SCIENCE DEPARTMENT MEETING MINUTES*

FRIDAY, SEPTEMBER 14, 2018

Location: Online (SCOPE) Discipline Groups

A&P/HSC Discipline Group

FACULTY	PRESENT	ABSENT	EXCUSED
Fay, Erik	x		
Hepner, Roy	x		
Hermann, Henry	x		
Hooks, Ed	x		
Koepke, Jay	x		
McCombs, Glenn	x		
Mera, Leonel		x	
Samaliazad, Esmaeel		x	
Shaw, Mary	x		
Vala, Teju	x		
Wolfson, Jed	x		
ADJUNCT FACULTY			
Gordon Handte	x		
Martin McClinton	x		

BIO/MICRO/NUTRITION Discipline Group

FACULTY	PRESENT	ABSENT	EXCUSED
Cameron, Angus	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	
	x		
ADJUNCT FACULTY			
Ann Mantell	x		
Elizaeth McElaney	x		
Helena Kashieva	x		
Sandra Tirado Dela Espriella	x		

CHEMISTRY Discipline Group

FACULTY (*Chemistry*)	PRESENT	ABSENT	EXCUSED
Kurt Donaldson		x	
Hilton, Kim	x		
Liu, Qin	x		
McGarity, Lisa	x		
Page, Rebecca	x		
Pasishnyk, Serhiy	x		
Xue, Di	x		
ADJUNCT FACULTY			
Katherine Longmire-Perez	x		
Martin McClinton	x		

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			
Sarah Dilling	x		

PHYSICS/ASTRONOMY Discipline Group

FACULTY (*Phys/Astronomy*)	PRESENT	ABSENT	EXCUSED
Coman, Marius	x		
Manacheril, George	x		
Paudel, Yadab	x		

Discussions		
No.	**Topic**	**Highlights**
1.	***Break-outs into Discipline Meetings***	For the September 14th meeting, disciplines within our department met separately to discuss syllabus updates, GenEd competencies, and course-level assessment. 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. The minutes for each of the five discipline-group minutes are itemized in the following table.
2.	***Next Meeting***	The next meeting, scheduled for **October 12, @ 1:00 – 3:00,** will again be limited to the discipline-specific groups. All groups will conduct their meeting using the Blue Button of SCOPE.

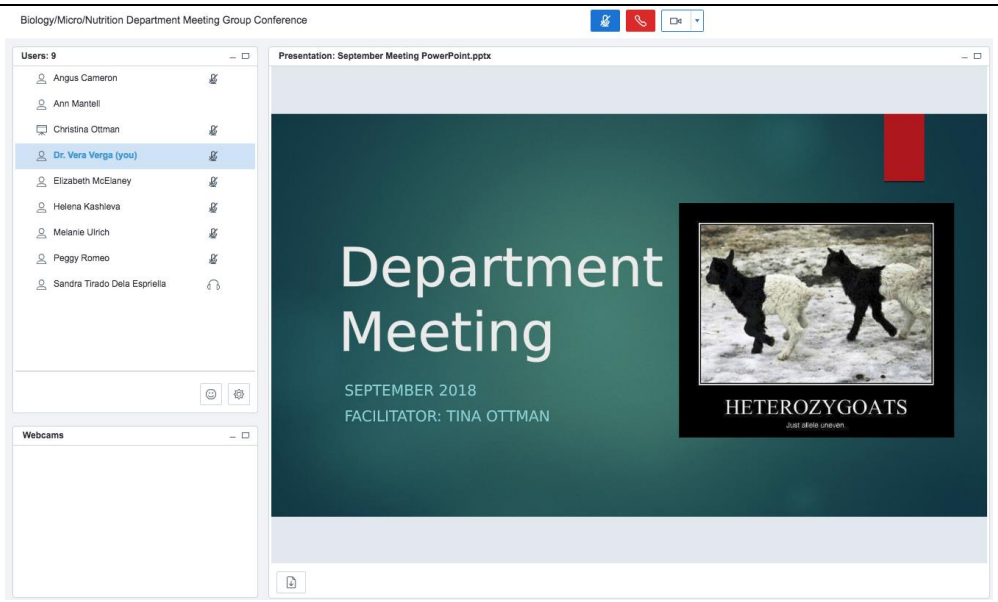
Discipline Group Discussions		
No.	**Group**	**Highlights**
1.	**Physics/Astronomy** Meeting was facilitated and minutes were prepared by *Marius Coman*	• Discuss adding a 2nd competency; We already got 2 NO votes; 1 yes, 1 50-50 or abstaining • Discuss assessment results see link posted under files, assessmentAug2018 • George gave feedback for ISC1001; feedback has been entered into compliance assist • The mapping of the SLO to questions has been posted for review • All in favor. • Yadab informed PHY2048 new common final exam should be ready before mid-October Present Marius, George, Yadab contributed at a later time.

Discipline Group Discussions

No.	*Group*	*Highlights*

2.	**Biology/Micro/ Nutrition**
	Meeting was facilitated by Tina Ottman; general meeting minutes were prepared by Vera Verga
		Tina asked if there were any questions and any new folks needing anything; all is well.
		
		Agenda
		• GenEd competencies on Syllabi: Need to add a second one (per Dean)
		• Course Assessment results
		• Need to facilitate (Tina has separate discussions for us to go to)
		• Curriculum Assessment
		• If any are needed changes must be made.
		
		Peggy stated curriculum changes by October 15th
		
		From PowerPoint from Dean McClinton
		
		1. Integral outcome...needs to change or add one… add a supplemental or a change
		2. Suggested list of CREATIVE
		
		Examples: Communicate or research
		Thinking or engage… none used for Science… maybe get it done
		If no changes to the curriculum you can use asterisks
		
		Helena question: If change competency needs quality assessment to make sure we are meeting it in the course.
		
		Competency descriptions are in the syllabus.
		
		Things to do in course discussions
		• Detail in minutes must be sent by course supervisor
		• Check your syllabus
		• Decide whether or not to add to the learning outcome
		• If add a supplemental use the learning outcomes to support the secondary. May need to change template unless:
		  ○ If only need asterisk.
		  ○ Must send supporting LO to match the competency.
		
		Course Assessment
		Martin: Course and discipline
		Listed all disciplines BSC1005 C and L
		BSC1010 and BSC1010L; Micro; BSC1011 L and BSC1011
		
		Need rotation so
		Each course: From the discussions on Assessment
		• Two successes and two improvements need to be listed and given to Martin

		Each group must do this; three sections moving forward. From Peggy: FOR SACS looking at the assessments, looking at good outcomes and poor outcomes. What is being done to address this? Discussion where the latest data from Van Gaalen is: • Not sure where the data is? • Need data before we can discuss. • Data was found and posted to files **Courses without Common Assessments in course** BSC1005 Working on it for the Fall BSC1011 revised and be done by Fall. Get a common final done within next two weeks. For these courses by Sept 28th **Other courses:** BSC1010 common final good Micro common final good Nutrition. no common final yet. Lisa want to address one common final question about cell signaling in BSC1010. • Tina emphasized the security and integrity of common finals • Remind us about the form to use for the fall • No common review • Must be the final exam and/or part thereof. It is a Professor's choice how it is used. Peggy did find common assessments and posted them to the files. Meeting ended with people going to their respective courses, separate minutes for each group are attached to the group on canvas by the course supervisors. Included below are screen shots of PowerPoint, those in attendance and also the threaded discussion by the faculty present.



Individual Discussion Group Minutes:

1. **BSC1005 Discussion Group** (Prepared by Jessica Slisher)

- Peggy started the discussion be clarifying any changes will need to be submitted by Oct. 15, 2018.
- Marcela Trevino suggested to create a detailed course content outline, from which to draw general learning outcomes and common final exam questions.
- It was agreed the BSC1005 syllabus learning outcomes will be revised.
- Peggy Romeo suggested removing "evaluate" to "engage" as the primary general education competency. Marcela Trevino and Carol Kennedy agreed with the suggestion.
- Angus Cameron also suggested "think" as a primary Gen Ed competency. Peggy Romeo agreed.
- Peggy Romeo and Jessica Slisher requested an in person meeting to complete the BSC1005 task on September 21, 2018 on Lee campus after the faculty senate meeting. Gus agreed to attend via conference call since he is in Labelle. Lisa Hermann confirmed Fridays was good. Mike Witty stated he taught Friday morning. Jessica Slisher restated the syllabus changes will need to be submitted to the curriculum committee by October 15, 2018.
- Lisa Hermann questioned if the Punnet square and figuring percentages could pertain to "evaluate" for general education competency
- Peggy Romeo proposed "evaluate" as the secondary general education competency due to sustainability. Jessica Slisher agreed. Jessica Slisher clarified Task #2 in the discussion was not pertinent and unable to complete since BSC1005 has no common final exam and no course assessment data from Marius.
- Marcela Trevino moved to adjourn the meeting. Peggy Romeo agreed.

2. BSC1010 Discussion Group (Prepared by Marcela Trevino)

Participants:

- Angus Cameron
- Lisa Hermann
- Tina Ottman
- Peggy Romeo
- Marcela Trevino, Course Supervisor

We addressed the following tasks assigned by Dr. McClinton.

Task #1: Review your course GenEd competency and consider if you still want to keep it as the primary competency; consider adding a second competency; add a single asterisk next to the course learning outcomes that address the primary competency; and add two asterisks to the learning outcome/s that cover the second competency. If the only changes your group makes to the syllabus are the insertion of the asterisks...those do not need to go to the curriculum committee for approval, but if you change or add a competency - those changes will need to be submitted to the curriculum committee.

OUTCOMES:

- The group discussed and agreed to make the changes listed below to the BSC1010 and BSC1010L syllabus templates, which will be submitted to CC prior to the 10/15/18 deadline.

Task #2: Review your course assessment data (from Marius) and discuss successes and areas for improvement. Make written notes of at least 2 successes, as well as goals for improvements.

OUTCOMES:

- We considered the following Common Assessment report comments from Joe VanGalen:

  - *"For the spring 2018 assessment, 366 artifacts were collected for BSC 1010 from 16 of 19 course sections. One section reported data using the old (Fall 2016) assessment in which only 28 questions were employed. Two other sections did not report data.*
  - *Online artifacts mean scores are 6.6 lower than traditional artifacts. This result largely stems from one of the two online sections which exhibits substantially lower scores than the other."*

Accordingly, our successes are as follows:

1. We have increased the participation by 1010 faculty using the common final exam.
2. The above success has led to more 1010 faculty taking an active role in creating a meaningful assessment.

Our goals for improvements are:

1. We plan to discuss course-level assessment after the Fall term, and again after the Spring term, to identify areas that need improvement. This way we don't wait a full year to create goals to improve. We are currently waiting to have the complete course assessment report from Marius Corman to identify areas of strength and/or improvement.
2. Have a specific training/conversation with our adjunct BSC1010 faculty to make sure they are fully aware of/and planning to use the common final, so that we may reach 100% participation.

BSC1010

A. General Education Competencies and Course Outcomes

1. Listed here are the course outcomes/objectives assessed in this course which play an integral part in contributing to the student's general education along with the general education competency it supports.

General Education Competency: **Think (integral) and Evaluate (supplemental)**

Course Outcomes or Objectives Supporting the General Education Competency Selected:

Describe the characteristics of living organisms.

- Describe basic atomic structure and its role in the formation of chemical bonds.**
- Relate chemical bonds to the structure of the major biomolecules.
- Explain how the special properties of water make life possible.*Compare and contrast the structure and function of prokaryotic and eukaryotic cell components.
- Explain the role of energy transfer in biological processes.*
- Describe the function of enzymes and enzyme inhibitors in biochemical reactions.
- Relate the structure of biological membranes to their functions.*
- Identify mechanisms involved in cell communication and response to stimuli.
- Explain how photosynthetic organisms convert light energy to chemical energy.
- Explain how cells convert chemical energy in fuel molecules into usable energy.
- Explain how cells store and use genetic information.*
- Explain how prokaryotes and eukaryotes regulate gene expression
- Explain the cellular life cycle including DNA replication, cell division and control mechanisms.
- Summarize how genetic information is passed from one generation to the next during reproduction.
- Interpret the laws governing inheritance.**

BSC1010L

A. General Education Competencies and Course Outcomes

1. Listed here are the course outcomes/objectives assessed in this course which play an integral part in contributing to the student's general education along with the general education competency it supports.

General Education Competency: **Evaluate (integral) and Communicate (supplemental)**

Course Outcomes or Objectives Supporting the General Education Competency Selected:

- Demonstrate an understanding of science as a way of knowing and inquiry.
- Apply the elements of the scientific method to answer a scientific problem.*
- Analyze and graph scientific data, using computer-based data management and presentation programs.**
- Properly use scientific procedures and equipment during experiments, including but not limited to microscopes, spectrophotometers, analytical balances, chromatography, and volumetric pipette delivery systems.

2. **BSC1011/L Discussion Group** (Prepared by Tina Ottman)

Participants:

- Tina Ottman
- Peggy Romeo
- Jessica Slisher

Absent:

- Mike Witty

We addressed the following tasks assigned by Dr. McClinton.

Task #1: Review your course GenEd competency and consider if you still want to keep it as the primary competency; consider adding a second competency; add a single asterisk next to the course learning outcomes that address the primary competency; and add two asterisks to the learning outcome/s that cover the second competency. If the only changes your group makes to the syllabus are the insertion of the asterisks...those do not need to go to the curriculum committee for approval, but if you change or add a competency - those changes will need to be submitted to the curriculum committee.

OUTCOMES:

The group discussed and agreed to make the changes listed below to the BSC1011 and BSC1011L syllabus templates, which will be submitted to CC prior to the 10/15/18 deadline.

		<u>BSC1011</u> **A. General Education Competencies and Course Outcomes** 1. Listed here are the course outcomes/objectives assessed in this course which play an integral part in contributing to the student's general education along with the general education competency it supports. General Education Competency: these will change **FROM Evaluate (integral) and Communicate (supplemental) TO Communicate (integral)* and Think (supplemental)**** Course Outcomes or Objectives Supporting the General Education Competency Selected:

Chapter LO		BSC1011 Student Learning Outcomes
12	1	Describe the historical development of the evolutionary theory.
	2	Analyze and interpret the theory of natural selection and its role in evolution.*
	3	Calculate evolutionary changes in populations using the Hardy-Weinberg equilibrium theorem.
	4	Interpret the processes of microevolution and compare various methods for change in gene frequency.
13	5	Evaluate the fossil, biogeographic, and genetic evidence that supports the theory of evolution. **
14-a	6	Compare pre-zygotic and post-zygotic barriers to successful reproduction and examine their role in allopatric and sympatric modes of speciation.*
14-b	7	Analyze hierarchical classification and its relation to evolutionary relationships among species.
15	8	Appraise the most recent theory of the history of life on Earth.
16	9	Examine the structure and characteristics of viruses and compare the differences and similarities between viruses and living cells. **
17	10	Differentiate between the heterotrophic bacteria, cyanobacteria, and the archaea.
18	11	Examine the common algae, protozoa, and other protists and appraise their classification status.
19	12	Review the main groups of the plant kingdom and identify adaptations involved in their evolutionary movement from an aquatic to a terrestrial lifestyle.
19	13	Compare similarities and differences in the alternation of generations life cycles among the main groups of the plant kingdom.
20	14	Summarize the characteristics of the various members of the fungi kingdom.
21	15	Evaluate the process of embryonic development in animals.
21	16	Examine characteristics of the major animal phyla and identify the evolutionary adaptations necessary for the transition from water to land in the Chordates.
36	17	Compare the interplay between innate behavior and learned behavior.
37	18	Analyze population growth patterns and the factors that influence them.
38	19	Analyze and interpret the structure of ecosystems.
38	20	Describe the relationships and interactions among biotic and abiotic ecosystem components.
38	21	Analyze and interpret the roles of predation, competition and cooperation in maintaining community-level structure and function.

39	22	Evaluate the role that ocean currents, rotation of the Earth, and seasonal changes have on the major biomes on Earth.
39	23	Analyze and appraise the similarities and differences between and among the major ecosystems and biomes.
40	24	Examine the threats to biodiversity and the current methods of ecological conservation.
40	25	Calculate and analyze resource use by human populations and identify methods for lowering individual ecological footprints. *

BSC1011L

A. General Education Competencies and Course Outcomes

1. Listed here are the course outcomes/objectives assessed in this course which play an integral part in contributing to the student's general education along with the general education competency it supports.

General Education Competency: These will change **FROM Evaluate (integral) and Communicate (supplemental) TO Evaluate (integral)* and Investigate (supplemental)****

Course Outcomes or Objectives Supporting the General Education Competency Selected:

- Appraise population genetics and its role in producing genetic diversity. *
- Analyze and evaluate the role of species diversity (biodiversity) on Earth and its adaptive significance.
- Analyze the evidence for evolution.
- Compare and contrast the interrelated biotic and abiotic components of complex ecosystems.
- Assess how altering one environmental factor may have far reaching effects on other components of the ecosystem.
- Analyze the different strategies employed by plants and animals in regulating their metabolism.
- Analyze scientific issues and propose solutions to scientific problems using concepts covered in this class.**
- Formulate common approaches in solving problems through group work.

Task #2: Review your course assessment data (from Marius) and discuss successes and areas for improvement. Make written notes of at least 2 successes, as well as goals for improvements.

OUTCOMES:

Here is the summary of the 1011 assessment report:

1. In a longitudinal study of item analytics, questions 6, 8, 20, 38, and 49 exhibit consistently poor scores in all item analytics. Questions 4, 5, 11, 21, 22, 25, 26, and 30 exhibit consistently poor scores in two of three analytics.

Goal for improvement: These questions will be reviewed and either reworded or replaced with the development of the new common final exam this semester.

2. In a longitudinal study of SLO achievement, SLOs 5, 7, and 8 are consistently the highest scoring. SLOs 9 and 10 are consistently the lowest of all SLOs. SLOs 1, 3, 4, 5, 6, 9, and 10 exhibit a consistent decline over the past three spring terms.

Goal for improvement: The Spring 2018 assessment results outline the LOs from our old syllabus, in which we only had 10 Learning Outcomes. The question associated with LO9 and LO10 includes an energy flow diagram that many students find confusing. We will revise this diagram to improve the outcome on the new common final exam being developed.

3. In a longitudinal study of score distribution, the most recent spring term exhibits a shift towards lower scores. Spring 2018 also exhibits a smaller negative skew compared to previous terms.
Reflection: This was the first assessment for BSC 1011 that included the online BSC 1011 course – which most likely explains the shift. Further comparisons will be made once we have more years of data to consider.

Successes:

1. Many of the previous LOs were a combination of several concepts and topics. Also, while some of the LOs had several questions which applied to them, others had very few. Due to the ambiguity of our previous LOs with questions that did not necessarily correspond to a specific LO, we updated and clarified our LOs (from 10 to 25).

2. Due to inconsistency in addressing LOs equally between the old LOs and the exam, we are planning to update the exam. We will be constructing an exam with 2 questions per LO to ensure all the LOs are equally weighted on the new exam. Then we can more accurately compare performance among questions for particular LOs.

3. BSC2010C Discussion Group (Prepared by Vera Verga)

Participants:

- Melanie Ulrich
- Vera Verga, Course Supervisor
- Ann Mantell sent comments via email.
- (Mike Witty commented on discussion thread)

We addressed the following tasks assigned by Dr. McClinton.

Task #1: Review your course GenEd competency and consider if you still want to keep it as the primary competency; consider adding a second competency; add a single asterisk next to the course learning outcomes that address the primary competency; and add two asterisks to the learning outcome/s that cover the second competency. If the only changes your group makes to the syllabus are the insertion

		of the asterisks...those do not need to go to the curriculum committee for approval, but if you change or add a competency - those changes will need to be submitted to the curriculum committee. **OUTCOMES:** • We discussed and agreed to make the changes listed below to the MCB 2010C syllabus templates, which will be submitted to CC prior to the 10/15/18 deadline. • We had started a discussion on adding immunology as a LO last Spring 2018 to be implemented in Fall 2019 so this will be completed. **Task #2:** Review your course assessment data (from Marius) and discuss successes and areas for improvement. Make written notes of at least 2 successes, as well as goals for improvements. **OUTCOMES:** We considered the following Common Assessment report comments from Joe VanGalen: For the spring 2018 assessment, 290 artifacts were collected for MCB 2010C from 16 course sections. Descriptive statistics within the current SLOs which are based in the course syllabus are shown in Table 5. A graphical representation is shown in Figure 5. Each SLO is defined by a collection of questions from the assessment that relate to the SLO. The average percent correct of those questions is compared here. SLO 3 exhibits the highest mean score at 80%. SLO 6 exhibits the lowest mean score at 40%. Accordingly, our successes are as follows: 1. We have 100% participation of the sections taught by MCB2010C faculty using the common final exam. 2. In examining the scores collected now since 2016 (3 times), our LO 1 has improved from 40% to over 50%. 3. We have already addressed one of the problem question 28 by changing wording. Our goals for improvements are: **1.** To improve overall percentage from low 60% to closer to 70%. *Vera, Melanie and Ann discussed this and believe we need higher buy-in by our students. We are all going to count it has a higher percentage in our test scores in the spring 2018 semester to see if they take it more seriously. Students have already figured out their grade and whether it will make a difference.* • We addressed quite a few of the questions that were too difficult or had weak discriminator and will be making changes to our common final. (see discussion thread on canvas for details) • We plan to increase the number of questions to 50

		MCB2010C **A. General Education Competencies and Course Outcomes** Listed here are the course outcomes/objectives assessed in this course which play an integral part in contributing to the student's general education along with the general education competency it supports. General Education Competency: **Evaluate (integral)* and Communicate (supplemental)**** Course Outcomes or Objectives Supporting the General Education Competency Selected: • Recognize and justify the important contributions made by scientists to microbiology • Compare and contrast the different types of microscopes and demonstrate proper use of a light microscope • Perform simple and differential staining techniques** • Distinguish between the morphology and functional anatomy of prokaryotic and eukaryotic microorganisms.* • Assess the key features of microbial metabolism and differentiate between microbial and non-microbial cellular metabolic pathway • Recognize the physical and chemical requirements for microbial growth and analyze the techniques used to measure microbial growth* • Evaluate the principles and methods used for the physical and chemical control of microorganisms* • Explain microbial genetics, mutation, and the mechanisms of genetic recombination in microbes** • Identify and appraise the classification, identification, and defining characteristics of the different groups of microorganisms • Explain methods of disease transmission, predisposing factors for disease, and the mechanisms of microbial pathogenicity** • Assess the causative agents, modes of transmission, clinical symptoms, and treatments for various human infectious diseases**

Discipline Group Discussions

No.	*Group*	*Highlights*
3.	**Environ/Ocean/ Earth Science/ Geology** Meeting was facilitated and minutes were prepared by *Jon McKenzie*	New Proposed Competencies to be added to the following classes: • EVR: Engage • ESC: Investigate • BSC1051: Engage • OCB: Communicate • OCE: Think Course Assessments: • Work on developing course assessment to match proposed competencies. • Have ready for Spring 2018. Merging OCB/OCE: • Discussed reasoning behind merging the two courses in an effort to increase enrollment and reduce course offerings. • Discussed what the course would be like. Essentially taking OCE and OCB and combining the existing material and added a laboratory component. Need to come up with name that attracts the students. • Need to figure out a potential book and lock down learning outcomes prior to November curriculum committee meeting.

Discipline Group Discussions		
No.	**Group**	**Highlights**
4.	**Chemistry** Meeting facilitated by Lisa McGarity; Minutes prepared by *Kim Hilton*	Agenda Common Assessments – How to Improve Scores Study Guides – *Course supervisors agreed to make "common" study guides as a standard for specific course to utilize.* 10% of Final Grade – *Discussed that 10% would motivate students more to prepare for the Common Final.* Approved Textbooks – *Lisa reviewed with everyone the requirement by the State of Florida to post the textbooks being used and each course as specified approved textbook that must be listed on syllabus.* *Discussion: Kim is working on CHM 2025L lab manual to be available for Fall, 2019. Discussion on chapter 6 remaining in CHM 2045 with Di and Becky checking on Learning Outcomes so there's no overlap in CHM 2045 and CHM 2046 for chapter 6. Lisa will contact publisher for the organic lab manual to bring back the caffeine lab for organic lab 2.* *Discussion of Pre-requisites for courses. Dr. McClinton recommends Intermediate Algebra for pre-req for CHM 2045. Dr. McClinton also suggests having a beginning level chemistry class for non-science majors. Kim will discuss further with Dr. McClinton other pre-req options for CHM 2045 in regards to bypass exam and high school transcripts. This will be after the CHM 2045 bypass exam completed in its functionality in Canvas. Lisa recommends all chemistry faculty assist with adding questions to the bypass exam. Becky will provide copies to everyone.* Curriculum Changes – *Becky is our curriculum committee member. If there are any curriculum changes they need to be sent to Becky and Dr. McClinton as soon as possible*. Department Meeting PowerPoint – *Lisa discussed the PowerPoint, explaining each section. We are going to continue the discussion and investigation into the need for additional general education competencies. For course assessment, improvements are being made with the addition of the study guides for the common finals.* Motion to adjourn was at 11:29am by Becky, second by Kim.

Discipline Group Discussions		
No.	**Group**	**Highlights**
5.	**A&P/HSC** Meeting was facilitated and minutes were prepared by *Jay Koepke*	**We addressed the following tasks assigned by Dr. McClinton.** **Task #1:** Review your course GenEd competency and consider if you still want to keep it as the primary competency; consider adding a second competency; add a single asterisk next to the course learning outcomes that address the primary competency; and add two asterisks to the learning outcome/s that cover the second competency. If the only changes your group makes to the syllabus are the insertion of the asterisks...those do not need to go to the curriculum committee for approval, but if you change or add a competency - those changes will need to be submitted to the curriculum committee. **OUTCOMES:** • The group discussed and agreed to make the changes listed below to the BSC1085C and BSC1086C syllabus templates, which will be submitted to CC prior to the 10/15/18 deadline. **BSC1085C** **A. General Education Competencies and Course Outcomes** 1. Listed here are the course outcomes/objectives assessed in this course which play an integral part in contributing to the student's general education along with the general education competency it supports. General Education Competency: these will change **FROM Communicate TO Communicate (integral)* and Think (supplemental)**** Course Outcomes or Objectives Supporting the General Education Competency Selected: Evaluate a disease or disorder in a body system.*/** **BSC1086C** **A. General Education Competencies and Course Outcomes** 1. Listed here are the course outcomes/objectives assessed in this course which play an integral part in contributing to the student's general education along with the general education competency it supports. General Education Competency: These will change **FROM Research (integral) TO Research (integral)* and Think (supplemental)****

		Course Outcomes or Objectives Supporting the General Education Competency Selected: Evaluate a disease or disorder in a body system.*/** **Task #2:** Review your course assessment data (from Marius) and discuss successes and areas for improvement. Make written notes of at least 2 successes, as well as goals for improvements. **OUTCOMES:** Summary of the BSC1085C assessment report: 1. In a longitudinal study of item analytics, questions 6,7,26 and 27 exhibit poor item analytics across all terms in the study. SLO 4 exhibits the highest average percent correct (80%) while SLO 15 exhibits the lowest percent correct (23%). **Goal for improvement:** It has been suggested that A&P faculty show in class or post on Canvas supplement lectures (Khan Academy) or an animation that supports SLO15. Summary of the BSC1086C assessment report: 1. In a longitudinal study of item analytics, questions 1 and 3 exhibit consistently poor scores in item analytics across both terms in the study. SLOs 12, 13 and 15 are consistently the highest scoring with SLO 12 being the highest average percent correct (74%). SLOs 4 and 5 are consistently the lowest of all SLOs with SLO 4 being the lowest percent correct (36%). **Goal for improvement:** It has been suggested that A&P faculty show in class or post on Canvas supplement lectures (Khan Academy) or an animation that supports SLO4. This learning outcome centers around a calculation but an overall understanding of topic could improve student's understanding of the basis and reasoning behind the calculation.

**Minutes edited, correlated, and recorded by Dr. Peggy Romeo*