

**SCIENCE DEPARTMENT MEETING MINUTES\***

*FRIDAY, SEPTEMBER 13, 2019*

*Location: Online (SCOPE) Discipline Groups*

***A&P/HSC Discipline Group***

FACULTY	PRESENT	ABSENT	EXCUSED
Anzalone, Jerry	X		
Fay, Erik	X		
Handte, Gordon	X		
Hepner, Roy	X		
Hermann, Henry		Could not connect to meeting	
Hooks, Ed	X		
Koepke, Jay	X		
Mason, Gregg	X		
Mera, Leonel	X		
Samaliazad, Esmaeel	X		
Vala, Teju	X		

ADJUNCT FACULTY

***BIO/MICRO/NUTRITION Discipline Group***

FACULTY	PRESENT	ABSENT	EXCUSED
Cameron, Angus	X		
Donini, Jordan	X		
Gaidos, Gabriel	X		
Hermann, Lisa	X		
Ottman, Tina	X		
Romeo, Peggy	X		
Slisher, Jessica	X		
Trevino, Marcela	X		
Ulrich, Melanie	X		
Verga, Vera	X		
Witty, Mike	X		
Robinson, Judy	X		

ADJUNCT FACULTY

Sandra Tirado	X		
Helena Kashleva	X		
Nina Infantado	X		

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***CHEMISTRY Discipline Group***

FACULTY ( <i>Chemistry</i> )	PRESENT	ABSENT	EXCUSED
Commendatore, Eric	x		
Gaidos, Gabe	x		
Hilton, Kim	x		
Liu, Qin	x		
McGarity, Lisa	x		
Pasishnyk, Serhiy	x		
Xue, Di	x		
Zalessov, Valentin	x		

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***ENVIRONMENTAL/OCEAN/EARTH SCI/GEO Discipline Group***

FACULTY	PRESENT	ABSENT	EXCUSED
Cameron, Angus	x		
McKenzie, Jonathan	x		
Porter, Emily			x
Sauer, Mike	x		
ADJUNCT FACULTY			
Jester, Roz	x		

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***PHYSICS/ASTRONOMY Discipline Group***

FACULTY ( <i>Phys/Astronomy</i> )	PRESENT	ABSENT	EXCUSED
Coman, Marius	x		
Coman, Luminita	x		
Manacheril, George	x		
Paudel, Yadab	x		

<i>Discussions</i>		
<i>No.</i>	<i>Topic</i>	<i>Highlights</i>
<b>1.</b>	<b><i>Break-outs into Discipline Meetings</i></b>	<p>For the <b>September 13<sup>th</sup></b> meeting, disciplines within our department met separately to discuss textbooks. Each discipline group met via group conference in SCOPE. Minutes for each group were submitted to Peggy Romeo for compilation into a single document to be uploaded onto the Document Manager.</p> <p>The minutes for each of the five discipline-group minutes are itemized in the following table.</p>
<b>2.</b>	<b><i>Next Meeting</i></b>	The next meeting will be October 11, 2019.

### *Discipline Group Discussions*

<b>No.</b>	<b>Group</b>	<b>Highlights</b>
1.	<b>Physics/Astronomy</b> Meeting was facilitated and minutes were prepared by <i>Marius Coman</i>	<ol style="list-style-type: none"> <li>1. Spring 2019 assessment: results were reviewed:               <ul style="list-style-type: none"> <li>• After discussing the Spring 2019 assessment highlights the group concluded the goals have been met.</li> <li>• For PHY2049 by comparing the online and traditional artifacts, the 0.7 difference is not statistically significant.</li> </ul> </li>   <li>2. As per the group's decision from the April 12th, 2018 meeting:               <ul style="list-style-type: none"> <li>• Yadab has reformulated question 27 to be used for the PHY2048 final common.</li> <li>• The updated exam and the answer key will be sent to the assessment office for consideration.</li> <li>• The updated PHY2048 final common exam will be administered in Fall of 2019.</li> </ul> </li>   <li>3. As per the group's decision from the April 12th, 2018 meeting:               <ul style="list-style-type: none"> <li>• George will Implement an activity for ISC1001;</li> <li>• Its goal is improving SLO 10 score.</li> </ul> </li>   <li>4. Assessment for other courses that have significant student enrollment:               <ul style="list-style-type: none"> <li>• The group decided to implement the final common exam for AST2002C in the Spring of 2020</li> <li>• The final exam has been designed by Luminita and has been reviewed and accepted by others teaching the course.</li> </ul> </li>   <li>5. Publisher access code:               <ul style="list-style-type: none"> <li>• Currently Yadab is using the Resnick's publisher access code in addition to the textbook for PHY2048 and PHY2049.</li> </ul> </li> </ol>

***Discipline Group Discussions***

<b>No.</b>	<b>Group</b>	<b>Highlights</b>
2.	<p><b>Biology/Micro/ Nutrition</b></p> <p>Meeting was facilitated by <i>Tina Ottman</i>, and minutes were prepared by <i>Vera Verga</i></p>	<p>Meeting started at 1:00 PM.</p> <p>Tina went over the TO DO TOPIC list on PPT:</p> <ol style="list-style-type: none"> <li>1. Review Goals - whether they were met or not</li> <li>2. Assessment report - Most significant findings and report from them</li> <li>3. Determine Goals for 2019-2020               <ol style="list-style-type: none"> <li>a. Marcela located goals from Spring 2019 and uploaded them to the Files folder for today's meeting /September 2019</li> <li>b. Review last year's goals 2018/2019; look at assessment results to review whether they were met or not, and then look at assessment highlights to establish new/continuing goals for this year 2019/2020</li> </ol> </li> <li>4. Course/s with Gen Ed assessment this year- Peggy confirmed that none of this group's courses are on the list.</li> <li>5. Textbook access code requirement for fulltime faculty for Spring 2020- Vera prepared a spreadsheet and entered everyone's decision about the requirement for a code for their course/s. everyone answered whether they used it or not.</li> </ol> <p><b>Group Discussion: Topics 1-3</b></p> <p>It was decided that course supervisors would put an email together for each course and have a smaller discussion with their groups about course-level assessment results and goals.</p> <p>Course supervisors will then type a short response to goals and highlights to 1) send to Marius Coman (Assessment) and, 2) be posted in the Files for our subgroup on Canvas.</p> <p>These should be completed as soon as possible, preferably by Friday, September 20, 2019.</p> <p><b><u>(From Chat post to the Group - this was Posted by TINA</u></b></p> <p>"Each group needs to review goals from 2018-2019; review the assessment report for THAT academic year and highlight results. Then, we need to establish GOALS for 2019-2020 - based on the deficits in the most recent assessment."</p> <p><b><u>Goals from 1005</u></b></p> <p>There was some discussion from BSC1005 group about what they need to do and 6 people committed to get together to work on the LOs for this course.</p> <p>Lisa – LO for common assessments. Get together via email to create/review questions that will align with each LO. These will then be used to build the common assessment.</p> <p>GROUP: Peggy, Lisa, Marcela, Jordan, Gus, Jessica, Judy.</p>

	<p><b>For BSC1011</b> Peggy and Tina- new goal (same as old, unfulfilled goal: make a new assessment that is aligned with out new LOs) Tina will review old goals, assessment highlights and new goal and post a summary to Files and send the summary to Marius.</p> <p><b>Topic 4.</b> Selected course/s for the next round of Gen Ed assessment artifacts is not one of ours (Bio/Micro/Nutrition). This time it goes to A &amp; P and Environmental courses.</p> <p>However, Peggy stressed that we must get common assessments done for courses that don't have one.</p> <p>The process is to first establish detailed objectives and then create questions that align with each specific LO to build the common assessment. That allows for better analysis of specific LOs.</p> <p><u>BSC1005 – continuation of conversation above</u></p> <ul style="list-style-type: none"> <li>• Goal – Detailed list of LO by Spring 2020</li> <li>• Common assessment by Fall 2020</li> <li>• Jessica thought these still had to go through curriculum committee for approval but was told by Peggy that that is not required.</li> <li>• Tina reminded us that Assessment Questions linked to specific learning outcomes help with matching outcomes to valid assessments.</li> </ul> <p style="text-align: center;"><b>Topic 5. Discussions about online access codes</b></p> <p>Most faculty are not using the online access codes with their courses. General discussion over the cost of books, with or without code vs the cost of the code that comes with the e-book. See spreadsheet for results of faculty responses.</p> <p><b>New Business- Next Meeting October will be facilitated by Vera</b></p> <ol style="list-style-type: none"> <li>1. Textbook adoptions need to be discussed before next meeting</li> <li>2. One Book One College- let us know if you are using the book in any way in your courses. What courses? What chapters of the book? How are you using it?</li> </ol> <p><b>Other business:</b> 1010L Late Night Labs- Nina I. asked what is being done to prepare for the loss of Flash in December. Currently, 1010L online is taught by Tina and Jessica and 1011L online lab is taught by Tina.</p> <p>Jessica is looking into labs for Spring- possibly using Labster. The discussion went over how important it is for labs to be comparable (in content and rigor) to BSC1010 ground labs. Jessica had looked at a few of the labs in Labster but was only able to access partial labs and could not therefore make a good judgement about using them. She said that the labs seemed similar to those in LNL ... including topics such</p>
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		<p>as Microscopes. Jessica also said that she was working to come up with “Kitchen Labs” to avoid using an online service at all.</p> <p>The conversation continued with questions from Tina and Vera:</p> <ol style="list-style-type: none"> <li>1) How do we make sure online is comparable to ground course?</li> <li>2) How do you know students did the labs unless there is a lab log documented in online. Kitchen labs would be very hard to show that students were actively engaged in the process and learning the concepts. The online chemistry labs required students to video-record themselves doing the lab activity, but review of the finished videos was more labor intensive for the professor to validate and grade than Proctorio.</li> </ol> <p>Peggy cautioned against creating kitchen labs and offering them right away just to have something for next spring, as the BSC 1005C labs were put into practice before they were fully vetted and improved).</p> <p>*It was suggested that we need a conversation with Martin. Based on the number of BSC1010 online for spring it was suggested to add ground labs for those online lecture courses to make sure they still can run. This will give us time to work out the best solution for the BSC 1010L online courses. Only Jessica had BSC1010 online labs on her schedule. She agreed that it would be better to have more time to fully prepare the online lab courses, and replacing them with ground labs for the spring term would be a good solution.</p> <p>Until this situation can be resolved it was suggested that maybe we only offer online lecture and have enough ground labs on the three campuses to cover them. There already are quite a few students who are mixing and matching online with ground lab or the reverse.</p> <p>For the Record; I am a pooper about telling the group that we may lose the option of meeting via Big Blue Button (due to the global loss of Flash player), but I did some research and found that FSW has already moved the platform to HTML – so we are good to go for future meetings.</p> <p>Final addition was a goal added by Tina for the BSC 1010L and BSC 1011L courses: to build new, rigorous online lab courses in the wake of losing Flash. Tina is building the BSC 1011L course with the “rollover” Hayden McNeil labs (not yet available). This course will be able to run in the spring.</p>
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***Discipline Group Discussions***

<b>No.</b>	<b>Group</b>	<b>Highlights</b>
3.	<b>Environ/Ocean/ Earth Science/ Geology</b> Meeting was facilitated, and minutes were prepared by <i>Jon McKenzie</i>	<p><b>Assessment/Goals 2019/20:</b> Goals for 2019 were partially met</p> <ul style="list-style-type: none"> <li>• <b>EVR:</b> Outcomes were modified and assessment was created but the assessment will be modified and completed by December 2019.               <ul style="list-style-type: none"> <li>- Jon - 11, 12, 15, 9 Chapters</li> <li>- Gus 3,4, 13, 6</li> <li>- Mike 1,2, 14,16,17</li> <li>- Emily 7 and 10</li> </ul> </li> <li>• <b>ESC:</b> Mike and Jon are still looking at refreshing the course. Starting with learning outcomes and then deciding on textbook. Hope have outcomes done and book selected for Fall 2020. Assessment will be ready for Spring 2020</li> <li>• <b>Marine Science Courses:</b> All instructors are compiling questions to organize a common assessment for these courses by Spring 2020. Outcomes for OCE/OCB will be examined and potentially modified for Fall 2020.</li> </ul> <p><b>E-access:</b> Only online courses currently require access codes. This will remain in place unless courses are revamped and don't use publisher resources/assignments.</p>

## Discipline Group Discussions

No.	Group	Highlights
4.	<p><b>Chemistry</b> facilitated, and minutes were prepared by <i>Qin Liu</i></p>	<p><b>Welcome new faculty: Dr. Eric Commendatore and Dr. Valentin Zalessov.</b></p> <p><b>All chemistry faculty agreed that Dr. Serhiy Pasishnyk will be the course supervisor of CHM2045/CHM2045L.</b></p> <ul style="list-style-type: none"> <li>• Dr. Serhiy Pasishnyk will lead us to create a new lab manual of CHM2045L, and all other faculty will try their best to contribute to this project.</li> <li>• We will discuss the selection of labs in our next meeting.</li> </ul> <p><b>Dr. Gabriel Gaidos, the course supervisor of CHM2032/CHM2032L:</b> talked about the change of CHM2032 lab manual, it would be more practical for health science students. He has sent a summary to me and I have attached it to these minutes as last part.</p> <p><b>Professor Kimberly Hilton:</b> talked about the change of CHM2025/CHM2025L.</p> <p>Common assessment result discussion:</p> <ul style="list-style-type: none"> <li>• CHM2025: Professor Kimberly Hilton will revise the current common final test based on the assessment report.</li> <li>• CHM2045: Dr. Serhiy Pasishnyk will create a new common final, and other faculty will contribute some questions, and Dr. Serhiy Pasishnyk will summarize them to a 40-question-test, which will represent each chapter more evenly than before.</li> <li>• CHM2046: Dr. Di Xue will revise the current common final test based on the assessment report.</li> <li>• CHM2210: Dr. Qin Liu will revise the current common final test based on the assessment report; the typo “no question is related to L.O. 5” will be reported to Marius.</li> <li>• CHM2211: no revision needed for the common final test.</li> </ul> <p><b>The course number &amp; names for those faculty who REQUIRE the access code:</b></p> <ul style="list-style-type: none"> <li>• CHM2025 Introduction to College Chemistry: Professor Kimberly Hilton (will use access code for current semester and Spring 2020. Professor Hilton will stop using access codes and switch to OER since Fall 2020)</li> <li>• CHM2045 General Chemistry I &amp; CHM2046 General Chemistry II: Dr. Lisa McGarity</li> <li>• CHM2210 Organic Chemistry I &amp; CHM2211 Organic Chemistry II: Dr. Lisa McGarity</li> </ul>

		<p><b>Goal of 2019-2020:</b></p> <ul style="list-style-type: none"> <li>• Faculty will update study guides for all common finals in order to improve student comprehension and performance.</li> <li>• Faculty will have the common final count for at least 10% of the final grade since some students do not study for common finals that have little impact on their grade.</li> <li>• OER lab manuals will be developed for CHM2045L.</li> <li>• CHM2025 will switch to OER in the semester of Fall 2020.</li> </ul> <p><b>*** CHM2032 Proposed Changes from Dr. Gabriel Gados</b></p> <ul style="list-style-type: none"> <li>• Based on repeated surveys, the student population attending CHM2032 is overwhelmingly (95+%) on a healthcare career track. They aim to become cardiovascular technologists, respiratory care technicians, paramedics, emergency medical technicians, dental hygienists, nurses, clinical lab technologists, exercise physiologists, pharmacists and occasionally medical doctors.</li> <li>• The current CHM2032 course could be improved by dedicating more course time for covering the practical aspects of chemistry that these healthcare vocations encounter. They do <u>not</u> need deeper theoretical aspects such as quantum numbers of orbitals, VSEPR theory, molecular orbital theory, and thermodynamics.</li> <li>• What they do need is a deep understanding of the metric system, with its applications in solutions. They need to prepare, dilute and mix various solutions, therefore they need to become comfortable with the calculations associated with dilutions, serial dilutions, mixing (alligations), and transforming between units of concentrations (from percentage to molarity and vice versa). They also need to be comfortable with medical dosing calculations.</li> <li>• Additionally, they need to have a solid understanding of acids and bases, the neutralization reaction, the pH scale, and the way buffers work.</li> <li>• Finally, on the basic theoretical side they only need to understand the general organization of the periodic table. This is necessary for the TEAS (Test of Essential Academic Skills, which is the entry exam for many allied health programs), and the NCLEX exam (this is the nursing licensing exam).</li> <li>• Therefore, I propose to change CHM2032 into a healthcare focused vocational chemistry course, and away from a general educational course.</li> </ul>
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**Discipline Group Discussions**

<b>No.</b>	<b>Group</b>	<b>Highlights</b>
5.	<p><b>A&amp;P/HSC</b> Meeting was facilitated, and minutes were prepared by <i>Leo Mera</i></p>	<p><b>Review of Course-Level Assessment Results</b></p> <ul style="list-style-type: none"> <li>The group discussed the results of the Anatomy and Physiology Assessment Report, Spring 2019.</li> <li>The results reflect the actual grade distribution of both A&amp;P 1 and A&amp;P 2.</li> </ul> <p><b>Report of Most Significant Findings</b></p> <ul style="list-style-type: none"> <li>We spoke about questions on the A&amp;P 1 assessment, two questions seemed too easy and two of them seemed too hard.</li> <li>We talked about revising all four questions but then decided against making any changes because of the balance.</li> </ul> <p><b>Determine Goals for Next Year</b> Decided to keep the Common Finals without making any changes</p> <p><b>Discussion of Gen Ed Assessment Strategies – NA</b></p> <p><b>Create Plan for Creation of Spring 2020 Common Assessment – NA</b></p> <p><b>Textbook/Code</b></p> <ul style="list-style-type: none"> <li>Group had discussions in past regarding changing the textbook and/or requiring students to purchase the code from publisher</li> <li>As in previous meetings, decided against making any changes</li> </ul> <p><b>Charlotte Campus A&amp;P Committee</b></p> <ul style="list-style-type: none"> <li>Gregg Mason and Gerald Anzalone met with A&amp;P instructor Dr. Gordon Handte from the Lee campus to discuss course organization, curriculum presentation, and student assessment strategies. The purpose of this meeting was to brainstorm ways in which we could unify our courses to avoid “instructor shopping” and to establish a common level of rigor in A&amp;P courses at Charlotte campus. Among the several main issues discussed, Gordon recommended the use of multiple-choice exams lecture blended with projected (e.g. PowerPoint) lab images requiring short-answer fill-in responses.</li> <li>Gregg Mason, Gerald Anzalone, and Gordon Handte assessed the Lee campus’s collection of anatomical models. We found that in comparison to the Lee campus, the Charlotte campus lacks a complete collection of anatomical models for instruction and student use, including (i) human head and neck models with removable parts in the midsagittal and parasagittal planes; (ii) wall-mounted lymphatic system models; (iii) human blood cell types models; (iv) human male and female urinary system models; (v) human endocrine organs models; and (vi) human nervous system models (frontal plane section). We would like to investigate ways and means by which we may be able to add essential models to the Charlotte campus’ A&amp;P lab to improve the students’ learning experience.</li> <li>Gregg Mason, Gerald Anzalone, and Gordon Handte discussed the logistical and cost-prohibitive factors which prevent our campuses from acquiring a human</li> </ul>

		<p>donor body for cadaveric dissection and student learning with a prosection. Previously, Dr. Handte attempted to establish a professional relationship with local morgues and hospitals and met with resistance from medical examiners. Gregg Mason and Gerald Anzalone would like to research the feasibility of establishing a relationship with the University of South Florida in Tampa for the purpose of bringing students interested in studying human donor bodies to the medical school's gross anatomy lab once per semester.</p> <ul style="list-style-type: none"><li>• Gerald Anzalone is investigating the use of the Vernier LabQuest 2 digital data collection device. The Charlotte campus has approximately a dozen of these units with blood pressure cuffs and sensors. There are no operating instructions or user manuals available. Additional applications include EKG sensors and leads, spirometry, electromyography, pulse oxygen sensors, and pulse heart rate sensors.</li></ul>
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*\*Minutes edited, correlated, and recorded by Dr. Peggy Romeo*