - much information on them and they don't know how to approach it from even basic point of reading labels and units on table columns and rows. Difficulty interpreting pie graphs, percentage values vs. absolute values. I worry that a student may have a decent grasp on sound dietary practices but their inability to interpret their own data gets in the way of their being able to make personalized, data-driven changes as opposed to "this is generally good for most people so I'm going to make this change even though I don't know if I really need to, personally, because I am not sure what my intake truly is." **Result:** Target Met **Year This Assessment Occurred:** 2013-2014 **Resource Request:** eventually, assistance with making a video tutorial compliant with accessibility standards **Related Documents:** Sample NCP-O All Daily Reports	10/10/2014 - I would like to develop an additional resource for the students to use to help them learn to read data, specifically the NCP-O reports. Would like to develop a written guide as well as a YouTube(?) video walking them through it with voice-over narrative to incorporate human connection. This will require a significant investment of time.
Department - Chemistry (CHEM) - CHEM 1A - GENERAL CHEMISTRY - Graphing and Data Analysis - A student who successfully masters the material in Chemistry 1A at Foothill College will be able to read and interpret graphs and data. (Created By	**Assessment Method:** All questions were assessed online through Mastering General Chemistry in Quiz format.Three questions were assessed. Two questions involved differentiating between physical and chemical properties/changes		

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
Department - Chemistry (CHEM)) **Start Date:** 01/09/2012 **End Date:** 06/30/2016 **Course-Level SLO Status:** Active	using given experimental descriptions/data. One question required students to read and interpret an Enthalpy Diagram. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** Average score of 80% with 90% participation.		
	Assessment Method: Two MasteringChemistry online HW questions were used to assess students' ability to interpret data. Question #1 had students reason about a set of experimental data to determine whether a physical or chemical change had taken place. Question #2 had students analyze a set of density data and reason about precision and accuracy of the datasets. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** A average score of 80% was targeted with a participation rate of 90%.		
	Assessment Method: MasteringChemistry online HW questions were used to assess students' ability to interpret data. Question #1 had students analyze a set of density data and reason about precision and accuracy of the datasets. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** A average score of 80% was targeted.	10/08/2014 - 59 students completed the Item "Measurements: Accuracy and Precision" on the Chapter 1 Online MasteringChemistry HW assignment. Students were allowed multiple attempts per question, but were deducted for incorrect answer submissions. On this question, students scored an average of 94.9% on the first part, and 98.3% on the second part, and the target was met. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	10/08/2014 - A quiz or exam question on these concepts may be a more accurate assessement of student understanding of this material. It is unknown if some students are sharing answers or working together when answering these questions.
	Assessment Method: Data was collected from student work on a series of questions presented in the third in-class Chem 1A midterm during the Winter 2015 quarter. First, students were asked to	09/25/2015 - Fifty-one students completed this page of this exam, and the average result was a 59.2% **Result:** Target Not Met	09/25/2015 - Students struggled greatly with the concept of atomic spectra and energy levels (this has been seen in past quarters as well). Students also struggle with the

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
	reason with a diagram of an atomic spectrum of the Hydrogen atom and identify the spectral lines. This required students to understand the visual representation and reason with the graph and given numbers. In a following question, students were asked to look at a set of ionization energy data to determine the electronic structure of an unknown atom. Lastly, students were asked to analyze data from an absorption spectroscopy experiment to identify the mass percent of copper in an unknown compound. All of these questions directly pushed students to reason with data and graphs in ways that linked their chemical understanding to experimental observations. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** Since this was an in-class exam, a target rate of 70% was expected.	**Year This Assessment Occurred:** 2014-2015 **Related Documents:** SLO1_Exam question.pdf	concept of absorption spectroscopy. More time should perhaps be devoted to these two subjects because they are integral techniques to understand in the field of analytical chemistry. More time and practice should be given to students to allow them to greater understand these concepts.
	Assessment Method: Students were given a question on the Final exam that tested their understanding of a emission spectrum and its relationship to a energy diagram of a hypothetical one electron atom. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** Since this was an in-class exam, a target rate of 70% was expected.	06/29/2016 - Of the 60 students who were enrolled in Chem 1A Section 1,2, and 7 at the time of the final exam only 52 students took the final. In order to receive full credit a student must be able to covert wavelength of a emission line to a energy difference. With the energy difference they are required to identify the transitions in a diagram. Of the 52 students, 31 students answered the question correctly. 7 students received partial credit for the problem but were able to calculate the energy difference for the emission. 14 students received no credit as the question was left unanswered, or it was misinterpreted as a hydrogen emission spectrum. The success rate was 37/52 or 71%. **Result:** Target Met **Year This Assessment Occurred:** 2015-2016 **Related Documents:**	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		Question 2 Final Exam Spring 2016	
Department - Chemistry (CHEM) - CHEM 1A - GENERAL CHEMISTRY - Applying Scientific Method - A student who successfully masters the material in Chemistry 1A at Foothill College will apply the scientific method in lab experiences to interpret information and draw conclusions. (Created By Department - Chemistry (CHEM)) **Start Date:** 01/09/2012 **End Date:** 06/30/2014 **Course-Level SLO Status:** Active	**Assessment Method:** All questions were assessed online through Mastering General Chemistry in Quiz format. Three questions were assessed. Two questions involved differentiating between physical and chemical properties/changes using given experimental descriptions/data. One question required students to determine the amount of liquid contained in two different graduated cylinders to the correct precision of the device. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** Average score of 80% with 90% participation.		
	Assessment Method: In one of the laboratory experiments in Chemistry 1A, the density of 7up and Diet 7up was investigated. Students were asked at the beginning of class to write down their hypothesis as to which had the greater density. During the end of the data analysis period on day 2, a class discussion was held to interpret results. Students were subsequently asked to write down on the report sheet how their resulting data matched with their initial hypothesis. **Assessment Method Type:** Discussion/Participation **Target:** The quality of discussion was assessed to gauge student understanding. The written lab work was assessed to see if students successfully evaluated their hypothesis. A success rate of 90% was targeted for the written lab work.		

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
	Assessment Method: A question from the MasteringChemistry online HW assignment was used to assess understanding of the scientific method. In the question, a scenario is presented and students are asked to apply the scientific method to arrive at some conclusions about the task. (see notes for scenario). **Assessment Method Type:** Exam - Course Test/Quiz **Target:** A average score of 80% was targeted.	10/08/2014 - 57 students answered the question. For the 3-part question, 100% of the students were able to select the correct answer before their attempts expired. For the 3 multiple choice question parts, there were only 0.4, 0.2 and 0.9 wrong attempts per student. All students were able to eventually ascertain that the experimenter should perform experiments to test the hypothesis, collect data and refine their hypothesis as needed. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	10/08/2014 - A quiz or exam question on this same concept may yield more accurate data on student understanding of this topic. It is unknown if some students are sharing answers or working together when solving these questions.
	Assessment Method: In planning for this assessment, four questions from an online pre-laboratory assignment were planned to be used to judge understanding of concepts related to the scientific method. The program used was Connect (http://connect.mheducation.com/). However, in practice, three of the questions had severe bugs (or faulty wording) in the online platform and accurate data was not able to be collected. Only data from one question was used in this current year's **Assessment Method Type:** Exam - Course Test/Quiz **Target:** An 85% success rate was set since student had access to their resources and materials.	09/25/2015 - Fifty-six student completed the online pre-lab assignment. Out of this group, the average score on this question was a 93.04%. Students overwhelming were able to answer this question correctly. **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 **Related Documents:** SLO2_PreLab question.pdf	09/25/2015 - For next year, the bugs in the remaining three questions need to be worked out, so all 4 questions on the Scientific Method can be used to assess student understanding of the concept for this SLO.
	Assessment Method: In one of the laboratory experiments in Chemistry 1A, the density of 7up and Diet 7up was investigated. Students were asked to measure volume using a graduated cylinder, volumetric pipet and buret. With that data they were asked to calculate density. During the end of the data analysis period on day 2, students were asked to write down on the report sheet which device	04/21/2016 - All students were able to calculate average and range correctly. With that data everyone was able to correctly identify the most precise device and the least accurate device. Many students asked very thoughtful questions and realized that the data that they decided to keep can affect their results. **Result:** Target Met	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
	was the most precise and which device was the least accurate. They were required to support their answer with data. **Assessment Method Type:** Class/Lab Project **Target:** The quality of discussion was assessed to gauge student understanding. The written lab work was assessed to see if students can interpret their data accurately. A success rate of 90% was targeted for the written lab work.	**Year This Assessment Occurred:** 2015-2016	
Department - Chemistry (CHEM) - CHEM 1A - GENERAL CHEMISTRY - Critical Thinking Skills - A student who successfully masters the material in Chemistry 1A at Foothill College will demonstrate the ability to think critically and employ critical thinking skills. (Created By Department - Chemistry (CHEM)) **Start Date:** 01/09/2012 **End Date:** 10/28/2017 **Course-Level SLO Status:** Active	**Assessment Method:** All questions were assessed online through Mastering General Chemistry in Quiz format. Seven different questions were used. The questions chosen addressed a variety of critical thinking skills. Students were required to correctly record a measurement and access its precision, to complete a multistep dimensional analysis problem, to interpret and draw conclusions from diagrams, to interpret and draw conclusions from videos/animations and to correctly describe/interpret energy transfer. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** Average score of 80% with 90% participation.		
	Assessment Method: Scores on written questions administered during in-class midterm and final exams were used to assess students' critical thinking skills. Questions were chosen that pushed students' analytical reasoning skills. Question #1 was from the second midterm and asked students to reason and calculate		

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
	all species present in a final solution. This was a complex problem and involved reasoning skills in a limiting reagent problem. Students had to analyze each of four species, and keep track of quantity reacted and state of matter, performing concentration calculations. Question #2 was from the final exam and students applied their knowledge of thermochemistry to an applied context of a scientist designing a new product, a cold pack. Students had to reason with the experimental design limited by the supplied parameters. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** All students participated in the in-class exams. An average score of 80% was targeted for each item.		
	Assessment Method: Scores on written questions administered during in-class midterm and final exams were used to assess students' critical thinking skills. Questions were chosen that pushed students' analytical reasoning skills. Question #1 was from the second midterm and asked students to reason and calculate all species present in a final solution. This was a complex problem and involved reasoning skills in a limiting reagent problem. Students had to analyze each of four species, and keep track of quantity reacted and state of matter, performing concentration calculations. Question #2 was from the final exam and students applied their knowledge of thermochemistry to an applied context of a scientist designing a new product, a cold pack. Students had to reason with the experimental design limited by the supplied parameters.(See attached for exact	10/08/2014 - For Question #1, 55 students answered the question. The average score was 22.3/28, and the 80% target was met. For Question #2, 56 students answered the question. The average score was 28.1/36 = 78%. The target was not met, but the performance was very close to the target value. **Result:** Target Not Met **Year This Assessment Occurred:** 2013-2014	10/08/2014 - Students performed well on the solution stoichiometry question (#1), but an average score of only 78% was achieved for the thermochemistry question. This may indicate a need to spend more time in lecture covering concepts of energy in chemical reactions and heat transfer.

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
	questions asked) **Assessment Method Type:** Exam - Course Test/Quiz **Target:** A average score of 80% was targeted. **Related Documents:** Q3_critical_thinking.pdf Qfinal_critical.pdf		
	Assessment Method: Data was collected for 2 online homework (Mc-Graw Hill Connect system - http://connect.mheducation.com) questions related to quantitative thinking skills across three different sections of Chem 1A in the Winter 2015 quarter. Chapter 4, #3 required students to calculate a final concentration upon mixing two solutions, NaCl and Na2SO4. This question involved more reasoning than a simple dilution calculation. Chapter 4, #8 also asked students to reason with the chemical equation and stoichiometry to determine how much of a compound must be used to neutraliza a spill. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** Since this was an online HW setting and students could use the textbook and class resources, a target success rate of 85% was expected.	09/21/2015 - Data was collected from students over 4 different sections of the course. Data was pooled from two different instructors. Out of the student group, a few students scored a zero on the question. This may be due to an inactive account (students stopped attending the class) or the student may not have even attempted the question at all. When these students were removed from the group, the following results were found Chapter #4, #3 – Out of 89 students (out of 111) who attempted the problem, the average score was 96.1% Chapter #4, #8 – Out of the 92 (out of 111) students who attempted the problem, the average score was 94.3% **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 **Related Documents:** SLO3_Online HW questions - text.pdf	09/21/2015 - These numbers may be artificially high, because I am only including nonzero answers in the pool. It is possible that some students attempted the question but scored a zero. It is not possible to tease out this information in the online data-reporting tool - so it may be useful to think about collecting this data in a slightly different way, perhaps by using an online quiz.
	Assessment Method: Students were asked to employ critical thinking skills on a final exam problem from Spring 2016. The electron configuration that belongs to the atom with the highest second ionization energy is	06/29/2016 - 23 of 52 students (44%) who took the final in Spring 2016 were able to answer this question correctly. Students who are unable to answer this question incorrectly answered because they are unable to write the make the connection between highest 2nd ionization energy and configuration. I believe they did not fully understand that the definition of 2nd ionization	11/09/2016 - I do not think that a all or nothing multiple choice question is reflective of a student's critical thinking skills. In the future I would like to employ a low stakes assessment.

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
	In order to answer the question correctly, a student must interpret the electron configuration and identify the atom that has 1 valance electron. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** 70% of students who took the assessment answered the question correctly.	energy in relation to 1st ionization energy and valence electrons. **Result:** Target Not Met **Year This Assessment Occurred:** 2015-2016 **Related Documents:** Critical thinking SLO.pdf	
Department - Chemistry (CHEM) - CHEM 1A - GENERAL CHEMISTRY - Quantitative/Critical Thinking Skills in General Chemistry - A student who successfully masters the material in Chemistry 1A at Foothill College will demonstrate the quantitative skills needed to succeed in General Chemistry. (Created By Department - Chemistry (CHEM)) **Start Date:** 01/09/2012 **End Date:** 06/30/2014 **Course-Level SLO Status:** Active	**Assessment Method:** All questions were assessed online through Mastering General Chemistry in Quiz format. Seven different questions were used. The questions chosen addressed a variety of skills. The questions included a multistep dimensional analysis problem, unit conversions between mass/molecules/moles, stoichiometric calculations, calculations involving energy and problems related to quantum chemistry. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** Average score of 80% with 90% participation.		
	Assessment Method: Scores on written questions administered during in-class midterm and final exams were used to assess students' quantitative and critical thinking skills. These questions were complex and highly mathematical, integrating varied concepts from the course. Question #1 was from the third midterm and dealt with the Bohr model of the Hydrogen atom, electron energy levels, and ionization energy, all parts consisted of varied quantitative calculations. Question #2 was from the final exam and consisted of determining an empirical formula from given		

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
	combustion data. This involved many conversions and multi-part calculations. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** All students participated in the in-class exams. An average score of 80% was targeted for each item.		
	Assessment Method: A short pop quiz was given in class to test student understanding of conversion factors and dimensional analysis. See attached file for questions asked. The quiz was scored out of a total of 5 points. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** A average score of 80% was targeted with a participation rate of 90%. **Related Documents:** Quiz_011614.pdf	10/08/2014 - 45 students took the pop quiz in lecture (out of a total of 56 students who were enrolled at the time of the quiz). Thus the participation rate was 80%. The average score on the quiz was a 3.9/5 = 77% **Result:** Target Not Met **Year This Assessment Occurred:** 2013-2014	10/08/2014 - I think the participation target was probably set too high. An 80% participation during lecture is still a good result, with 77% average on the quiz very close to the target. For future SLO assessments, it may be better to use scheduled exams that students know about ahead of time to improve the participation rate. Overall, the results of the quiz were very close to the target.
	Assessment Method: Data was collected for 2 online homework (Mc-Graw Hill Connect system - http://connect.mheducation.com) questions related to quantitative thinking skills across three different sections of Chem 1A in the Winter 2015 quarter (N = 112). The first question (Chapter 1, #11) dealt with a complicated dimensional analysis problem (see attached) and the second question (Chapter 3, #11) dealt with the mass of an excess reactant remaining in a chemical stoichiometry problem. Both questions required higher orders of thinking and pushed students to think critically about concepts involved. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** Since this was an online HW setting and	09/21/2015 - Data was collected from students over 4 different sections of the course. Data was pooled from three different instructors. Out of the student group, a few students scored a zero on the question. This may be due to an inactive account (students stopped attending the class) or the student may not have even attempted the question at all. When these students were removed from the group, the following results were found Chapter #1, #11 – Out of 80 students (out of 112) who attempted the problem, the average score was 95.4% Chapter #3, #11 – Out of the 83 (out of 105) students who attempted the problem, the average score was 93.1% **Result:** Target Met	09/21/2015 - These numbers may be artificially high, because I am only including nonzero answers in the pool. It is possible that some students attempted the question but scored a zero. It is not possible to tease out this information in the online data reporting tool. Even with this caveat, it seems as if students are being very successful across sections on these types of questions. For future data collection, it may be useful to think about collecting data in a different way (perhaps an online quiz) to get a better picture of student understanding

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
	students could use the textbook and class resources, a target success rate of 85% was expected.	**Year This Assessment Occurred:** 2014-2015 **Related Documents:** SLO4_Online HW questions - text.pdf	
	Assessment Method: Students were given a challenging dimensional analysis problem on the final in order to determine if they had the quantitative skills necessary to succeed in General Chemistry. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** Since this was an in-class exam, a target rate of 70% was expected.	06/29/2016 - Of the 60 students who were enrolled in Chem 1A Section 1,2, and 7 at the time of the final exam only 52 students took the final. In order to receive full credit a student must be able to 1. determine the volume of a sphere; 2. use density to convert the volume of sphere to mass of a sphere; 3. use the percent mass of each sphere to determine the amount of nickel required to make the sphere; and 4. use the mass of nickel given and the the amount of nickel required to make a sphere to find the total amount of spheres that could be made. Of the 52 students, 27 students answered the question correctly, 4 students made a small mathematical mistake which resulted in a few points deducted. 15 students received partial credit (7/15 points) for the problem as they attempted the problem and was only able to solve for volume and mass of a sphere; they were unable to relate it to % mass of a sphere. 6 students left the question unanswered or was unable to solve the problem. The success rate was 31/52 or 60%. **Result:** Target Not Met **Year This Assessment Occurred:** 2015-2016 **GE/IL-SLO Reflection:** Computation Complex problem-solving skills,apply mathematical concepts and reasoning, and ability to analyze and use numerical data. Creative, Critical, and Analytical Thinking Problem solving through analysis. **GE/IL-SLO Reflection:**	06/29/2016 - More time and practice should be given to students to allow them to exercise their critical thinking and quantitative skills. I will continue to work through problems during lecture and employ active learning strategies to get students comfortable with these types of problems.

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		Computation Complex problem-solving skills,apply mathematical concepts and reasoning, and ability to analyze and use numerical data. Creative, Critical, and Analytical Thinking Problem solving through analysis.	
Department - Chemistry (CHEM) - CHEM 1B - GENERAL CHEMISTRY - Quantitative Skills in General Chemistry - Global: Demonstrate the quantitative skills needed to succeed in General Chemistry. (Created By Department - Chemistry (CHEM)) **Start Date:** 01/09/2012 **Course-Level SLO Status:** Active	**Assessment Method:** At two times during the quarter, student quantitative skills were analyzed using a subset of Midterm exam questions. #1. Three quantitative question on the gas laws were given on the first page of the first midterm exam. #2. Three quantitative questions on pH, concentration, % ionization on acids were given on the last page of the second midterm exam. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** a 70% success rate was targeted for students **Related Documents:** Exam Questions	09/19/2016 - On the gas laws assessment on midterm #1: 55 students completed the item with an average score of 77.7% On the acids/pH assessment on midterm #2: 53 students completed the item, with an average score of 64.3% On average between the 2 assignments, the score was: 71.0% **Result:** Target Met **Year This Assessment Occurred:** 2015-2016	09/19/2016 - Students had much more success with the gas laws problem than with the problems on acids and pH. More review/practice should be provided to students on acids, since the problems are considerably more complex and harder to grasp. This should be noted in future instruction.
	Assessment Method: All questions were assessed online through Mastering General Chemistry in Quiz format. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** Average score of 80% with 90% participation.		
	Assessment Method: Online homework through Mastering General Chemistry, by Pearson. **Assessment Method Type:** Departmental Questions **Target:** Succes would be B-, 78% percentage score.	10/10/2014 - The use of mastering Chemistry to asses students Quantitative skills seems to be very reflective of the student population. We use a series of mathematical based questions that involve several steps and analysis. We used 104 questions from the online homework. There was 71.3% completion with an average score of	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
	This reflects the ability of an average 1B student.	93.4%. This meets our target success of 78%. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014 **Resource Request:** Noe at this time.	
	Assessment Method: All questions were assessed online through Mastering General Chemistry in Quiz format. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** Average score of 80% with 90% participation.		
	Assessment Method: Laboratory Quiz stressing mathematical analysis of data and problem solving. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** Passing score with 65% or better.	03/03/2016 - The average for the students laboratory quizzes was a 75%, which shows that the majority of students are successful in demonstrating this skill. **Result:** Target Met **Year This Assessment Occurred:** 2015-2016	
		12/08/2015 - The average score was 73% with a median of 75%. These questions primarily were on kinetics, heavy on the quantitative reasoning and mathematical skills. The students did about as expected, the low average is common for kinetics problems. Note: 29% of the students did not meet the target. **Result:** Target Met **Year This Assessment Occurred:** 2014-2015	
Department - Chemistry (CHEM) - CHEM 1B - GENERAL CHEMISTRY - Graphing and Data Analysis - Global: Read and interpret graphs and data. (Created By Department - Chemistry (CHEM))	**Assessment Method:** Three questions from the second midterm exam were analyzed to gauge students' ability in reading and interpreting graphs and data. The first question asked to students to	09/19/2016 - A total of 50 students completed the exam question. Students had a success rate of 74.1%. A majority of students were able to correctly read and reason with both a table of concentration and rate values, as well as with a	09/19/2016 - In future quarters, similar types of assessments can be given to see if student mastery of these concepts is being upheld. The high rate of success points to

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
Start Date: 01/09/2012 **Course-Level SLO Status:** Active	make predictions on the rate of reaction given a set of parameters. The second question gave students a set of concentration and rate data for 4 experiments and had them determine the rate law and rate of reaction. The third question showed students a plot of concentration over time and had students reason with it. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** a 70% success rate was targeted for the class. **Related Documents:** Exam#2, Q1	plot of concentration over time. (see attachment for exact questions) **Result:** Target Met **Year This Assessment Occurred:** 2015-2016	the conclusion that students are able to successfully reason with these graphs and data.
	Assessment Method: A quiz is given to the students in lab that reflects their lab experiments and requires them to read and interpret graphical data. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** To be successful on this quiz a student must score 70% or higher.		
	Assessment Method: Quiz given in laboratory based on experiments where graphing interpretation was stressed and required. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** 65% or better average on quiz/exam questions.	12/08/2015 - The students did very well analyzing and interpreting a graph of gas density versus pressure. The average and median grade were both 80%. We continually stress the interpretation of graphs throughout chemistry. By the time the students reach 1B, they seem to be very comfortable with graphical analysis. Note: 17% of the students that did not meet the 65% score. **Result:** Target Met **Year This Assessment Occurred:** 2014-2015	
	Assessment Method: All questions were assessed online through Mastering General Chemistry in Quiz format. **Assessment Method Type:**		

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
	Exam - Course Test/Quiz **Target:** Average score of 80% with 90% participation.		
	Assessment Method: Online homework through Mastering General Chemistry, by Pearson. **Assessment Method Type:** Departmental Questions **Target:** Succes would be B-, 78% percentage score. This reflects the ability of an average 1B student.	10/10/2014 - We used 24 questions from the homework data base. The average score was 93.4% with 69.7% participation. Participation is low so the average score may be skewed to a higher than normal value. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014 **Resource Request:** None at this time.	
	Assessment Method: All questions were assessed online through Mastering General Chemistry in Quiz format. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** Average score of 80% with 90% participation.		
Department - Chemistry (CHEM) - CHEM 1B - GENERAL CHEMISTRY - Critical Thinking Skills - Global: Demonstrate the ability to think critically and employ critical thinking skills. (Created By Department - Chemistry (CHEM)) **Start Date:** 01/09/2012 **Course-Level SLO Status:** Active	**Assessment Method:** All questions were assessed online through Mastering General Chemistry in Quiz format. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** Average score of 80% with 90% participation.		
	Assessment Method: Online homework through Mastering General Chemistry, by Pearson. **Assessment Method Type:** Departmental Questions **Target:** Succes would be B-, 78% percentage score. This reflects the ability of an average 1B	10/10/2014 - We used a homework set of 46 problems coverall all chapters and subjects. Th average score was 88.2 with 64.6% completion rate. This is the most difficult of the assessments for the students as reflected in the low participation rate. We are pleased with the results as this 1B class performed below average compared to previous quarters.	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
	student.	**Result:** Target Met **Year This Assessment Occurred:** 2013-2014 **Resource Request:** None at this time.	
	Assessment Method: All questions were assessed online through Mastering General Chemistry in Quiz format. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** Average score of 80% with 90% participation.		
	Assessment Method: Laboratory Quiz on Data Analysis **Assessment Method Type:** Exam - Course Test/Quiz **Target:** Passing grade of 65%.	12/08/2015 - The average and median were both 75%. However, 22% of the students did not meet the target. This is typical, about 20% of students are not successful in chemistry 1B and is reflected consistently in the grades on quizzes and exams. **Result:** Target Met **Year This Assessment Occurred:** 2014-2015	
	Assessment Method: A question on the Final exam for the course was analyzed to understand students' critical thinking skills. The item was a complex question involving thermodynamics, equilibrium/ICE tables and the dependence of the equilibrium constant on temperature. It was a challenging and complicated question that asked for student's critical thinking and analysis skills. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** Because of the complex and challenging nature of the question, a target of 65% (passing) was targeted.	09/19/2016 - A total of 53 students completed the final exam item. They earned an average score of 67.25%. Overall, most students were able to reason through most parts of the question. Most students were able to construct the ICE table and recognize the temperate dependence of the equilibrium constant. **Result:** Target Met **Year This Assessment Occurred:** 2015-2016	09/19/2016 - Instruction should focus on more complex, involved questions such as these, to push students in their critical thinking and increase student scores in future quarters.

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
Department - Chemistry (CHEM) - CHEM 1C - GENERAL CHEMISTRY & QUALITATIVE ANALYSIS - Solubility of Salts - Critical Thinking - A successful student will demonstrate the ability to make connections between concepts across several areas of General Chemistry as applied to salt solutions. (Created By Department - Chemistry (CHEM)) **Assessment Cycles:** End of Quarter **Course-Level SLO Status:** Active	**Assessment Method:** Online course homework. **Assessment Method Type:** Departmental Questions **Target:** An average of 75% for the class.		
	Assessment Method: Chemistry 1C Final Exam - Multiple Choice Question. The Ksp for Zn(OH)2 is 5.0x10-17. Determine the molar solubility of this salt in a buffer solution with a pH of 11.50. A) 5.0x10-12 B) 5.0x10-17 C) 2.3x10?6 D) 1.6x10-14 E) 1.2x10-13 **Assessment Method Type:** Exam - Course Test/Quiz **Target:** An average of 70% correct for the class.		
Department - Chemistry (CHEM) - CHEM 1C - GENERAL CHEMISTRY & QUALITATIVE ANALYSIS - Electrochemistry - Computation - A successful student will demonstrate the ability to think critically and employ computational skills in the analysis of redox reactions and chemistry. (Created By Department - Chemistry (CHEM)) **Course-Level SLO Status:** Active	**Assessment Method:** Online course homework. **Assessment Method Type:** Departmental Questions **Target:** An average of 75% for the class.		
	Assessment Method: Chemistry 1C Final Exam - Multiple Choice Question. The standard emf for the cell using the overall cell reaction below is +2.20 V: 2Al(s)+3I2(s) ?> 2Al3+(aq)+6I-(aq) The emf generated by the cell when [Al3+] = 4.5 ! 10-3 M and [I-] = 0.15 M is ? V. A) 2.23 B) 2.39 C) 2.20 D) 2.10 E) 2.30 **Assessment Method Type:**		

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
	Exam - Course Test/Quiz **Target:** This is a difficult problem. A 70% success rate would be terrific!		
	Assessment Method: Final Exam-Section on Redox Chemistry involving critically thinking for both quantitative and qualitative questions. The questions were a mix of open ended problem solving, multiple choice and written explanation. Students were required to show understanding of electrochemistry topics that included batteries, cell-potential, corrosion, voltaic and electrolytic cells, and current flow. Students were also required to integrate concepts learned within the general chemistry sequence, such as pH, free energy, and spontaneity of reactions. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** An average of 75%, which is a "C+" grade.	10/15/2016 - Winter quarter of 2016 the class average was 69.1%; thus the target for success was not achieved within this group of 21 students. Spring quarter of 2016 the class average was 79.6%; the the target for success was achieved within this group of 43 students. The weighted average, including both quarters was 76.2%; the target for success was met for the aggregate group. A similar pattern was observed for success between winter and spring quarters of 2014, with spring students significantly out-performing winter students. There are logical factors that contribute to the difference in success in chemistry 1C between winter and spring quarters. The winter students are "off sequence" and are more at risk for the following reasons: The vast majority of the spring students begin the general chemistry sequence in the fall, and complete it at a "normal pace" and in a smooth fashion by the end of spring. The winter students either begin the sequence the prior spring, with a summer gap before taking chemistry 1B, or they take chemistry 1A at a much greater pace during the summer quarter. When a gap occurs in the sequence, students will start to forget essential knowledge and skills. When covered at a fast pace, students do not have adequate time to fully develop their understanding and skills. Since chemistry 1C integrates skills and knowledge from through-out the course sequence, the results are not surprising. **Result:** Target Met **Year This Assessment Occurred:** 2015-2016	11/30/2016 - Further investigate the population difference between Winter and Spring students. Determine the number of students in Winter that are repeating the course for a second time. Consider Surveying students to determine subject-matter weaknesses that may be addressed in STEM center workshops. 10/15/2016 - A member of the department is currently on PDL developing a series of assessments to determine each student's level of readiness and/or mastery of essential skills needed to succeed within the general chemistry series for chemistry 1A and 1B. The assessments will then be linked to booster modules designed to address gaps in student knowledge/skills as they progress through these two courses, thus leaving students better prepared for the rigors of chemistry 1C. The goal is to improve student success within the entire sequence over all, although at risk students may benefit the most.

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
Department - Chemistry (CHEM) - CHEM 1C - GENERAL CHEMISTRY & QUALITATIVE ANALYSIS - Nuclear Chemistry - A successful student will demonstrate an understanding of the impact of science on society in the area of nuclear chemsitry. (Created By Department - Chemistry (CHEM)) **Course-Level SLO Status:** Active	**Assessment Method:** Online homework. **Assessment Method Type:** Departmental Questions **Target:** An average of 75% for the class.		
	Assessment Method: Final Exam-Section on Nuclear Chemistry. The questions were a mix of open ended problem solving, multiple choice and written explanation. Students were required to show understanding of nuclear chemistry topics that included types of nuclear decay and their interaction with matter, nuclear fission versus nuclear fusion and their limitations/uses, calculations of energy released in nuclear processes and kinetics of nuclear decay. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** An average of 75%, which is a "C+" grade	10/15/2016 - This was assessed during spring quarter 0f 2016. The class average was 72.6%; a little under the target for success. **Result:** Target Not Met **Year This Assessment Occurred:** 2015-2016	10/15/2016 - Nuclear Chemistry is the last topic covered in Chemistry 1C. The final exam during this quarter took place less than a week after the class finished covering the subject. Students may not have sufficient time to fully understand the new material while also studying for a cumulative final exam. Perhaps a lower success rate of 70% is more reasonable.
Department - Chemistry (CHEM) - CHEM 1C - GENERAL CHEMISTRY & QUALITATIVE ANALYSIS - Colligative Properties - Critical Thinking - A successful student must be able to recognize the types of salts presented as strong or non-electrolytes. Secondly, perform the required critical thinking/mathematical analysis of the experimental data to select the one salt that satisfies the conditions given. (Created By Department - Chemistry (CHEM)) **Start Date:** 06/26/2012 **Course-Level SLO Status:** Active	**Assessment Method:** Chemistry 1C Final Exam - Multiple Choice Question. A 1.35 m aqueous solution of compound X had a boiling point of 101.4°C. Which one of the following could be compound X? The boiling point elevation constant for water is 0.52°C/m. A) C6H12O6 B) CH3CH2OH C) KCl D) CaCl2 E) Na3PO4 **Assessment Method Type:** Exam - Course Test/Quiz **Target:** 75% correct would be considered acceptable		

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
	given the difficulty of the problem.		
Department - Chemistry (CHEM) - CHEM 1C - GENERAL CHEMISTRY & QUALITATIVE ANALYSIS - Laboratory Techniques - Students will demonstrate an understanding of how to execute common laboratory techniques. (Created By Department - Chemistry (CHEM)) **Assessment Cycles:** End of Quarter **Course-Level SLO Status:** Active	**Assessment Method:** Students were asked the following question on an open lab notebook lab exam: You need to prepare 100 ±1 mL of a buffer that is 0.15 M acetic acid and 0.40 M sodium acetate. The reagents that you have available are 1.00-M HCl, and solid sodium acetate trihydrate. Write step by step instructions on how to prepare the buffer using appropriate lab equipment. (Note that students calculated the reagent amounts in a previous part of the question. Incorrectly calculated amounts of reagents did not impact grading of this part of the question.) **Assessment Method Type:** Exam - Course Test/Quiz **Target:** This question was assessed out of 4 points. Individual students were considered successful if they earned at least 3 out of the 4 points, or 75%. Target for success was 80% of the class earning a minimum of 3 out of the 4 points possible.		
Department - Chemistry (CHEM) - CHEM 1C - GENERAL CHEMISTRY & QUALITATIVE ANALYSIS - Identification of ions in solution- Scientific inquiry and lab techniques - Successful students will illustrate separation and identification schemes using flow diagrams and apply principles of aqueous solubility equilibria to separate and identify the ions in a solution. (Created By Department - Chemistry (CHEM)) **Assessment Cycles:** End of Quarter **Course-Level SLO Status:**	**Assessment Method:** One of the most demanding requirements in Foothill's Chemistry 1C laboratory program is the qualitative analysis of a small sample of a solution containing six different unknown cations, an individual project that spans the last four weeks of the course. Student results for correct identification of the ions in their sample solution during spring quarter of 2014 were tabulated and summarized. **Assessment Method Type:** Class/Lab Project **Target:**	10/10/2014 - A total of 38 students passed the class; 22 of the passing students correctly identified all 6 ions and 15 of the passing students correctly identified 5 out of the 6 ions in their sample solution. Thus, 97.4% of passing students correctly identified at least 5 out of the 6 ions. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014 **Resource Request:** Preparation of the individual unknown samples and the reagents needed for	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
Active	Students who earn a passing grade in Chemistry 1C should have developed the skills needed to identify at least 5 out of the 6 ions correctly. Target for success is set at 90% of passing students achieving this goal.	analysis is labor intensive for the stockroom personnel. Continued support of the stockroom with the current level of at least 2 technicians is needed.	
Department - Chemistry (CHEM) - CHEM 1C - GENERAL CHEMISTRY & QUALITATIVE ANALYSIS - Global Learning Outcome-Impact on Society - The successful student will demonstrate an understanding of the impact of science on society. (Created By Department - Chemistry (CHEM)) **Assessment Cycles:** End of Academic Year **Course-Level SLO Status:** Active	**Assessment Method:** The students were asked to determine the validity of the following question: In nuclear power plants energy is generated from a critical mass of radioactive fuel, therefore a nuclear explosion is possible. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** At least 80% of the class should be able to correctly answer this question.	11/03/2015 - Only 60% of the students could correctly answer the question. **Result:** Target Not Met **Year This Assessment Occurred:** 2014-2015 **Resource Request:** None **GE/IL-SLO Reflection:** The concept that nuclear power plants do not use a critical mass of radioactive fuel was discussed in lecture. However, this was not reinforced with related homework questions. Reinforcing the concept with work assigned outside of class is recommended to increase the success rate.	11/03/2015 - Although this concept was discussed during lecture, it was not reinforced with related homework questions. Reinforcing the concept with work/research assigned outside of class is recommended to increase the success rate.
Department - Chemistry (CHEM) - CHEM 25 - FUNDAMENTALS OF CHEMISTRY - Physical and Chemical Properties and Change - The students will be able to identify physical and chemical properties and change (Created By Department - Chemistry (CHEM)) **Course-Level SLO Status:** Active	**Assessment Method:** Results from selected assignments in the online homework system will be compiled and reviewed. **Assessment Method Type:** Departmental Questions **Target:** Correct response rates from 70 to >90% will be targeted depending on the timing (within the term) and the difficulty of the selected assignment.	10/29/2015 - The exercise that follows was chosen to evaluate SLO #2 and was administered by in Winter and Spring quarters 2015 through the required online homework component of the course. The exercise asks students to categorize several properties of a compound as chemical or physical. This topic is covered in the first two weeks of the course. The students were comfortable with the exercise, with an average score of 74.8% and 76.4% for the W15 and S15 quarters, respectively. **Result:** Target Met **Year This Assessment Occurred:** 2014-2015	10/29/2015 - No action plan needed 04/29/2011 - Target met; no change recommended

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		Resource Request: None **GE/IL-SLO Reflection:** This is a straightforward topic which is presented very early in the quarter and the majority of students should be able to complete the exercise successfully. The success rate in the mid-to high seventies is acceptable, but may be slightly lower than reality since some students are slower to master the online homework system.	
Department - Chemistry (CHEM) - CHEM 25 - FUNDAMENTALS OF CHEMISTRY - Dimensional Analysis - The students will be able to use dimensional analysis to set up and solve numerical problems. (Created By Department - Chemistry (CHEM)) **Course-Level SLO Status:** Active	**Assessment Method:** Results from selected assignments in the online homework system will be compiled and reviewed. **Assessment Method Type:** Departmental Questions **Target:** Correct response rates from 70 to >90% will be targeted depending on the timing (within the term) and the difficulty of the selected assignment.	11/25/2016 - An assessment of the overall success of the students in solving problems requiring quantitative skills was made through the online homework system. Average percent success rates were examined for assignments early and late in the course for triple sections taught during WQ16 and SQ16. Early in the quarter, when math skills and new quantitative concepts are being introduced, the average success rates were higher than typical, being greater than 90% for both quarters on a multi-part problem. This multi-part probem focused on unit conversion skills, significant figures and dimension analysis problems. Later in the quarter, the success rates remained high for these types of problems, with success rates of greater than 90% maintained on selected homework problems that required unit conversions. **Result:** Target Met **Year This Assessment Occurred:** 2015-2016 **GE/IL-SLO Reflection:** In a homework setting, where multiple attempts (with a small penalty) are permitted, high success rates are expected. In the quarters assessed for 2016, higher scores on a multiple part dimensional analysis problem were achieved than the	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		previous year. This earlier mastery of unit analysis skills may reflect a focus on completing practice worksheets in class during these quarter that was instituted during these quarters. The improvement that was noted in the average success rates for quantitative skills based questions is encouraging, although withdrawal of less successful students from the course may skew the results slightly. The success rates for these Chem25 sections were generally superior to the aggregate Mastering Chemistry system scores. No changes are recommended other than continued practice and reinforcement of problem solving skills in class using worksheets or other methods.	
		10/29/2015 - An assessment of the overall success of the students in solving problems requiring quantitative skills was made through the online homework system. Average percent success rates were examined for assignments early and late in the course for triple sections taught during WQ15 and SQ15. Early in the quarter, when math skills and new quantitative concepts are being introduced, the average success rates ranged from 66-88% (WQ15) and 80 - 94% (SQ15) over a series of problems. These early problems focused on unit conversion skills, significant figures and dimension analysis problems. Later in the quarter, the success rates improved, with success rates of 86-95% (WQ15) and 82-97% (SQ15). **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 **Resource Request:** none **GE/IL-SLO Reflection:** No change recommended. In a homework setting, where multiple attempts (with a small penalty) are permitted, high success	10/29/2015 - No change recommended. The implementation of graded online homework will continue to be a vital component in ensuring students are learning the importance of dimensional analysis. The online homework system used has recently added an adaptive follow-up component which will be used to supplement SLO assessments in future years.

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		rates are expected. The improvement that was noted in the average success rates for quantitative skills based questions is encouraging, although withdrawal of less successful students from the course may skew the results slightly. Comparison of online homework scores with in-class test results is generally good. The online homework system used has recently added an adaptive follow-up component which will be used to supplement SLO assessments in future years.	
Department - Chemistry (CHEM) - CHEM 25 - FUNDAMENTALS OF CHEMISTRY - Mole and Avogadro's Number - The students will understand the meaning and uses of the mole and of Avogadro's number. (Created By Department - Chemistry (CHEM)) **Course-Level SLO Status:** Active	**Assessment Method:** Results from selected assignments in the online homework system will be compiled and reviewed. **Assessment Method Type:** Departmental Questions **Target:** Correct response rates from 70 to >90% will be targeted depending on the timing (within the term) and the difficulty of the selected assignment.	09/27/2014 - A multi-part exercise (Conversions involving moles) designed to assess the student's understanding of the concept of the law of conservation of mass and the mole to mass conversions necessary to use this law was selected for the assessment. The correct response rate for Foothill Chem 25 students continued to be 96% for this exercise, compared with 90% for the Mastering Chemistry database. This suggests most students are able to develop a solid understanding of this concept and are able to perform the simple unit conversions necessary to complete the exercise. Based on a review of incorrect answers submitted during the assignment, most errors involved incorrect calculations of numbers with exponents and a failure to predict/recognize an answer that is too large or small to make physical sense. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014 **Resource Request:** none **GE/IL-SLO Reflection:** Students in Chem 25 have a wide range of math competencies, which impacts their success in mastering necessary problem	09/27/2014 - In future terms, students will be directed to practice worksheets on dimensional analysis and scientific notation on the course website to allow targeted practice of areas of weakness. The concept of estimating answers and evaluating calculated results for physical feasibility will be stressed during in class problem solving.

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		solving skills in chemistry. Though almost all students ultimately answered this series of questions correctly, the incorrect responses provide some insight into ways to improve student outcomes. In future terms, students will be directed to practice worksheets on dimensional analysis and scientific notation on the course website to allow targeted practice of areas of weakness. The concept of estimating answers and evaluating calculated results for physical feasibility will be stressed during in class problem solving.	
Department - Chemistry (CHEM) - CHEM 25 - FUNDAMENTALS OF CHEMISTRY - Comprehension of chemical reactivity and quantitative relationships in chemical equations - Students will be able to recognize basic patterns of chemical reactivity, express reactions in terms of balanced equations and be able to determine quantities of reactants and products in terms of moles, mass and volumes of solutions. (Created By Department - Chemistry (CHEM)) **Start Date:** 01/09/2012 **End Date:** 03/30/2012 **Course-Level SLO Status:** Active	**Assessment Method:** Performance on relevant homework exercises completed using Mastering Chemistry (online homework site) was assessed for all or selected sections of Chem 25 for the relevant term. Foothill performance was also compared to system data available for students that answered the specific problem from all institutions using the Mastering Chemistry system. **Assessment Method Type:** Departmental Questions **Target:** At least 80% of students who completed the questions should be able tocomplete the selected exercises correctly. Foothill performance should be at least as good as the system data.	11/25/2016 - Student performance was assessed on homework problems which required understanding of the targeted concepts. The exercises included writing and balancing the relevant chemical equations, as well as determining quantities of products that would be produced from the reactions, given specified quantities of reactants. The questions requiring calculations using reactant quantities were answered correctly by 95% or more of the Foothill students compared with 93% of the correct response rates in the system database, indicating the target for success was met. Students were in Winter quarter 2016 were not as successful in answering a question on writing and balancing a chemical equation (66% correct vs, the system rate of 80%), though Spring quarter 2016 students achieved a correct response rate of 87%. **Result:** Target Met **Year This Assessment Occurred:** 2015-2016 **GE/IL-SLO Reflection:** The scores were generally high for these exercises, indicating students are mastering the concepts of calculating quantities of reactants and products, using stoichiometry	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		and mole ratios in the context of homework. Because students in Winter quarter 2016 did not appear to be as successful in answering a question on writing and balancing a chemical equation (66% correct vs. the system rate of 80%), the wrong answers given were evaluated and responses to additional questions on balancing chemical equations were assessed. Most of the incorrect responses on the target problem were due to students incorrectly noting the phase (S, L, G) of a reactant or product, rather than errors in balancing the equation or identifying the reactants and products. The correct response rates to other homework questions on balancing equations were quite high (>90%).	
		09/27/2014 - Students were required to complete two multi-part exercises on solubility and precipitation reactions (“PHET Simulation” and “Solubility and Precipitation Reactions”. The exercises included writing and balancing the relevant chemical equations, as well as predicting whether the solubility of the products would result in a precipitate as one of the products. The questions was answered correctly by 91 and 96% of the Foothill students compared with 79 and 88% correct response rates in the system database, indicating the target for success was met. The higher success on the second exercise is likely due to repetition of the concept within the homework assignment, since it one of the last problems in the homework assignment. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014 **Resource Request:** none **GE/IL-SLO Reflection:** The scores were quite high for this exercise,	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		indicating students are mastering the concepts of precipitations reactions, solubility and how to interpret the information given in a solubility table. Incorrect answers suggested there was a slight learning curve in using the solubility table, but that students mastered the concepts with repetition within the exercise.	
Department - Chemistry (CHEM) - CHEM 30A - SURVEY OF INORGANIC & ORGANIC CHEMISTRY - Chemical Equations and Formulas - Students will be able to represent chemical changes correctly through balanced chemical equations with proper formulas for elements and compounds. (Created By Department - Chemistry (CHEM)) **Course-Level SLO Status:** Active	**Assessment Method:** The following problem for SLO#3 is used in the online homework grading system (Mastering Chemistry) for students in all sections of Chemistry 30A. Mastering Chemistry homework problems are used in preparation for course examinations (pretesting). Chapter 5, Problem #7: Which is the correct equation for the reaction of magnesium with hydrochloric acid to produce hydrogen and magnesium chloride? A. 2 Mg + 6 HCl → 3 H2 + 2 MgCl2 B. Mg + HCl ->H + MgCl C. Mg + 3 HCl ->3 H + MgCl2 D. Mg + 2 HCl -> 2 H + MgCl2 E. Mg + 2 HCl -> H2 + MgCl2 *Note: formatting for subscripts and arrows did not copy over to TracDat **Assessment Method Type:** Pre/Post Test **Target:** Students who are able to successfully answer this problem have mastered SLO #3. Overall success is indicated by a minimum of 70% of students successfully completing this problem.	06/29/2016 - This assessment was performed on in Chem 30A Section 03 in Spring 2016. Of the 28 students enrolled in the this section at time of assessment, 100% of the students answered the question correctly. This shows that the learning outcome has been met for these students. **Result:** Target Met **Year This Assessment Occurred:** 2015-2016 **Resource Request:** None **GE/IL-SLO Reflection:** This SLO achieves institutional learning outcome of Computation since students were required to perform decision analysis (synthesis and evaluation) in order to property predict the reactants and products of the chemical reaction.	
		09/21/2015 - Data from the online homework for Chemistry 30A section 03 from Spring 2015 was used to assess this SLO. 100% of the 34 students enrolled in the course were able to correctly answer this homework problem in the online homework assignment. This indicates that students are learning how to write chemical formulas and chemical equations correctly. **Result:** Target Met **Year This Assessment Occurred:** 2014-2015	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		06/23/2014 - Data from the online homework for Chemistry 30A section 01 from Spring 2014 was used to assess this SLO. 100% of the 34 students enrolled in the course were able to correctly answer this homework problem in the online homework assignment. This indicates that students are learning how to write chemical formulas and chemical equations correctly. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	
Department - Chemistry (CHEM) - CHEM 30A - SURVEY OF INORGANIC & ORGANIC CHEMISTRY - Matter Classification - Students will be able to classify matter correctly. (Created By Department - Chemistry (CHEM)) **Course-Level SLO Status:** Active	**Assessment Method:** The following problem for SLO#1 is used in the online homework grading system (Mastering Chemistry) for all students enrolled in Chemistry 30A. These homework assignments are used in preparation for course examinations (pretest). Prelab #2, Classifying Matter: Classify the following as an element, compound or mixture: Vitamin D, salt water, oxygen, maple syrup, fruit salad, water, gold **Assessment Method Type:** Pre/Post Test **Target:** Students who are able to correctly classify the substances given in this problem have mastered SLO #1. Overall success is indicated by a minimum of 70% of students successfully completing this problem.		
	Assessment Method: The following problem for SLO#1 is used in the online homework grading system (Mastering Chemistry) for all students enrolled in Chemistry 30A. These homework assignments are used in preparation for course examinations (pretest). Prelab #2, Classifying Matter:	06/29/2016 - This assessment was performed on in Chem 30A Section 03 in Spring 2016. Of the 28 students enrolled at the time the assignment was due, only 25 students answered the question. 72% of the students answered the question correctly while 28% of the students didn't finish the question or answer correctly. The most common mistake was to classify ammonia as a mixture	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
	Classify each of the pure substances as an element or a compound. silicon, gold, gaseous ammonia **Assessment Method Type:** Pre/Post Test **Target:** Students who are able to correctly classify the substances given in this problem have mastered SLO #1. Overall success is indicated by a minimum of 70% of students successfully completing this problem.	when it is a pure substance. The % correct for this section is 2% greater than the system average which demonstrate success in this learning outcome. **Result:** Target Met **Year This Assessment Occurred:** 2015-2016 **Resource Request:** None **GE/IL-SLO Reflection:** This SLO meets the institutional learning outcome of creative, critical, and analytical thinking skills. Students were required to use their best judgement and research skills to classify matter.	
		09/21/2015 - Data from the online homework for Chemistry 30A section 03 from Spring 2015 was used to assess this SLO. 88.2% of the 34 students enrolled in the course were able to correctly answer this homework problem in the online homework assignment. This shows that the target was met for this SLO. **Result:** Target Met **Year This Assessment Occurred:** 2014-2015	
		06/23/2014 - Data from the online homework for Chemistry 30A section 01 from Spring 2014 was used to assess this SLO. 84.8% of the 34 students enrolled in the course were able to correctly answer this homework problem in the online homework assignment. This indicates that our students are able to successfully classify matter. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	
Department - Chemistry (CHEM) - CHEM 30A - SURVEY OF INORGANIC &	**Assessment Method:** The following problem for SLO#2 is used in	06/29/2016 - This assessment was performed on	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
ORGANIC CHEMISTRY - Measurements and Equipment - Students will be able to use common laboratory equipment correctly and report measurements to the correct significant figures with proper units. Equipment includes Bunsen burners, beakers, graduated cylinders, thermometers, top loading balances, rulers and burets. (Created By Department - Chemistry (CHEM)) **Course-Level SLO Status:** Active	the online homework grading system (Mastering Chemistry) for students enrolled in Chemistry 30A. These homework assignments are used as a pretest in preparation for course exams. Problem #90 from Chapter 1: Which choice best describes the uncertainty in the measurement 16.30 g? A. cannot be determined B. quantity is exact C. +/- 0.01 g D. +/- 0.10 g E. +/- 1.00 g **Assessment Method Type:** Pre/Post Test **Target:** Students who are able to correctly answer this question have mastered SLO #2. Overall success is indicated by a minimum of 70% of students successfully completing this problem.	in Chem 30A Section 03 in Spring 2016. Of the 28 students enrolled in the class at the time the assignment was due, only 27 students answered the question. 96.3% of the students answered the question correctly while 3.7% of the students didn't finish the question or answered it incorrectly. The % correct for this section is greater than the system average which demonstrate success in this learning outcome. **Result:** Target Met **Year This Assessment Occurred:** 2015-2016 **Resource Request:** None **GE/IL-SLO Reflection:** This outcome fulfills the institutional learning outcomes for Computation by analyzing numerical data and for Critical Thinking by problem solving through analysis. **GE/IL-SLO Reflection:** This outcome fulfills the institutional learning outcomes for Computation by analyzing numerical data and for Critical Thinking by problem solving through analysis. 09/21/2015 - Data from the online homework for Chemistry 30A section 03 from Spring 2015 was used to assess this SLO. 100% of the 35 students enrolled in the course were able to correctly answer this homework problem in the online homework assignment. This shows that the target was met for this SLO. **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 06/23/2014 - Data from the online homework for Chemistry 30A section 01 from Spring 2014 was used to assess this SLO. 100% of the 34 students enrolled in the course were able to correctly answer this homework problem in the online	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		homework assignment. This shows that the target was met for this SLO. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	
Department - Health (HLTH) - HLTH 21 - HEALTH EDUCATION - SLO 1 - Application of Knowledge - Assess health behavior choices, apply that information to everyday life for the improvement of individual, family, and community well-being. (Created By Department - Health (HLTH)) **Start Date:** 04/06/2015 **End Date:** 06/25/2015 **Course-Level SLO Status:** Active	**Assessment Method:** Three multiple choice tests. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** 90% of students shall receive a grade of B or better.	01/09/2016 - THESE ARE THE DATA IN FALL 2015: Hybrid 1 = 74% avg Hybrid 2 = 75% avg Hybrid 3 = 72% Online = 77% THESE WERE THE DATA IN FALL 2014: Hybrid 1 = 59% Hybrid 2 = 71% Hybrid 3 = 64% Online = 66% Here are more breakdown DATA IN Fall 2014: 73% of students received a grade of B or better. The breakdown was 58% received an A, 15% received a B, 10% received a C, 1% received a D, and 16% received an F. These data only include the online and hybrid courses. **Result:** Target Not Met **Year This Assessment Occurred:** 2014-2015 **Resource Request:** $490 to purchase 4 textbooks to put on reserve in the library. **GE/IL-SLO Reflection:** The class averages have improved since 2014. I believe this is in part due to the greater communication to failing students early on in the quarter.	01/09/2016 - There will be a continued effort to identify and communicate with students who are at risk for failing the course. 10/09/2014 - In the Summer of 2014 the hybrid and online courses will be redesigned to include a more interactive online component that will include Chapter Self Surveys and a more interactive online coursework. There will be an increased effort to identify students early on who do not access their required online coursework on a timely and regular basis.
	Assessment Method: Three written exams shall be given. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** 70% of students shall pass at the 70% or higher level.	06/28/2016 - 90% of students passed at the C or better level 40% at a B level 20% at an A level **Result:** Target Met **Year This Assessment Occurred:** 2015-2016 **Resource Request:** None	01/14/2014 - More students need to use the CourseMate learning tool 07/31/2013 - More textbooks in the library to checkout

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
			04/30/2012 - Application of knowledge met institutional learning objectives as well 03/11/2012 - Stuents also satisfied institutional leaning outcomes in communication and social responsibility 03/11/2012 - Students also satisfied the institutional learning outcomes in communication
		06/28/2016 - 90% of students passed with a grade of C or better 40% at a B level or better 20% at an A level **Result:** Target Met **Year This Assessment Occurred:** 2015-2016 **Resource Request:** More textbooks in the library for student check-out	01/14/2014 - More students need to use the CourseMate learning tool 07/31/2013 - More textbooks in library for students to check out 04/30/2012 - Met institutional learning objectives as well 03/11/2012 - Students satified institutional learning outcome in communication
Department - Health (HLTH) - HLTH 21 - HEALTH EDUCATION - SLO 2 - Application of knowledge - Identify preconceived ideas about knowledge, values,and behavior that affect health and compare with established	**Assessment Method:** Students will score a 70% or better on three exams which evaluate their knowledge on health behaviors **Assessment Method Type:**	01/09/2016 - THESE ARE THE DATA IN FALL 2015: Hybrid 1 = 74% avg Hybrid 2 = 75% avg Hybrid 3 = 72% Online = 77% THESE WERE THE DATA IN FALL 2014: Hybrid 1 = 59% Hybrid 2 = 71% Hybrid 3 = 64% Online = 66%	01/09/2016 - Continue to reach out to students who initially show their progress puts them at risk for not passing the course.

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
research and accepted scientific evidence. (Created By Department - Health (HLTH)) **Course-Level SLO Status:** Active	Exam - Course Test/Quiz **Target:** 90% of the students in the class score a 70% or better on the three tests.	**Result:** Target Not Met **Year This Assessment Occurred:** 2014-2015 **GE/IL-SLO Reflection:** There will be continued effort to evaluate students at risk and continue with the extended communication to help them perform better. **GE/IL-SLO Reflection:** There will be continued effort to evaluate students at risk and continue with the extended communication to help them perform better.	
		10/09/2014 - 83% of students received a B or better final grade in the class. This includes hybrid and online courses only. The breakdown was 58% received an A, 15% received a B, 10% received a C, 1% received a D and 16% received an F. **Result:** Target Not Met **Year This Assessment Occurred:** 2013-2014 **Resource Request:** $460 to purchase 4 textbooks to put on reserve in the library. **GE/IL-SLO Reflection:** These are baseline data for the online and hybrid Health 21 courses.	10/09/2014 - In the Summer of 2014 the hybrid and online courses will be redesigned to include a more interactive online component that will include Chapter Self Surveys and a more interactive online coursework. There will be an increased effort to identify students early on who do not access their required online coursework on a timely and regular basis.
		01/14/2014 - 70% of students scored a C grade or better 15% earned a B grade 15% earned an A grade **Result:** Target Not Met **Year This Assessment Occurred:** 2013-2014 **Resource Request:** None	01/14/2014 - More students need to use CourseMate as a learning tool 07/23/2012 - No changes planned

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
Department - Kinesiology (KINS) - KINS 4 - CONCEPTS OF PHYSICAL FITNESS & WELLNESS - SLO 1 - Application of Knowledge - A successful student will be able to identify and explain how the various components of physical fitness and wellness contribute to general health and wellness (e.g., healthy lifestyles, physical activity, body mechanics, nutrition, stress management, avoiding destructive behaviors, making informed choices, etc.) (Created By Department - Physical **Start Date:** 09/26/2011 **End Date:** 12/16/2011 **Course-Level SLO Status:** Active	**Assessment Method:** Students are given 6 quizzes and Laboratory assignments covering each Concept of Physical Fitness & Wellness. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** 75% of students will receive a B grade or better for the course.	06/28/2016 - 80% of students received a B grade or better for the course. **Result:** Target Met **Year This Assessment Occurred:** 2015-2016 **GE/IL-SLO Reflection:** Mastering these basic skill are crucial to developing Community/Global Consciousness and Responsibility Skills. 06/29/2015 - 80% of students received a B grade or better for the course. **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 **GE/IL-SLO Reflection:** This course satisfies Community/Global Consciousness and Responsibility 06/16/2014 - Student's identified and explained the various components of fitness and wellness by submitting Labs & Quizzes. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	
Department - Kinesiology (KINS) - KINS 4 - CONCEPTS OF PHYSICAL FITNESS & WELLNESS - SLO 2 - Application of knowledge - A successful student will be able to assess current personal health and fitness lifestyle behaviors, and implement appropriate changes to improve his/her physical fitness and wellness. (Created By Department - Physical Education (PHED)) **Start Date:**	**Assessment Method:** Students will keep a journal of Laboratory Assignments for Each Concept of Physical Fitness & Wellness. Students will be assigned a 3 - 5 page final essay on reflections of personal fitness and wellness changes implemented as a result of taking the course. **Assessment Method Type:** Essay/Journal	06/28/2016 - 80% of the students received a grade of 3 or higher on the 5-point rubric. **Result:** Target Met **Year This Assessment Occurred:** 2015-2016 **GE/IL-SLO Reflection:** Mastering these basic skill are crucial to	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
09/26/2011 **End Date:** 12/16/2011 **Course-Level SLO Status:** Active	**Target:** 75% of the students will receive a grade of 3 or higher on the 5-point rubric.	developing Community/Global Consciousness and Responsibility Skills. **GE/IL-SLO Reflection:** Mastering these basic skill are crucial to developing Community/Global Consciousness and Responsibility Skills.	
		06/26/2015 - 80% of the students received a grade of 3 or higher on the 5-point rubric. **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 **GE/IL-SLO Reflection:** Mastering these basic skill are crucial to developing Community/Global Consciousness and Responsibility Skills.	
		06/16/2014 - Students demonstrated their current health and fitness by documenting their health/fitness improvements with their Interpretations, Implications, and Conclusions of self improvement. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	
Department - Mathematics (MATH) - MATH 10 - ELEMENTARY STATISTICS - Summarize - The student will be able to describe and summarize data effectively. (Created By Department - Mathematics (MATH)) **Course-Level SLO Status:** Inactive	**Assessment Method:** Students are given a question related to the particular learning objective. See Related Documents for a list of the questions. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** 70% of students will get the question correct.	06/22/2015 - 74% of the students correctly answered the 2nd problem on the related document **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 **Resource Request:** . **GE/IL-SLO Reflection:** The students appeared to be able to correctly interpret the graph. The ability to summarize data graphically appears to have	06/22/2015 - The students appeared to be able to correctly interpret the graph. The ability to summarize data graphically appears to have mastered by the students.

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		mastered by the students. **Related Documents:** Math10_SLO_questions_Sp14	
		06/27/2014 - 71% of students correctly answered problem two on the related document **Result:** Target Met **Year This Assessment Occurred:** 2013-2014 **GE/IL-SLO Reflection:** The students appeared to be able to correctly interpret a histogram graph. That is, the ability to summarizing data graphically appears to have been mastered by the students. **Related Documents:** math 10 slo questions	06/27/2014 - The students appeared to be able to correctly interpret a histogram graph. That is, the ability to summarizing data graphically appears to have been mastered by the students.
Department - Mathematics (MATH) - MATH 10 - ELEMENTARY STATISTICS - Probability - The student will be able to determine the likelihood of events. (Created By Department - Mathematics (MATH)) **Course-Level SLO Status:** Inactive	**Assessment Method:** Students are given a question related to the particular learning objective. See Related Documents for a list of the questions. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** 70% of the students will get the question correct.	06/22/2015 - 70% of the students answered the 4th problem correctly on the related document. **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 **Resource Request:** . **GE/IL-SLO Reflection:** At least 70% of the students were able to answer a basic probability question related to the experiment of rolling 2 dice and recording the sum. **Related Documents:** Math10_SLO_questions_Sp14	06/22/2015 - At least 70% of the students were able to answer a basic probability question related to the experiment of rolling 2 dice and recording the sum.
		06/27/2014 - 72% of students answered problem four correctly on the related document **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	06/27/2014 - More than 70% of the students were able to answer a basic probability questions related to the experiment of rolling 2 dice and recording the sum.

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		GE/IL-SLO Reflection: More than 70% of the students were able to answer a basic probability questions related to the experiment of rolling 2 dice and recording the sum. **Related Documents:** math10_SLO_Sp2014	
Department - Mathematics (MATH) - MATH 10 - ELEMENTARY STATISTICS - Inferences/Predictions - The student will be able to make accurate inferences or predictions about groups of interest using limited information. (Created By Department - Mathematics (MATH)) **Course-Level SLO Status:** Inactive	**Assessment Method:** Students are given a question related to the particular learning objective. See Related Documents for a list of the questions. **Assessment Method Type:** Exam - Course Test/Quiz **Target:** 70% of the students will get the question correct.	06/22/2015 - 71% of the students correctly answered the 3rd problem on the related document. **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 **Resource Request:** . **GE/IL-SLO Reflection:** When given a skewed right data set, 71% of the students understood that the median for the data set would be smaller than the mean. **Related Documents:** Math10_SLO_questions_Sp14	06/22/2015 - When given a skewed right data set, 71% of the students understood that the median for the data set would be smaller than the mean.
		06/27/2014 - 70% of the students correctly answered problem three on the related document **Result:** Target Met **Year This Assessment Occurred:** 2013-2014 **GE/IL-SLO Reflection:** When told a data set was skewed right, 70% of the students understood that the mean for that data set would be greater than the median. Target met. **Related Documents:** math10_SLO_Sp2014	06/27/2014 - When told a data set was skewed right, 70% of the students understood that the mean for that data set would be greater than the median. Target met

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
Department - Mathematics (MATH) - MATH 10 - ELEMENTARY STATISTICS - Concepts and Connections - Students will develop conceptual understanding of descriptive and inferential statistics. They will demonstrate and communicate this understanding in a variety of ways, such as: reasoning with definitions and theorems, connecting concepts, and connecting multiple representations, as appropriate. (Created By Department - Mathematics (MATH)) **Assessment Cycles:** End of Academic Year **Start Date:** 12/14/2015 **Course-Level SLO Status:** Active	**Assessment Method:** Rigorous homework problem, graded upon a rubric that is shared with students in advance. **Assessment Method Type:** Data **Target:** All students will obtain a passing average (70%) on this homework.	05/26/2016 - Homework is correlated with course grade. So it's possible that by focusing on increasing student homework scores, course grades might also increase. See complete analysis in related document. **Result:** Target Not Met **Year This Assessment Occurred:** 2015-2016 **Resource Request:** Continued support of the STEM Center **GE/IL-SLO Reflection:** These rigorous homework problems, collected throughout the quarter, require translation and interpretation, complex computations and problem solving, and also critical thinking and synthesis. **Related Documents:** Math 10 SLO Reflections Winter 2016.pdf	
Department - Mathematics (MATH) - MATH 10 - ELEMENTARY STATISTICS - Mechanical Fluencies - Students will demonstrate the ability to compute descriptive statistics, calculate confidence intervals, and carry out tests of hypotheses. (Created By Department - Mathematics (MATH)) **Assessment Cycles:** End of Academic Year **Start Date:** 12/14/2015 **Course-Level SLO Status:** Active			
Department - Mathematics (MATH) - MATH 10 - ELEMENTARY STATISTICS - Applications - Students will formulate			

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
conclusions about a population based on analysis of sample data. (Created By Department - Mathematics (MATH)) **Assessment Cycles:** End of Academic Year **Start Date:** 12/14/2015 **Course-Level SLO Status:** Active			
Department - Physical Education (PHED) - PHED 1 - INTRODUCTION TO PHYSICAL EDUCATION AS A PROFESSION - SLO 2 - Job tasks - Evaluate career options in the field of kinesiology and customize career goals as they relate to the discipline of kinesiology (Created By Department - Physical Education (PHED)) **Assessment Cycles:** End of Academic Year **Start Date:** 09/22/2013 **End Date:** 06/29/2015 **Course-Level SLO Status:** Active	**Assessment Method:** Academic research project **Assessment Method Type:** Research Paper **Target:** Passing score would be 75% or better		
	Assessment Method: In class discussions/activities that explore and examine current professions in Physical Education **Assessment Method Type:** Discussion/Participation **Target:** Physical and/or vocal participation		
	Assessment Method: The students will complete a cover letter, resume, reflection, and professional philosophy for their final project. **Assessment Method Type:** Class/Lab Project **Target:** 80% of students will have completed the project with given standards.	07/02/2014 - 92% of students completed the final project which included a cover letter, resume, reflection, and philosophy. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	
Department - Physical Education (PHED) - PHED 1 - INTRODUCTION TO PHYSICAL EDUCATION AS A PROFESSION - SLO 1 - Knowledge - Analyze current issues in America involving physical activity (Created By Department - Physical Education	**Assessment Method:** Group and individual presentations on relevant Physical Education topics **Assessment Method Type:** Presentation/Performance **Target:**		

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
(PHED)) **Assessment Cycles:** End of Academic Year **Start Date:** 09/22/2013 **End Date:** 06/29/2015 **Course-Level SLO Status:** Active	Class interaction/participation, creativity of content and accurate verbal cuing/articulation are all necessary evaluative components of these presentations. If all components are satisfactorily met, students receive a passing point value of completion.		
	Assessment Method: What school, home, and community interventions, taken together or separately, would increase the likelihood of achieving public health goals in the next generation? **Assessment Method Type:** Essay/Journal **Target:** 80 % of students include in their essay an effective and detailed plan which would engage the public in a healthy lifestyle utilizing school, home, and community interventions.		
	Assessment Method: Comprehensive Final Exam - multiple choice, fill in the blank, true/false and short answer **Assessment Method Type:** Exam - Course Test/Quiz **Target:** 75% or better is a passing grade		
	Assessment Method: The students will critique the article, Healthy People 2012, which is offers physical activity objectives for the USA for the decade of 2010-2020. They will offer their critical opinion plus answer questions regarding the article. **Assessment Method Type:** Essay/Journal **Target:** 80% of students will complete this assignment.	07/02/2014 - 85% of students completed this assignment. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
Department - Physical Education (PHED) - PHED 15 - FIRST AID & CPR/AED - SLO 1 - Application of Knowledge - Qualify for American Red Cross Certification in CPR/AED for the Adult, Child and Infant, CPR/AED for the Professional Rescuer or First Aid (Created By Department - Physical Education (PHED)) **Course-Level SLO Status:** Active	**Assessment Method:** Instruct students in techniques in CPR/AED and First Aid per the American Red Cross requirements through class participation and discussion **Assessment Method Type:** Discussion/Participation **Target:** All students completing PHED 66 will qualify for American Red Cross Certification in CPR/AED for the Adult, Child and Infant, CPR/AED for the Professional Rescuer or First Aid	06/27/2016 - All students met SLO **Result:** Target Met **Year This Assessment Occurred:** 2015-2016 **Resource Request:** Continued upkeep of equipment (mannequins, AEDs) 12/09/2015 - All students met SLO. AEDs and Mannequins need updating. **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 **Resource Request:** New / repair AEDs and Mannequins 12/01/2014 - All students met SLO **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	
Department - Physical Education (PHED) - PHED 15 - FIRST AID & CPR/AED - SLO 2 - Application of knowledge - Perform Life Saving Skills (Created By Department - Physical Education (PHED)) **Course-Level SLO Status:** Active	**Assessment Method:** Practical Exam **Assessment Method Type:** Presentation/Performance **Target:** All students completing PHED 66 will demonstrate competency in life saving skills	06/27/2016 - All students met SLO **Result:** Target Met **Year This Assessment Occurred:** 2015-2016 **Resource Request:** Floor in classroom needs replacement (skills peformed on floor) 12/09/2015 - All students met SLO **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 12/01/2014 - All students met SLO **Result:** Target Met	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		Year This Assessment Occurred: 2013-2014	
Department - Physical Education (PHED) - PHED 16A - PREVENTION OF ATHLETIC INJURIES - SLO 1 - Application of Knowledge - The student will demonstrate proficiency in the techniques of ankle taping to prevent injury. (Created By Department - Physical Education (PHED)) **Start Date:** 09/26/2011 **End Date:** 12/16/2011 **Course-Level SLO Status:** Active	**Assessment Method:** Practical Examination **Assessment Method Type:** Discussion/Participation **Target:** 80% of the students will correctly apply athletic tape to prevent an inversion ankle sprain	12/01/2016 - 80% of the students will correctly apply athletic tape to prevent an inversion ankle sprain **Result:** Target Met **Year This Assessment Occurred:** 2015-2016 **Resource Request:** Funding for Lab supplies and replace unsanitary floor	
		12/01/2016 - 80% of the students will correctly apply athletic tape to prevent an inversion ankle sprain **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 **Resource Request:** Funding for Lab supplies needed,	
		06/16/2014 - Students correctly demonstrated a preventative ankle taping by practical examination **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	
Department - Physical Education (PHED) - PHED 16A - PREVENTION OF ATHLETIC INJURIES - SLO 2 - Application of knowledge - The student will design a warm up program to prevent musculoskeletal injuries. (Created By Department - Physical Education (PHED)) **Course-Level SLO Status:** Active	**Assessment Method:** Practical Examination **Assessment Method Type:** Discussion/Participation **Target:** 80% of the students will demonstrate appropriate warm up exercises to prevent a musculo-skeletal injury	12/01/2016 - 80% of the students will demonstrate appropriate warm up exercises to prevent a musculo-skeletal injury **Result:** Target Met **Year This Assessment Occurred:** 2015-2016 **Resource Request:** Funding for Lab supplies and replace unsanitary floor	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		12/01/2016 - 80% of the students will demonstrate appropriate warm up exercises to prevent a musculo-skeletal injury **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 **Resource Request:** Funding for Lab supplies and replace unsanitary floor	
		06/16/2014 - Students demonstrated their warm up programs to prevent musculoskeletal injuries during the Practical Examination **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	
Department - Physical Education (PHED) - PHED 16B - EMERGENCY ATHLETIC INJURY CARE - SLO 1 - Application of Knowledge - The student will qualify for American Red Cross CPR Certification. (Created By Department - Physical Education (PHED)) **Start Date:** 01/02/2013 **End Date:** 03/30/2013 **Course-Level SLO Status:** Active	**Assessment Method:** Practical & Written Examination **Assessment Method Type:** Discussion/Participation **Target:** 80% of the students will demonstrate proficiency in American Red Cross CPR	12/01/2016 - Each student passed a written and practical American Red Cross CPR Examination **Result:** Target Met **Year This Assessment Occurred:** 2015-2016 **Resource Request:** Funding for Lab supplies and replace unsanitary floor	
		12/01/2016 - 80% of the students will demonstrate proficiency in American Red Cross CPR **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 **Resource Request:** Funding for Lab supplies and replace unsanitary floor	
		06/16/2014 - Each Student qualified for the American Red Cross CPR Certification. **Result:** Target Met	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		Year This Assessment Occurred: 2013-2014	
Department - Physical Education (PHED) - PHED 16B - EMERGENCY ATHLETIC INJURY CARE - SLO 2 - Application of knowledge - The student will qualify for American Red Cross First Aid Certification (Created By Department - Physical Education (PHED)) **Start Date:** 01/02/2012 **End Date:** 03/30/2012 **Course-Level SLO Status:** Active	**Assessment Method:** Practical and Written American Red Cross Examination **Assessment Method Type:** Discussion/Participation **Target:** 80% of the students will demonstrate proficiency in Emergency First Aid	12/01/2016 - Each student passed a written and practical American Red Cross Emergency First Aid Examination **Result:** Target Met **Year This Assessment Occurred:** 2015-2016	
		12/01/2016 - 80% of the students will demonstrate proficiency in Emergency First Aid **Result:** Target Met **Year This Assessment Occurred:** 2015-2016 **Resource Request:** Funding for Lab supplies and replace unsanitary floor	
		06/16/2014 - Each student qualified for the American Red Cross First Aid Certification. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	
Department - Physical Education (PHED) - PHED 16C - TREATMENT & REHABILITATION OF ATHLETIC INJURIES - SLO 1 - Application of Knowledge - The student will design a Year Round Conditioning Program for a rehabilitating athlete (Created By Department - Physical Education (PHED)) **Start Date:** 04/09/2012 **End Date:** 06/29/2012 **Course-Level SLO Status:** Active	**Assessment Method:** The student will review the literature for a specific athlete's injury and design a year round exercise program for the rehabilitating athlete. **Assessment Method Type:** Research Paper **Target:** Complete a written project that explains the mechanism of the athlete's injury, why specific exercises were chosen and the requirements for progression	12/01/2016 - Each student submitted an exercise program for an individual athlete of a specific sport. **Result:** Target Met **Year This Assessment Occurred:** 2015-2016 **Resource Request:** Funding for Lab supplies and replace unsanitary floor	
		12/01/2016 - Each student submitted a project explaining the mechanism of injury for a specific sport/athlete with an exercise program to prevent	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		it's reoccurrence **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 **Resource Request:** Funding for Lab supplies and replace unsanitary floor	
		06/16/2014 - Each Student selected an athlete and designed a Year Round Conditioning Program to prevent injuries and enhance performance. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	
Department - Physical Education (PHED) - PHED 16C - TREATMENT & REHABILITATION OF ATHLETIC INJURIES - SLO 2 - Application of knowledge - The student will design a Injury Rehabilitation Program for an injured athlete. (Created By Department - Physical Education (PHED)) **Start Date:** 04/02/2012 **Course-Level SLO Status:** Active	**Assessment Method:** Student will design a rehabilitation program for a specific musculo-skeletal injury incurred in athletics. Students may work in conjointly for the same athletic injury. **Assessment Method Type:** Research Paper **Target:** 80% of the students will complete the written program with a B grade or better.	12/01/2016 - Rehabilitation projects submitted by students correlated with Year round conditioning programs. **Result:** Target Met **Year This Assessment Occurred:** 2015-2016	
		12/01/2016 - Students submitted a rehabilitation program specifically related to their Year round conditioning program **Result:** Target Met **Year This Assessment Occurred:** 2014-2015	
		06/16/2014 - Students selected an injury or surgery to rehabilitate for an athlete and designed an appropriate musculo-skeletal rehabilitation program to prevent re-injury and enhance performance. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
Department - Physical Education (PHED) - PHED 62A - CLINICAL EXPERIENCES IN SPORTS MEDICINE I - SLO 1 - Application of Knowledge - Perform preventative ankle taping (Created By Department - Physical Education (PHED)) **Course-Level SLO Status:** Active	**Assessment Method:** Practical exam **Assessment Method Type:** Presentation/Performance **Target:** All components of tape job included Tape job neat, without wrinkles or holes Complete tape job in less than 3 minutes	12/06/2016 - All students met SLO **Result:** Target Met **Year This Assessment Occurred:** 2015-2016 **Resource Request:** Supplies for instruction and student practice 12/09/2015 - All students met SLO **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 **Resource Request:** Taping Supplies 12/01/2014 - All students met SLO. Resource request for practice tape valuable to allow for ample instruction and practice. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	
Department - Physical Education (PHED) - PHED 62A - CLINICAL EXPERIENCES IN SPORTS MEDICINE I - SLO 2 - Application of knowledge - Perform stretching techniques for the upper and lower extremity (Created By Department - Physical Education (PHED)) **Course-Level SLO Status:** Active	**Assessment Method:** Practical Examination **Assessment Method Type:** Presentation/Performance **Target:** Demonstrate appropriate techniques for active and passive stretching of the upper and lower extremities	12/06/2016 - All students met SLO **Result:** Target Met **Year This Assessment Occurred:** 2015-2016 12/09/2015 - All students met SLO **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 12/01/2014 - All students met SLO **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
Department - Physical Education (PHED) - PHED 62B - CLINICAL EXPERIENCES IN SPORTS MEDICINE II - SLO 1 - Application of Knowledge - Perform soft tissue massage techniques (Created By Department - Physical Education (PHED)) **Course-Level SLO Status:** Active	**Assessment Method:** Practical Exam **Assessment Method Type:** Presentation/Performance **Target:** All students completing PHED 62B will show competency in performing soft tissue massage techniques	12/06/2016 - All students met SLO **Result:** Target Met **Year This Assessment Occurred:** 2015-2016 12/09/2015 - All students met SLO **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 12/01/2014 - All students met SLO. Identified by Advisory Council as valuable skill to be applied in the workplace. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	
Department - Physical Education (PHED) - PHED 62B - CLINICAL EXPERIENCES IN SPORTS MEDICINE II - SLO 2 - Application of Knowledge - Describe theoretical use of therapeutic modalities (Created By Department - Physical Education (PHED)) **Course-Level SLO Status:** Active	**Assessment Method:** Research paper describing theoretical use of therapeutic modalities **Assessment Method Type:** Research Paper **Target:** All students completing PHED 62B will complete the research paper describing the theoretical use of therapeutic modalities	12/06/2016 - All students met SLO **Result:** Target Met **Year This Assessment Occurred:** 2015-2016 12/09/2015 - All students met SLO **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 12/01/2014 - All students met SLO. Theoretical understanding of therapeutic modality use makes our students leaders in further academic study and in the workplace. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
Department - Physical Education (PHED) - PHED 62C - CLINICAL EXPERIENCES IN SPORTS MEDICINE III - SLO 1 - Application of Knowledge - Demonstrate foot, ankle, and lower leg injury evaluation (Created By Department - Physical Education (PHED)) **Course-Level SLO Status:** Active	**Assessment Method:** Practical Exam **Assessment Method Type:** Presentation/Performance **Target:** All students completing PHED 62C will show competency in demonstrating a foot, ankle and lower leg injury evaluation	12/06/2016 - 80% of students met this SLO. Continued instruction time necessary to increase completion rate. **Result:** Target Not Met **Year This Assessment Occurred:** 2015-2016	12/06/2016 - Add weekly educational session to future quarters
		12/09/2015 - 80% of students met this SLO. Continued instruction time needed to increase completion. **Result:** Target Met **Year This Assessment Occurred:** 2014-2015	
		12/01/2014 - 80% of students completed SLO. Continued focus on instruction and practice in this area is necessary. Increased application of this skill with actual injuries to student-athletes! **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	
Department - Physical Education (PHED) - PHED 62C - CLINICAL EXPERIENCES IN SPORTS MEDICINE III - SLO 2 - Application of knowledge - Identify muscles used during various free weight and variable resistance machine exercises (Created By Department - Physical Education (PHED)) **Course-Level SLO Status:** Active	**Assessment Method:** Research paper correlating muscle groups with various free weight and variable resistance machine exercises **Assessment Method Type:** Research Paper **Target:** All students completing PHED 62C will complete a research paper correlating muscle groups with various free weight and variable resistance machine exercises	12/06/2016 - 80% of students met this SLO. Increased instruction time needed to increase completion rate. Added instruction as new and advanced equipment becomes available. **Result:** Target Not Met **Year This Assessment Occurred:** 2015-2016 **Resource Request:** Update exercise equipment in Wellness Center to bring up to industry standard	12/06/2016 - Add weekly educational sessions to future quarters.
		12/09/2015 - 80% of students met this SLO. Continued instruction time needed to increase completion. **Result:**	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		Target Met **Year This Assessment Occurred:** 2014-2015	
		12/01/2014 - 80% of students met this SLO. Continued focus on instruction and application important for skill development. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	
Department - Physical Education (PHED) - PHED 62D - CLINICAL EXPERIENCES IN SPORTS MEDICINE IV - SLO 1 - Application of Knowledge - Demonstrate shoulder injury evaluation (Created By Department - Physical Education (PHED)) **Course-Level SLO Status:** Active	**Assessment Method:** Practical Exam **Assessment Method Type:** Presentation/Performance **Target:** All students completing PHED 62D will complete a shoulder injury evaluation	12/06/2016 - 80% of students completed this SLO. Increased instruction time necessary to increase completion rate. **Result:** Target Not Met **Year This Assessment Occurred:** 2015-2016	12/06/2016 - Add weekly educational sessions in future quarters.
		12/09/2015 - 80% of students met this SLO. Continued instruction time needed to increase completion. **Result:** Target Met **Year This Assessment Occurred:** 2014-2015	
		12/01/2014 - 80% of students completed this SLO. Continued focus on instruction and practice time is important. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	
Department - Physical Education (PHED) - PHED 62D - CLINICAL EXPERIENCES IN SPORTS MEDICINE IV - SLO 2 - Application of knowledge - Design functional rehabilitation program for the lower extremity (Created By Department - Physical Education (PHED))	**Assessment Method:** Written description of functional rehabilitation program as well as demonstration of the functional rehabilitation program with an athlete **Assessment Method Type:**	12/06/2016 - All students completed this SLO. Continues to be a strong point for KINS 62D students. **Result:** Target Met **Year This Assessment Occurred:**	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
Course-Level SLO Status: Active	Class/Lab Project **Target:** All students completing PHED 62D will design and demonstrate a functional rehabilitation program for the lower extremity	2015-2016 12/09/2015 - All students completed this SLO. Excellent progress with these programs. Students completed excellent work with injured student-athletes providing a valuable service to Foothill inter-collegiate athletics. **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 12/01/2014 - All students completed this SLO. Excellent progress with these programs. Students completed excellent work with injured student-athletes providing a valuable service to Foothill inter-collegiate athletics. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	
Department - Physical Education (PHED) - PHED 62E - CLINICAL EXPERIENCES IN SPORTS MEDICINE V - SLO 1 - Application of Knowledge - Design comprehensive rehabilitation program (Created By Department - Physical Education (PHED)) **Course-Level SLO Status:** Active	**Assessment Method:** Oversee and collaborate with student on a comprehensive rehabilitation program for an injured student athlete. **Assessment Method Type:** Class/Lab Project **Target:** All students completing PHED 62E will develop a comprehensive rehabilitation plan	12/06/2016 - All students met this SLO. **Result:** Target Met **Year This Assessment Occurred:** 2015-2016 12/09/2015 - All students met this SLO **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 12/01/2014 - All students completed this SLO **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	
Department - Physical Education (PHED) - PHED 62E - CLINICAL EXPERIENCES IN SPORTS MEDICINE V - SLO 2 - Application	**Assessment Method:** Review capstone project summarizing the body of student learning over the course of	12/06/2016 - All students met this SLO. Students continue to demonstrate tremendous skill and knowledge upon completion of the KINS 62 series	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
of knowledge - Demonstrate mastery of course material in a capstone project (Created By Department - Physical Education (PHED)) **Course-Level SLO Status:** Active	the PHED 62 series of classes **Assessment Method Type:** Portfolio Review **Target:** All students completing PHED 62E will complete a capstone project demonstrating mastery of course materials	and the Foothill Sports Medicine Program. **Result:** Target Met **Year This Assessment Occurred:** 2015-2016 12/09/2015 - All students completed this SLO. This project continues to be a shining example of the comprehensive experience the students receive in the KINS 62 series and Foothill Sports Medicine Program. Student completing the progression and program are leaders in the areas of sports medicine! **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 12/01/2014 - All students completed this SLO. This project continues to be a shining example of the comprehensive experience the students receive in the KINS 62 series and Foothill Sports Medicine Program. Student completing the progression and program are leaders in the areas of sports medicine! **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	
Department - Physical Education (PHED) - PHED 65A - PNF: INTRODUCTION TO THE UPPER EXTREMITY - SLO 1 - Application of Knowledge - Perform upper extremity stretching demonstrating techniques of PNF. (Created By Department - Physical Education (PHED)) **Start Date:** 01/02/2013 **End Date:** 03/30/2013 **Course-Level SLO Status:** Active	**Assessment Method:** Practical Examination of Upper Extremity Stretching **Assessment Method Type:** Discussion/Participation **Target:** 80% of students will successfully demonstrate Upper Extremity PNF Stretching	12/01/2016 - Students demonstrated proficiency in upper extremity PNF stretching techniques **Result:** Target Met **Year This Assessment Occurred:** 2015-2016 **Resource Request:** Safe tables for Lab techniques, Funding for Lab supplies, Replace unsanitary floor 12/01/2016 - Students demonstrated proficiency in upper extremity Stretching in 3 planes of motion **Result:**	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		Target Met **Year This Assessment Occurred:** 2014-2015 **Resource Request:** Safe tables for Lab techniques, Funding for Lab supplies, Replace unsanitary floor **Resource Request:** Safe tables for Lab techniques, Funding for Lab supplies, Replace unsanitary floor	
		06/16/2014 - Students demonstrated Upper Extremity Stretching using techniques of PNF during their Practical Examination **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	
Department - Physical Education (PHED) - PHED 65A - PNF: INTRODUCTION TO THE UPPER EXTREMITY - SLO 2 - Application of knowledge - Perform upper extremity strengthening demonstrating techniques of PNF. (Created By Department - Physical Education (PHED)) **Start Date:** 01/10/2012 **End Date:** 03/30/2012 **Course-Level SLO Status:** Active	**Assessment Method:** Practical Examination **Assessment Method Type:** Discussion/Participation **Target:** 80% of the students will demonstrate appropriate techniques of Upper Extremity PNF Strengthening	12/01/2016 - Students safely performed PNF strengthening exercises for the upper extremity **Result:** Target Met **Year This Assessment Occurred:** 2015-2016 **Resource Request:** Safe tables for Lab techniques, Funding for Lab supplies, Replace unsanitary floor	
		12/01/2016 - Students demonstrated safe techniques of MRE in 3 planes of motion **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 **Resource Request:** Safe tables for Lab techniques, Funding for Lab supplies, Replace unsanitary floor	
		06/16/2014 - Students performed Upper Extremity strengthening using techniques of PNF during their Practical Examination. **Result:** Target Met	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		Year This Assessment Occurred: 2013-2014	
Department - Physical Education (PHED) - PHED 65B - PNF: INTRODUCTION TO THE LOWER EXTREMITY - SLO 1 - Application of Knowledge - The student will perform lower extremity muscle stretching implementing techniques of PNF. (Created By Department - Physical Education (PHED)) **Start Date:** 09/26/2011 **End Date:** 12/16/2011 **Course-Level SLO Status:** Active	**Assessment Method:** Practical Examination **Assessment Method Type:** Discussion/Participation **Target:** 80% of the students will successfully demonstrate Lower Extremity Stretching	12/01/2016 - Students demonstrated safe PNF stretching techniques for the lower extremity **Result:** Target Met **Year This Assessment Occurred:** 2015-2016 **Resource Request:** Safe tables for Lab techniques, Funding for Lab supplies, Replace unsanitary floor	
		12/01/2016 - Students demonstrated safe stretching techniques for the lower extremity in 3 planes of motion **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 **Resource Request:** Safe tables for Lab techniques, Funding for Lab supplies, Replace unsanitary floor	
		06/16/2014 - Students demonstrated Lower Extremity musculo-skeletal stretching using techniques of PNF during their Practical Examination. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	
		06/16/2014 - Students demonstrated Lower Extremity musculo-skeletal stretching using techniques of PNF. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	
Department - Physical Education (PHED) -			

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
PHED 65B - PNF: INTRODUCTION TO THE LOWER EXTREMITY - SLO 2 - Application of knowledge - The student will perform lower extremity muscle strengthening implementing techniques of PNF. (Created By Department - Physical Education (PHED)) **Course-Level SLO Status:** Active	**Assessment Method:** Practical Examination **Assessment Method Type:** Discussion/Participation **Target:** 80% of the students will demonstrate appropriate Lower Extremity PNF Strengthening techniques	12/01/2016 - PNF strengthening exercises were demonstrated by each student for the lower extremity **Result:** Target Met **Year This Assessment Occurred:** 2015-2016 **Resource Request:** Safe tables for Lab techniques, Funding for Lab supplies, Replace unsanitary floor	
		12/01/2016 - safe MRE 's were demonstrated in 3 planes of motion for the lower extremity **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 **Resource Request:** Safe tables for Lab techniques, Funding for Lab supplies, Replace unsanitary floor	
		06/16/2014 - Students demonstrated Lower Extremity musculo-skeletal strengthening using techniques of PNF during their Practical Examination **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	
Department - Physics (PHYS) - PHYS 2A - GENERAL PHYSICS - Kinematics, Newton's Laws, Energy, and Momentum - Students should be able to solve problems involving Kinematics, Newton's Laws, Energy, and Momentum, and know when to use which concept. (Created By Department - Physics (PHYS))	**Assessment Method:** Students will be pre and post-tested with the Mechanics Baseline Test, a standardized test from the Physics Education Reseach community. **Assessment Method Type:** Exam - Standardized **Target:** The class should show an improvement of 0.2 as measured by a normalized gain. This is the national average for physics courses.	09/07/2016 - We have continued with the FCI. This was administered three times. The gains were an excellent 0.55, a strong 0.41 and a good 0.27. The first two both made use of peer-instruction, the last did not. We also may see some shifts as 2A is no longer required for 4A students who did not have high school physics **Result:** Target Met **Year This Assessment Occurred:** 2015-2016	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		09/01/2015 - We used the FCI, which is also an industry-standard assessment with a similar scoring profile to the MBT. We found a normailized gain of 0.41, which is both well above the national average and many of our previous results. This number is somewhat skewed as this class had higher than normal attrition, which tends to give gain a bump (lower achieving students are not in the post-test sample). Also noted was that the average pre-test score for someone who completed the class was 12.7, as opposed to 10.7 for someone who dropped. **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 **Resource Request:** We would like to keep class sizes to single-lab-lectures for 2A.	09/01/2015 - We should continue to look at the difference in pre-test means for the people who dropped and the people who stayed, in order to see if this can be used as part of an early alert system. **Follow-Up:** 09/07/2016 - We found that we have not had time to look at the pre-test data. This is important, and should be addressed with release time or a PDL project.
		10/02/2014 - We were not able to administer the MBT, instead we compared some questions that were similar from this year's final and one from Fall 2012. 1st) Rotational inertia / angular momentum Fall '12 = 58% Spring '14 = 69% 2nd) projectile motion Fall '12: 82% Spring '14: 67% The drop in performance in the projectile motion problem reflects that the instructor was using a new method of instruction based upon Physics Education Research. This was the first quarter this was implemented, and there were struggles. That being said, the department has a strong belief in cutting-edge research-based instructional models, and needs both financial and structural support to continue to develop as instructors. **Result:**	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		Target Met **Year This Assessment Occurred:** 2013-2014 **Resource Request:** College should continue to fund travel for workshops at the current level.	
Department - Physics (PHYS) - PHYS 2A - GENERAL PHYSICS - Lab Experiments - Via lab experiments, students will have an understanding of the background science, error analysis, and how to perform experiments. (Created By Department - Physics (PHYS))	**Assessment Method:** Instructors will examine an experiment with an eye towards major revision. **Assessment Method Type:** Departmental Questions **Target:** Instructors should be satisfied that implementation of lab revision will lead to improved student understanding in lab. These improvements should also reflect current best practices in pedagogy.	09/07/2016 - This past year the FT faculty have focused on 4A labs. Most likely 2016-7 will be spent on 4B lab reform. We should also look at what we can roll from there into the 2A labs. **Result:** Target Met **Year This Assessment Occurred:** 2015-2016	
		06/27/2014 - The Full-Timer continued to work with the RealTime Physics Active Lab program, and this is also being test-driven by a pair of PT. While it is still under development, it promises a strong alternative to watered-down 4A labs. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014 **Resource Request:** A general parts fund should be in place to repair-and-replace sensors and instruments for this lab.	06/27/2014 - The Full-Timer should continue to work on these new labs, and bring them to full maturity.
Department - Physics (PHYS) - PHYS 2B - GENERAL PHYSICS - Concepts in E&M - Students should be able to solve problems involving the relationships between charges, forces and fields for both electricity and magnetism, the concept of voltage, and simple circuits. (Created By Department - Physics (PHYS)) **Course-Level SLO Status:** Active	**Assessment Method:** Students will be pre- and post-tested using a standardized exam. **Assessment Method Type:** Exam - Standardized **Target:** The class should show an improvement of 0.2 as measured by a normalized gain. This is the national average for physics courses.	09/01/2016 - The students struggled in 2B this year. One class, with a smaller sample size, posted a Hake gain of 0.26. However, the larger class saw a gain of only 0.17. Both of these classes were taught by veteran instructors who use peer interaction methods, which have been successful in our other courses. **Result:** Target Not Met **Year This Assessment Occurred:**	09/01/2016 - From a structural point of view, 2B might be our biggest challenge. It covers two very different segments of physics, and attempts to do a great deal of material in a format that only has four hours a week available for classroom instruction. We are also moving over to a new

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		2015-2016	text this year. We should examine the exam (where students have always seen a poor Hake gain) to make sure that the instrument has fidelity with the course objectives (and yes, we wrote that last year, but with the new book there's added impetus).
		09/01/2015 - We pre and posted tested for a result of .39, in a small sample size. This result is not surprising as small classes thrive in our peer-interaction environment. **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 **Resource Request:** We have no requests specifically for 2B.	09/01/2015 - We wish to upgrade the assessment tool to get a better view of student success.
Department - Physics (PHYS) - PHYS 2B - GENERAL PHYSICS - Thermodynamics - Students should understand the following concepts from Thermodynamics: 1. Distinctions between temperature, heat and energy. 2. PV diagrams 3. First and Second Laws of Thermodynamics (Created By Department - Physics (PHYS)) **Course-Level SLO Status:** Active	**Assessment Method:** Students will be pre- and post-tested with a standardized exam. **Target:** The class should show an improvement of 0.2 as measured by a normalized gain. This is the national average for physics courses.	09/01/2015 - We pre and posted tested for a result of .39, in a small sample size. This result is not surprising as small classes thrive in our peer-interaction environment. **Result:** Target Met **Year This Assessment Occurred:** 2014-2015	
Department - Physics (PHYS) - PHYS 2B - GENERAL PHYSICS - Lab Experiments - Lab experiments should teach students the background science, error analysis, and how to perform experiments. (Created By Department - Physics (PHYS))	**Assessment Method:** Either via examination of lab books or in class observation, instructors should evaluate labs for improvement. **Assessment Method Type:** Essay/Journal	09/16/2014 - We decided that the Ohm's Law lab took too much time as currently devised, and would be better presented over a two-week period. **Result:** Target Met **Year This Assessment Occurred:**	09/16/2014 - We should spread this out over two weeks, with the first week consisting of a discovery lab to determine parallel and series circuits, and the second to look at internal resistances and deviations

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
Course-Level SLO Status: Active		from Ohm's Law. 2013-2014 **Resource Request:** This can be implemented with our current materials, however, physics should have an equipment budget that is more responsive than the SLO cycle, as new labs should be implemented on a shorter timescale than the current funding model.	
Department - Physics (PHYS) - PHYS 2C - GENERAL PHYSICS - Waves - Students should demonstrate competence in waves, including: Sound E&M Waves Interference (Created By Department - Physics (PHYS)) **Course-Level SLO Status:** Active	**Assessment Method:** A standardized exam will be used. **Assessment Method Type:** Exam - Standardized	09/01/2016 - This year's assessment posted a Hake gain of 0.34, the best we've ever seen using this instrument. This is also over a decently-sized sample, so we are very pleased. There should be department-level discussion of how to move forwards with 2C. With the addition of our new FT instructor, perhaps this class should always be taught by an FT during the day, and we should make sure that the PT who teaches the possible night section is the same year-to-year. As this class is offered in general once a year, it would be a good idea to not have too many people teaching this "for the first time in a while." **Result:** Target Met **Year This Assessment Occurred:** 2015-2016	
		09/01/2015 - Students had a normalized gain of 0.21 (barely over target of 0.2), which was lower than the gains we saw in the other Physics 2 classes. It has been several years since this class was taught by a full-time instructor. Perhaps this class and the assessment need to have a stronger look from the FT instructors to make sure that the material and expectations are properly aligned. **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 **Resource Request:**	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		FT availabilty for 2C, which has been an ongoing resource allocation issue. Hopefully the addition of a new FT will help address this issue.	
		07/01/2014 - The students had a normalized Hake gain of 0.29, which is better than the national average of 0.2. As 2C students they are high quality, having passed 2A and 2B. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	
Department - Physics (PHYS) - PHYS 2C - GENERAL PHYSICS - Optics - Students should demonstrate competence in optics, including: Relection Refraction Lenses Mirrors (Created By Department - Physics (PHYS)) **Course-Level SLO Status:** Active	**Assessment Method:** A standardized exam will be used. **Assessment Method Type:** Exam - Course Test/Quiz	07/01/2014 - The students had a normalized Hake gain of 0.29, which is better than the national average of 0.2. As 2C students they are high quality, having passed 2A and 2B. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	
Department - Physics (PHYS) - PHYS 2C - GENERAL PHYSICS - Modern Physics - Students should demonstrate competence in Modern Physics, including Special Relativity Wave Nature of Quantum Physics (Created By Department - Physics (PHYS)) **Course-Level SLO Status:** Active	**Assessment Method:** A standardized exam will be used. **Assessment Method Type:** Exam - Course Test/Quiz	07/01/2014 - The students had a normalized Hake gain of 0.29, which is better than the national average of 0.2. As 2C students they are high quality, having passed 2A and 2B. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	09/16/2014 - While we are seeing good student success in 2C, as a program, 2C has only been offered at night in recent memory. As a department we've seen growth mainly in the 2 sequence, and would like to establish a daytime 2C class. We need to translate our success in the 2C classroom to daytime students.
Department - Physics (PHYS) - PHYS 2C - GENERAL PHYSICS - Lab Experiments -			

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
Labs experiments should teach the students the background science, error analysis and how to perform experiments. (Created By Department - Physics (PHYS)) **Course-Level SLO Status:** Active	**Assessment Method:** Either by review of lab reports, in-class observation, or independent study, instructors should evaluate the lab experiments on an ongoing basis. **Assessment Method Type:** Essay/Journal	07/01/2014 - Going back to the radioactivity lab, although the students learned what they needed to, there were big difficulties due to the shortage of recent Po-210 sources, we should buy more annually. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014 **Resource Request:** More Po-210 sources should be purchased each year.	09/16/2014 - Additional purchase of Po samples.
Department - Psychology (PSYC) - PSYC 1 - GENERAL PSYCHOLOGY - SLO 1 - Science - A successful student will be able to identify the reasons why psychology is a science. (Created By Department - Psychology (PSYC)) **Course-Level SLO Status:** Active	**Assessment Method:** Multiple Choice Exam **Assessment Method Type:** Exam - Course Test/Quiz		
Department - Psychology (PSYC) - PSYC 1 - GENERAL PSYCHOLOGY - SLO 2 - theoretical perspectives - A successful student will be able to identify the major theoretical perspectives in psychology. (Created By Department - Psychology (PSYC)) **Course-Level SLO Status:** Active	**Assessment Method:** Exam **Assessment Method Type:** Exam - Course Test/Quiz	05/09/2016 - This assessment was completed in a hybrid course in the Spring quarter of 2016 by Tiffany Rideaux. Students were required to apply the behavioral and biological perspectives to short answer questions on the first exam. A total of 85% (34/40) of the students who took the exam scored at least 72% (24/33) on the short answer portion. **Result:** Target Met **Year This Assessment Occurred:** 2015-2016	
		04/20/2015 - For this assessment Tiffany Rideaux's Winter 2015 hybrid course was used. I administered a pre-test on the first day of the quarter and a post-test on the last day of classes. Students were asked to identify 6 major theoretical perspectives in psychology. On the pre-test 11% (4/35) of students were able to correctly identify 3	04/20/2015 - I will continue to include a pre- and post-test as well as exam questions on the major theoretical perspectives for my Winter 2016 course. I will also include the major theoretical

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		or more theoretical perspectives. On the post-test 96% (23/24) of students were able to correctly identify 3 or more theoretical perspectives. **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 **GE/IL-SLO Reflection:** The students who completed the post-test demonstrated increased knowledge of the theoretical perspectives. I believe this was helped by the consistent weekly reminders of the major theoretical perspective being studied that week. Additionally, all course exams included questions regarding the major theoretical perspectives.	perspectives with the assignment outline on my syllabus.
		09/17/2014 - 10 multiple choice questions that assessed students' knowledge of theoretical perspectives were embedded in the final exam for Ben Stefonik's Psyc 1 course. The assessment took place Spring quarter 2014 in his face-to-face class. 44 students took the exam. The aggregate percentage for the 10 questions was 81%, which surpassed our desired outcome of 80%. One reason for the success was that the instructor provided students a study guide for the final, so students were well aware of what material would be covered on the final. To increase the success rates for future quarters, the instructor will, at the beginning of each new chapter, introduce the perspective from which the chapter is written. In Psyc 1, each chapter is essentially it's own perspective in psychology (e.g., biopsychology, developmental psychology, etc.). So to further help students learn the perspectives, the instructor will continually emphasize the way in which each chapter constitutes a perspective within psychology. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	

Course-Level SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		Resource Request: None **GE/IL-SLO Reflection:** This SLO most directly relates to IL-SLO #3 creative, critical and analytical thinking. Students must analyze the theoretical approaches to each perspective and apply methods of analysis to each perspective, which requires analytical thinking.	

Unit Assessment Report - Four Column

Foothill College

Program (KA-PHYS) Athletic Injury Care - Physical Education AS

PL-SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
Program (KA-PHYS) Athletic Injury Care - Physical Education AS - 1 - Upon completion of the Athletic Injury Care AS Degree, students will demonstrate an entry-level of knowledge and skill in a variety of sports medicine disciplines, including athletic training, physical therapy, strength and conditioning and emergency medical care. **SLO Status:** Active	**Assessment Method:** Foothill College Sports Medicine Clinical Workbook **Assessment Method Type:** Presentation/Performance **Target:** 100% completion of all skill competencies by the time students graduate from the program.	12/06/2016 - All students demonstrated an entry-level of knowledge and skill in sports medicine disciplines. However, further focus needs to be placed on completing 100% of skill competencies. **Result:** Target Met **Year This Assessment Occurred:** 2015-2016 **Resource Request:** Continued funding of Graduate Assistant Athletic Trainer is critical to maintaining appropriate instruction and supervision. 12/08/2015 - Continued focus on instructional time has led to increased success in this SLO. Students continue to be well prepared for entry to an upper-level sports medicine education program or entry in to the workforce. Continued funding of the Athletic Training Graduate Assistant position is critical to maintaining appropriate levels of instruction and supervision. **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 **Resource Request:** Athletic Training Graduate Assistant Position **Resource Request:** Athletic Training Graduate Assistant Position 12/07/2014 - Students completing the program completed 100% of the skill competencies! Greater focus on skill sessions and workshops led to increased student success! **Result:** Target Met	

PL-SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		Year This Assessment Occurred: 2013-2014	
Program (KA-PHYS) Athletic Injury Care - Physical Education AS - 2 - Upon completion of the Athletic Injury Care AS Degree, students will provide quality medical care for the Foothill College Intercollegiate Athletic teams. **SLO Status:** Active	**Assessment Method:** Observation, critique and feedback from Foothill College athletes, coaches and sports medicine staff **Assessment Method Type:** Observation/Critique **Target:** >90% favorable/positive comments on all feedback	12/06/2016 - Foothill Sports Medicine Students continue to provide the highest level of medical care for intercollegiate athletics in the state! Feedback from coaches, administrators and colleagues from both within Foothill and around the California Community College system reinforces how great a job our students are doing. **Result:** Target Met **Year This Assessment Occurred:** 2015-2016 **Resource Request:** Continued funding of Graduate Assistant Athletic Trainer is critical to maintaining appropriate instruction and supervision.	
		12/08/2015 - Foothill College Sports Medicine student continue to be widely recognized as providing the highest level of care for our athletes. Recognition by outside teams, coaches and athletes reaffirms the great success we are having. Continued funding of the Athletic Training Graduate Assistant position is critical to maintain appropriate levels of instruction and supervision. **Result:** Target Met **Year This Assessment Occurred:** 2014-2015 **Resource Request:** Athletic Training Graduate Assistant Position	
		12/07/2014 - All students met this SLO. Feedback for students completing the program continues to be exemplary from Foothill College faculty, staff, coaches and student-athletes. Students also continue to gain recognition from surrounding colleges and programs leading to increased	

PL-SLOs	Means of Assessment & Target / Tasks	Assessment Findings/Reflections	Action Plan & Follow-Up
		opportunities upon graduation. **Result:** Target Met **Year This Assessment Occurred:** 2013-2014	