Assessment: Course Four Column



Courses (SCI) - Chemistry

CHEM 242L:Organic Chemistry Lab II

Course Outcomes	Assessment Measures	Results	Actions
Chemistry in a particular experiment - Understanding the chemistry involved in a particular experiment. Students will describe the chemical theory behind an experiment and be able to clearly articulate this theory in a lab report and lab notebook Course Outcome Status: Active Next Assessment: 2023-2024	Assignment - Lab - Aggregate grade on lab notebook and lab reports Criterion: 90% of students with an aggregate score of 90% or better on the lab notebook and lab reports	Reporting Period: 2018-2019 Criterion Met: Yes 100% of students had an an aggregate score of 90% or better on the lab notebook and lab reports Results Analysis: This is an adequate result for this part of this course. (09/17/2019)	Action: keep this part of the course the same (09/17/2019)
Safety and coming prepared - Safety and coming to lab prepared. Students will pass quizzes on the experiment of the day and the equipment and chemicals that are being used Course Outcome Status: Active Next Assessment: 2023-2024	Exam - Lab quizzes Criterion: 100% of students with an aggregate score of 90% or better on lab quizzes	Reporting Period: 2018-2019 Criterion Met: Yes 100% of students had an an aggregate score of 90% or better on applicable exam questions this is about safety. If they do not perform at this level then I make them retake the quiz Results Analysis: This is an adequate result for this part of this course. (09/17/2019)	
Complete lab - Keeping accurate and complete lab notebooks Students will record experimental procedures and results in a lab notebook in a manner clear enough that experiments may be reproduced and detailed lab reports may be	Assignment - Written - Lab notebooks Criterion: 100% of students with an aggregate score of 90% or better on lab notebooks	Reporting Period: 2018-2019 Criterion Met: Yes 100% of students had an an aggregate score of 90% or better on lab notebooks Results Analysis:	

Course Outcomes **Assessment Measures** Results Actions written This is an adequate result for this part of this course. Course Outcome Status: Active (09/17/2019) Next Assessment: 2023-2024 Technical expertise in an organic Assignment - Lab - labs, lab reports, Reporting Period: 2018-2019 **chemistry lab** - Technical expertise in lab notebook Criterion Met: Yes an organic chemistry lab and **Criterion:** 90% of students with an 100% of students had an an aggregate score of 90% or exposure to appropriate techniques. aggregate score of 90% or better on better on labs, lab reports, lab notebook Students will demonstrate technical labs, lab reports, lab notebook lab capabilities commensurate with Results Analysis: those in a 1-year organic chemistry This is an adequate result for this part of this course. course and have been exposed to an (09/17/2019) array of lab techniques appropriate for this course Course Outcome Status: Active Next Assessment: 2023-2024 Lab (technical) report writing -Assignment - Lab - Correct Reporting Period: 2018-2019 Proficiency at lab (technical) report completion of lab reports Criterion Met: Yes writing Criterion: 90% of students with an 100% of students had an an aggregate score of 90% or students will produce scientific lab aggregate score of 90% or better on better on lab reports reports that clearly communicate a lab reports scientific experiment and Results Analysis: differentiate between the different, This is an adequate result for this part of this course. distinct parts of the lab report Students have written over 100 lab reports by this point in Course Outcome Status: Active their career, so they know how to do it. (09/17/2019) Next Assessment: 2023-2024 **Grammatically English - Ability to** Assignment - Lab - Correct Reporting Period: 2018-2019 communicate in clear, grammatically completion of lab reports – lab **Criterion Met:** Yes correct written English 100% of students had an an aggregate score of 90% or reports are not accepted with Students will communicate in clear, excessive language mistakes. better on lab reports grammatically correct written English **Criterion:** 90% of students with an Course Outcome Status: Active aggregate score of 90% or better on Results Analysis: lab reports Next Assessment: 2023-2024 This is an adequate result for this part of this course. Students have written over 100 lab reports by this point in their career, so they know how to do it. (09/17/2019) **GEN ED, Scientific Data** Assignment - Lab - Aggregate lab Reporting Period: 2018-2019 Interpretation - GEN ED, Scientific Criterion Met: Yes score Data Interpretation: Effectively apply

100% of students with an aggregate score of 90% or better

Criterion: 90% of students with an

Course Outcomes	Assessment Measures	Results	Actions
mathematical principles and quantitative methods to collect and analyze scientific data Course Outcome Status: Active Next Assessment: 2023-2024	aggregate score of 90% or better on the total lab score	on applicable sections of lab reports Results Analysis: This is an adequate result for this part of this course. (09/17/2019)	
GEN ED, Scientific Data Interpretation: Utilize the scientific method to arrive at informed conclusions - GEN ED, Scientific Data Interpretation: Utilize the scientific method to arrive at informed conclusions Course Outcome Status: Active Next Assessment: 2023-2024	Assignment - Lab - Aggregate lab score Criterion: 90% of students with an aggregate score of 90% or better on the total lab score	Reporting Period: 2018-2019 Criterion Met: Yes 100% of students with an aggregate score of 90% or better on applicable sections of lab reports Results Analysis: This is an adequate result for this part of this course. (09/17/2019)	Action: Labs are the closest thing we have to completion/competency-based learning in the sciences. I approach assessment of this course with the intent that students should be able to get 100% on all the assignments. To this end students are made to repeat lab quizzes if they get below 80% (due mainly to safety) and they are made to rewrite lab reports that have errors (sometimes this means two or three revisions – especially in lower division courses where students are still learning how to write reports.) This is what leads to the very high outcome attainment reflected in this report (09/17/2019)