

SCIENCE DEPARTMENT MEETING MINUTES*

FRIDAY, MARCH 11, 2022

FACULTY	PRESENT	ABSENT	EXCUSED
Anzalone, Gerald	X		
Cameron, Angus			х
Coman, Luminita	x		
Coman, Marius	х		
Commendatore, Eric	X		
Donini, Jordan	Х		
Gaidos, Gabriel	Х		
Hilton, Kim	Х		
Hooks, Ed	Х		
Koepke, Jay		Х	
Lehigh, Corey	Х		
Liu, Qin	Х		
Lydon, Christina	Х		
Manacheril, George			Х
Mason, Gregg	Х		
McKenzie, Jonathan	Х		
Nittis, Thalia			X
Ottman, Tina	Х		
Pasishnyk, Serhiy	Х		
Paudel, Yadab	Х		
Porter, Emily	Х		
Robinson, Judy	Х		
Romeo, Peggy	Х		
Samaliazad, Esmaeel	Х		
Sauer, Mike	Х		
Slisher, Jessica	Х		
Tirado, Sandra			x
Ulrich, Melanie	Х		
Vala, Teju	Х		
Verga, Vera	Х		
Witty, Mike	Х		
Xue, Di	Х		
Zalessov, Valentin	Х		

ADJUNCT FACULTY/Guests

Helena Kashleva	x
Ralph Laudan	х



Discussions		
No.	Торіс	Highlights
1.	<i>Meetings by Disciplines</i>	For the March meeting, faculty met by disciplines in order to review last semester's goals & assessment results, and based upon the discussions, set new Fall 2022 goals.
2.	Biology/Nutrition /Micro	Present: Peggy Romeo, Tina Ottman, Jordan Donini, Vera Verga, Melanie Ulrich, Mike Witty, Jessica Slisher, Gabe Gaidos, Helena Kashleva,
	Meeting facilitated by Peggy Romeo Minutes submitted by Peggy Romeo	Discussion : Faculty reviewed assessment data collected from Fall 2021 Common Final results. Due to using various online modalities which was new to many faculty, we had decided not to administer the common final for some courses due to the possibility of compromising the final. After reviewing the goals from last year, faculty decided to continue with the same goals for HUN1201 with a couple changes reflected below. For BSC1010, BSC1011, and BSC1005, since our revised Course Learning Outcomes have been accepted by the Curriculum Committee, these Learning Outcomes will go into effect Fall 2022. For these three courses, we will have alternative common assessments ready to be initiated Fall 2022. For MCB2010C the Learning Outcome #8 showed as the lowest mean score, so faculty will update the questions for that particular LO.
		Next year goals for the individual courses are:
		 BSC1005: Syllabus change for new LO's was approved by Curriculum Committee, so need to wait until Fall 2022 to initiate plan! Faculty will continue with the goal that by the end of Spring 2022 we will create a Common Assessment that targets two or three Course LO's which will possibly target Photosynthesis/Respiration/Climate change discussion. BSC1010: Syllabus change for new LO's was approved by Curriculum Committee as need to wait until Fall 2022 to initiate plant. This Spring
		2022 we'll be using the current Common Final again. All ground courses plus Jessica Slisher, Peggy & Vera's online courses will also be using the Common Final.
		By the end of Spring 2022 we will decide on an alternative assessment, most likely targeting three or four Course LO's.
		• BSC1011: Syllabus change for new LO's was approved by Curriculum Committee, so need to wait until Fall 2022 to initiate plan! This Spring 2022 we'll be using the current Common Final again. By the end of Spring 2022 we will decide on an alternative assessment, most likely targeting four Course LO's. Tina has a pre-post assessment started and Peggy & Tina will work together on a pool of questions for a Canvas quiz to use for Fall 2022.
		• HUN1201: Faculty will design a Pre/Post assessment which will target three or four Course Learning Outcomes. In progress; a Common final will be ready for Fall 2022. Still talking about creating a health-care oriented course. Will work with new dean to help get direction and get ball rolling. On hold until get new quizzes to go with new courses.
		• MCB2010C: Several ground courses ran for Fall 2021 and so we had more data than the previous semester. Based on the Fall 2021 report, we need to



		revisit LO 8 due to low mean score (38%). Once we tweak the questions related to this LO, will use this newly revised exam for Fall 2022.
		In addition to working on assessment, faculty discussed
		 The need to get final grades for our courses more in line; faculty are especially concerned with success rates for some courses averaging in the A-range. Potentially meeting with nurses to talk about content covered in A&P and Microbiology and the possibility of adding BSC1010 back into their curriculum. P. Romeo will see if she can arrange a meeting before the end of the semester.
		The meeting ended at 2:30 pm.
3.	Physics/Astro	The group discussed the Fall assessment reports for PHY2048 and ISC1001C .
	Meeting facilitated by Marius Coman Minutes submitted by Marius Coman	• PHY2048 Group is satisfied with: "In a study comparing modalities, traditional artifact mean scores are the highest at 21.0 points followed by asynchronous online at 19.9, or 3%-points lower, and then live online, at 14.6, or 17%-points lower still. Results of an ANOVA do not exhibit a statistically significant difference between sites." Group considers that ~10% are easy questions and ~10% difficult questions is a fair distribution. "In an item analysis of the 33 questions, a total of 8 of 33 questions exhibit scores outside the range of what is typically defined as acceptable or reasonable, compared with 4/33 in fall 2020, 4/33 in fall 2019, and 13/33 in fall 2018. Questions 1, 4, 18 and 24 exhibit item difficulty levels categorized as 'too easy' according to accepted standards. Additionally, questions 13, 14, 20, and 26 exhibit item difficulty categorized as 'too difficult' according to accepted standards." Shall we reformulate Q21? No. Q21. A 3kg block travels around a 1.32m radius circle with an angular velocity of 223 $\frac{rad}{s}$. The magnitude of its angular momentum about the center of the circle is: a 63.0 $\frac{kg \cdot m^2}{s}$ b. 125 $\frac{kg \cdot m^2}{s}$ c. 48 $\frac{kg \cdot m^2}{s}$ d. 172 $\frac{kg \cdot m^2}{s}$ SLO: Studying rotational motion, investigating the concept of angular momentum $\vec{L} = \vec{r} \times \vec{p}$
		• Goal : We are going to implement an activity using an interactive simulation- credit Univ of Colorado -grant NSF- so students would get a better grasp of the angular momentum concept;



		SLO : Studying rotational motion, investigating the concept of angular momentum
		Shall we implement the activity in section/class only and then compare with the other sections/classes?
		Question: Will the activity be implemented in all sections/classes?
		Who, what: Yadab will design an activity and we'll each contribute to it; TO be implemented in Fall of 2022.
		ISC1001: Goal will be rolled over; No of questions will be modified from 20 to 25.
		• ISC1001C: LO will be re-mapped to questions.
4.	Envir/Ocea/Earth	Attendees: Jon McKenzie, Michael Sauer
	Meeting facilitated by Jon McKenzie	Assessment Results: Looked over the results of the EVR assessment. Appears that there is a significant difference between dual-enrollment students and traditional. Also, significant differences between campuses with Hendry Glades
	Jon McKenzie	having the highest success and Collier having the lowest. Lee had significantly more students than the other campuses. We looked over the questions that had the lowest success rates and are looking at editing the questions if the wording seems difficult.
		2021 Goals were mostly met. We have edited the EVR online course over the past year to fix any issues that arose during its initial run last year. We are finally getting data from the common assessment so we will continue to watch this as more students take the exam.
		2022 Goals: Continue to modify final assessment as data indicates. Develop pre/post in problem areas Look into assessments for online courses. Develop pre/post assignments and give to both ground and online to test feasibility.
5.	Chemistry	There seems to be an issue with access to the assessments in general, and there is concern that the online (Proctorio) assessments are nowhere to be found if
	Meeting facilitated by Eric Commendatore	they were analyzed at all. Eric is following up with Dr. Van Gaalen and Dr. Coman to address this and confirm that online assessments will be counted as were discussed during lookdowns.
	Minutes submitted by	
	Eric Commendatore	• For this semester: CHM 2211 common final is being altered prior to administering the final exams.
		 For next year: We will be working on readjusting learning outcomes for CHM 2025/L and CHM 1020C. The hope is that we will have an optional intro to chemistry class which will hopefully cut down on student course loads as they pursue a STEM associate's degree. Additionally, CHM 1020C would be altered to offer a non-science/non-health major chemistry course. This will require new/updated learning outcomes, new/updated syllabi, and new/updated course descriptions. We will set up a chemistry google file share or a dropbox so it is easier to access and exchange exams, course materials, and assessments in one solid location. CHM 2210/2211 will change its text IF a suitable OER option is found.



6.	A&P	Anatomy & Physiology Discipline Meeting Minutes
	Meeting facilitated by Jerry Anzalone	March 11, 2022 10:00 AM – 11:10 AM
	Minutes submitted by Jerry Anzalone	In attendance: Dr. Gerald Anzalone, Dr. Ed Hooks, Dr. Corey Lehigh, Dr. Gregg Mason, Dr. Esmaeel Samaliazad, Dr. Tejendrasinh Vala (A&P 1 course supervisor)
		Agenda Items:
		 1. Course Common Assessments: Dr. Hooks proposed five questions selected and modified from the pool of assessment questions submitted online. The faculty approved these questions and elected to select an additional five questions for discussion during next month's meeting. The faculty agreed to compile a total of 10 assessment questions for the common assessment. Dr. Hooks will select an additional five questions for discussion at our next meeting. Dr. van Gaalen had previously mentioned that we are not required to assess every learning outcome in each cycle of common testing. The faculty discussed whether the common assessment should be administered on Canvas or as a traditional paper test. Concerns about Adaptive Services accommodations for Canvas testing were discussed. Further discussions with a resolution will take place at our next meeting on this topic. 2. The meeting adjourned at 11:10 AM. The next meeting will take place on Friday, April 8, 2022, at 10:00 AM. The link for the meeting is: https://fsw.zoom.us/j/83123014723 Meeting ID: 831 2301 4723 Passcode: 236536
	7. Charlotte	Charlotte Science Committee Meeting Minutes:
	Science Committee	March 11, 2022
	Meeting	1:30 – 2:30 PM
	Meeting facilitated by Jerry Anzalone Minutes submitted by	In attendance: Dr. Gerald Anzalone (Anatomy & Physiology, Human Biology, Medical Terminology), Jacqueline Calvano (Science Lab Manager), Dr. Ralph Laudan (Anatomy & Physiology), Christina Lydon (Chemistry), Dr. Gregg Mason (Anatomy & Physiology), Professor Ludy
	Jerry Anzalone	Robinson (Biology, Oceanography, Environmental Science)
		Agenda Items:
		1. Charlotte Campus Open House:
		Open House was held on 3/1/22. The science faculty contributed with demonstrations reflecting themes from this year's OBOC selection, A Life on Our Planet, by David Attenborough.



	Jacque Calvano organized the table reservations, created signs with this year's slogan (Science is Our Superpower) and animations of the Charlotte science faculty portrayed as superheroes, and she participated in the set-up and breakdown.
	Professor Robinson demonstrated how fluid dynamics affect the climate. She also showed how hydroponic gardening provides an environmentally friendly alternative to conventional gardening using edible plants.
	Dr. Lydon demonstrated how a working knowledge of chemistry empowers consumers to understand the economic impact of consumer purchases on the environment and human health using models and a variety of household items.
	Dr. Anzalone and Dr. Mason used bone, muscle, and organ models to discuss the human impact on the evolutionary development of life on our planet.
	Dr. Anzalone dressed as a pirate to encourage future Buccaneers to come aboard FSW.
	2. Lab Conditions:
	The chemistry lab remains infested with termites. They have caused significant damage to numerous wooden cabinets, drawers, and tables. Dr. Lydon and Jacque Calvano have notified Dr. McClinton. Facilities has inspected the lab.
	The autoclave door has been repaired. Jacque has received conflicting instructions from administration and accounts payable. Dr. McClinton and Andy Buck authorized Jacque to hire an outside contractor to repair the autoclave door. However, the contractor found that autoclave's electrical cord must be replaced at a cost of about \$300. Jacque has informed Dr. McClinton.
	The insufficient wiring to the G building has also damaged the electrical cords to several other pieces of equipment, including chemistry hotplates. Jacque has discussed this with Dr. McClinton.
	3. Faculty STEM Mentorship:
	Dr. Rath responded by email regarding the science faculty's proposal to help mentor STEM students. He has discussed this idea with Dr. McClinton and said he would convene a meeting between the science faculty and his advisors to further explore the idea sometime in April. So far, this has not happened.
	4. FEE Grants:
	The Office of Sponsored Programs and Research is currently accepting applications for the Foundation Educational Excellence (FEE) Grant. The deadline is April 1, 2022 (funding available May 1, 2022). For more information:
	https://www.fsw.edu/facultystaff/ospr
	Contact Jessica Godwin (jessica.godwin@fsw.edu)



		Contact Dr. Joseph van Gaalen (joseph.vangaalen@fsw.edu)
		5. A&P Labs:
		Dr. Laudan and Dr. Anzalone will introduce several additional case studies in A&P 2 for the digestive system and the renal system to help encourage critical thinking and collaborative learning among students.
		6. Transdisciplinary Education:
		Dr. Anzalone recently received an ARC Grant for CRISPR/Cas gene targeting experiments. Jacque will purchase a small countertop freezer and the MiniPCR Knockout kits with the grant funding. Professor Robinson and Dr. Anzalone will co-teach an extra-curricular student research project using these kits in the Fall 2022 semester. Professor Robinson will incorporate a paper CRISPR/Cas paper snail cloning model into the experiment. Dr. Anzalone will incorporate a CRISPR/Cas paper sickle cell anemia model into the experiment. Students will create poster presentations detailing their experiments and relate their findings to real-world situations.
		7. The meeting adjourned at 2:30 PM. The next meeting is scheduled for Friday, April 8, 2022, at 1:30 PM.
7.	Next Department Meeting	The next meeting, scheduled for April 8 @ 1:00 via Zoom, will be followed by discipline breakouts for discussion of textbook adoptions.

*Minutes were compiled, recorded & submitted by Dr. Peggy Romeo