Call To Order
The meeting was called to order at 12:00 on October 23, 2013 in Room 2502. Dr. Will Lynch presided.

Approval of Minutes
The Minutes from September 25, 2013 were approved as presented.

New Business
A. Faculty Senate Up-date
Dr. Baird reported the following from the October 21st Faculty Senate Meeting:

i- The President vetoed the Faculty Senate’s New Administrative Positions Freeze bill.

ii- The Faculty Salary Analysis Bill passed and that will be done every three years from now on.

iii- The Biochemistry Courses were all approved without any modifications.

iv- Two commendations were made:
   A. The first one for Dr. Mark Finlay, Assistant Dean of the College of Liberal Arts and Professor of History, who passed away after serving the university for 20 years as teacher, mentor, colleague, scholar and administrator. The Faculty Senate expressed its deep sadness at the untimely passing of Dr. Finlay. His family expressed its gratitude for the resolution. Dr. Finlay’s family has been invited to attend the November 2013 Faculty Senate Meeting and at that time the signed resolution will be presented to them.

   B. The second commendation was for ITS Network Upgrades, which were made in a smooth and professional way, with minimal interruptions in service and has received very positive comments.

   v- The Administration is behind the Domestic Partners Benefits Bill even though currently the same does not have any funding. Rebecca Carroll, Director of Human Resources, was present in the faculty senate meeting showing support on its behalf.

   vi- And lastly, an up-date regarding Committee Restructuring was given. The Senate decided to get rid of a number of committees that already have their own structure and are not under the Senate. The Senate’s decision does not imply that such committees are not worth having but rather that can best complete their tasks independently and since they never really send anything to the
Senate, they have no need to be under the Senate. Among these committees are the International Education, Honors, Writing, Library and Interdisciplinary.

B. Budget 2013/2014
   i. Status Up-date for 2013/2014 Budget
   A brief up-date of the 2013/2014 department budget status was given by Dr. Lynch.

   ii. 2014/2015 Laboratory Fees in the Department of Chemistry and Physics
   Last month the faculty was made aware of the status of the lab fees of the department in comparison with its peers across the State of Georgia. In view of that, the Chemistry side of the department decided not to ask for an increase in lab fees for the time being. The Physics side of the department needs to make a decision soon since this information usually is required around the month of December.

C. Chemistry Curriculum Items
   Last year the department tried to pass through the curriculum process CHEM 1100, which was a 3-hour lecture course on the Chemistry of the Environment. The idea was that there would be a general interest to talk about global warming, pollution and environmental issues from the chemical standpoint to the general population and perhaps down the road move to an online format for the course. Unfortunately, the BOR denied the implementation of the course for reasons that are still not clear; even though, there was a single statement saying that the course might be of interest to the College of Education.

   This year the department started from scratch and ended up modifying a course that is already in the core, SCIE 1212, which seems to be a close match to the CHEM 1100 that was denied. This way all that needs to be done is a local change. The description of the lecture, lab and pre-reqs of SCIE 1212 were adjusted so that the course meets the original objective of CHEM 1100. Over the years if we decide we want to go online with this course, the description can be modified again.

   A motion was made to adopt this course and the department voted unanimously in favor of the adoption of the course. Please refer to Attachment #1 for more details.

Dr. Nivens asked the department to endorse the Environmental Studies Minor, which will replace CHEM 1100, that does not exist, with SCIE 1212. The faculty voted unanimously in favor of endorsing SCIE 1212. For more details, please refer to Attachment #2.

D. Chemistry/Physics Planning
   Both the Chemistry and Physics sides of the department have made their priorities regarding instrumentation and technology and will continue to revise it on a monthly basis. For more details, please refer to Attachment #3.

E. Peer Mentoring Guidelines and Rotation.
   The faculty voted unanimously to adopt the attached departmental Peer Review of Instructions for Mentoring Guidelines. For more details, refer to Attachment #4.

F. DFW Rates in Courses – Discussion Item
   The Dean’s Office asked the department to review and discuss the DFW rates in our courses. The DFW rates in courses have been reviewed and the department will inform the Dean what our decision was as we move forward.
G. Calendar 2013/2014
Dr. MacGowan briefly informed the faculty about some of the items that are being considered by the Calendar Committee regarding the 2014/2015 calendar in order to get some feedback from the faculty. Among those items was the preference of the department to continue to have

i. An early fallbreak with a short Thanksgiving break or
ii. A full week of Thanksgiving

The faculty voted and the outcome was 14 votes in favor of option #1 and 4 votes in favor of option #2.

H. MFT Data Fall 2013 (Chemistry and Physics) to be presented and voted on
Dr. Lynch presented the MFT data and the faculty voted based on the outcomes of the exam.

I. General Chemistry
Dr. Lea Padgett briefly up-dated the faculty regarding the outcome of their last meeting. The General Chemistry Committed basically went over one part of the objectives from the College Assessment Committee and drafted a response. They, also, chose some items to work on this year like the examination of the Math requirement and re-submitting CHEM 1200, both of which have good potential to improve student success in CHEM 1211.

For more details, refer to Attachment #5.

IV. Old Business
A- Lab Supervisor Search Up-date
Dr. Lea Padgett reported that the Lab Supervisor Search Committee will be meeting next week and will pick a date to start reviewing the applications.

B- The Organic tenure-track Search Committee is currently working on putting a schedule together.

V. Announcements
1- ACS Coastal Georgia Section will hold its annual Low Country Boil on October 25/2013 at 6:30pm at the Bamboo Farms.

2- Ms. Melinda Dang and Kyle Hillis represented Armstrong’s Gamma Sigma Epsilon Chemistry Honor Chapter at Gamma Sigma Epsilon’s national biennial meeting in Frostburg, MD. Ms. Dang won the W. Allan Powell award for best research project poster at the conference.


4- Congratulations to Dr. Brandon Quillian, who is the recipient of the Petroleum Research Fund, a grant funded by the American Chemical Society. The grant is for $50,000 and will go into effect this coming Summer 2014 and will continue for the next two years. Funds will be used for supplies, student workers and travel.
Adjournment – The meeting was adjourned at 12:55pm.

cc: Dr. Robert Gregerson, Dean, College of Science and Technology
    Dr. Delana Nivens, Assistant Dean, College of Science and Technology
Attachment #1

Chemistry Curriculum Item
SCIE 1212 Chemical Environment 3-0-3
Pre-requisite: eligibility for MATH 1111

Current description: Fundamental concepts, laws, and theories of chemistry. For non-science majors interested in a quantitative survey of the chemistry underlying our world, including classification of the elements, basic chemical reactions, atomic structure, and earth science.

Change: Pre-requisite: eligibility for MATH 1001 or MATH 1111
New description: Fundamental concepts, laws, and theories of chemistry applied to the environment. For non-science majors interested in a quantitative and qualitative survey of environmental issues.

SCIE 1212L Chemical Environment Laboratory 0-2-1
Co-Requisite: SCIE 1212

Current Description: Laboratory investigations of the fundamental concepts, laws and theories of chemistry.

Change:
Pre- or Co-Requisite: SCIE 1212
New description: Laboratory investigations related to environmental chemistry.

Rationale: Last year we implemented a curriculum change to add CHEM 1100 Chemistry of the Environment to the Core D offerings. It was denied at the BOR level. This course has been dormant for a number of years and this proposal would allow it to be taught in a fashion that allows us to be topical yet fulfill our mission to core students. This is already in Core D and so a minor editing change would allow it to be taught closely to the content designed for CHEM 1100 while not having to drive it through core analysis.
ENVIRONMENTAL STUDIES

General Information

The minor in environmental studies is designed for students who have an interest in learning more about the natural environment and the ecology of the planet, as well as understanding political, historical, economic, and cultural issues concerning the environment. By requiring courses in both the sciences and the non-sciences, the minor offers an interdisciplinary perspective that will complement a wide range of majors.

Environmental Studies Minor

Environmental Studies ............................................................ 15 hours

Nine credits must be 3000 level or above. At least nine credits must be from a discipline other than your major.

Select at least two science courses from this list (cannot be used to fulfill Core Area D requirements):

- BIOL 1103 (and Lab), BIOL 1107 (and Lab), BIOL 1108 (and Lab), BIOL 1120, BIOL 1140, BIOL 3050 (and Lab), BIOL 3100, BIOL 3250, BIOL 3470, BIOL 3600 (and Lab), BIOL 4550 (and Lab), BIOL 4970 (and Lab), CHEM 1100, CHEM 1211 (and Lab), CHEM 1212 (and Lab), CHEM 2200, CHEM 4100, 4200, 4300, 4600 (topics as appropriate), GEOL 2010, OCEA 3100, SCIE 1212/1212L

Select at least two non-science courses from this list:

- ARTS 3680, ECON 3450, ENGL 5280U, ENST 4000, HIST 5580U, HSCC 3760, PHIL 3200, POLS/LWSO 4190, POLS 5530U

CHEM 1100 was not approved at the BOR level to be in the core. We have instead adjusted the description and pre-reqs for SCIE 1212 and that course meets the original objectives of CHEM 1100.
Chemistry & Physics Planning Outcomes – Instrumentation and Technology
Oct. 23, 2013

2013 Items

High Priority
1. Back up Power Supply for all required instruments (Need Number and Specs, Lea Padgett, Lynch)
2. Ultra-Sonic Bath – Wallace (immediate purchase)
4. Raman – Cuvette Holder (need quote, Lynch)
5. Raman – Polarizer (need quote, Lynch)
6. Balance Replacement (Need Number and Specs, Roach, Lynch)
7. Desk Top Computers (SC 23XX row, Dept. Office, 6 ordered)
8. Micro Pipetts (Need Number and Specs, Gray, Feske, Weiland)
9. AA for General Chemistry, Quote < $20,000 (Technology Fee Request – Sept. 2013)
10. AA for Instrumental, High End Instrument > $20,000 (need quote, Gray)
11. Autosampler for current GC-MS (need price, Technology Fee ? Dept. Budget? EOY?)
12. Roto-Vaps with Vac Pumps X 2 ($7000-$8000 per, Technology Fee ? Dept. Budget? EOY?)
13. Base model Microcentrifuge: ~$1600 (Fisher) Point: Weiland (EOY or Dept)
14. Gel casting system: 2 set-ups ~$1150 ea (BioRad) Point: Weiland (EOY or Dept)
15. Electrophoresis Power Supply: ~$1400 (Fisher) Point: Weiland (EOY or Dept)
17. Rutherford Scattering Apparatus + film $1000.00

Moderate Priority
1. High Field NMR (Long Range – NSF MRI, $400,000)
2. GC-MS with autosampler (need price, Technology Fee ? Dept. Budget? EOY?)
3. Benchtop Autoclave
4. Laptops for Organic (need 8)
5. Electron Diffraction Tube $1300.00
6. Complete Franck-Hertz Setup for Mercury $3500.00

Low Priority
1. TGA / DSC – Ours are functional but future purchase may be necessary, Estimate Cost: $35,000 (Technology Fee Request – Sept. 2013, EOY request, or department budget)
2. Microscopy equipment – TEM, SEM (Long Range – NSF MRI, $400,000, possible collaboration with BIOL, ENG?)
3. Laptops for Organic Chemistry
4. Franck-Hertz Setup for Neon $3100.0
5. Photoelectric Effect System $2300.00
6. Complete Zeeman Apparatus $8000.00
Purchased Items from 2012 Planning List

1. **(On site)** Raman Spectrometer – Estimated Cost: $14,000 (next step, need quote, EOY request, or department budget) Must have polarization.

2. **(On site)** ELMO –5 @ $2000 (2001, 2103, 2502, 2503, 2504), 7 total for the department (2 physics) total = $14,000. (next step, tech fee proposal, EOY request, or department budget) – Point: Carpenter

3. **(On site)** Refrigerated/Incubated Shaker: ~$9000 (New Brunswick) 4-2L Shaker clamps ~$200

4. **(On site)** Analytical Balance: ~$1200 (Fisher) (biochemistry) The current balance has a broken door and needs to be replaced. Point: Weiland


6. **(On site)** Transilluminator: ~$1600 Needed to visualize DNA gels – currently using one on loan from Dr. Gregerson. Point: Weiland

7. **(On site)** Microcentrifuge with Adaptors: ~$3500 (Eppendorf) 96 well plate rotor ~50mL conical tube rotor ~ This is a cheaper option than buying both another microcentrifuge and an additional larger centrifuge to hold the 50mL tubes. Additionally we could accommodate 96 well plates which we currently do not have the ability to. Point: Weiland

8. **(On site)** Laptops for General chemistry.

9. **(On site)** -80 C freezer: - Upright 13cu. ft. ~$10,000 (Fisher) or - chest 3.0 cu. Ft. ~$7200 (Fisher) Point: Weiland

10. **Biochemistry Degree Program**
Department of Chemistry and Physics
Peer Review of Instruction for Mentoring Guidelines
(Draft Sept. 2013)

College of Science and Technology Tenure and Promotion Guidelines (Sept. 20, 2013)

2.2.4.3. Evaluation by peers.

Peer review of instruction has two primary uses: a) mentoring and b) evaluation. The methods of peer review and peer evaluation will vary according to department, however, each department is expected to develop a peer review and evaluation process. Copies of this departmental process shall be provided to the Dean of the College of Science and Technology and the College Committee on Promotion and Tenure. Departmental criteria are subject to review and approval by the Dean of the College and the Provost and Vice President of Academic Affairs.

a.) Peer review of instruction for mentoring purposes:

Departments must take an active role in the mentoring and professional development of their faculty as quality teachers. Each department must establish specific guidelines for peer review for mentoring purposes that include formalized classroom observation by departmental peers and feedback to the faculty member. These guidelines must be approved by the Tenure and Promotion Committee and the Dean of the College. The department should use a partially standardized format/form developed and subsequently evaluated for effectiveness at least every three years, by the College Tenure and Promotion committee (available from the dean’s office), to submit feedback from classroom teaching observations. Peer review of instruction should be both informal and frequent to allow for multiple sets of formative data to be collected. Peer-review for mentoring purposes should occur at least once each semester in a faculty member’s first year, and at least once each year thereafter until tenure is achieved. The mentor, a tenured faculty member in the department other than the department head, must write up a written record of the mentoring review (using the standardized form) which may or may not be entered into the faculty member’s official file at the option of the faculty member being reviewed. If there are no tenured faculty in the department to perform the peer mentoring reviews, a tenured faculty member in a closely related discipline, preferably in the College, may perform this duty for the faculty member until such time as a tenured faculty member becomes available. Any faculty member, at any rank, may, at any time, request from their department head, a peer review for mentoring purposes.

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1 Peer Review of Instruction for Mentoring and Peer Review of Instruction for Evaluation are required for tenure-track and permanent full-time faculty and at the discretion of the department head for temporary faculty.
Peer Review of Instruction for Mentoring Guidelines - Mechanics

1. Two mentors shall be assigned to each faculty member as an indication of the commitment of the department faculty to excellence in instruction.
2. The assignments will be made with respect to disciplinary expertise as well as other factors which may impact the assignments. The assignments are to be made by the Department Head in consultation with all faculty involved.
3. All department faculty who meet the College of Science and Technology criteria are expected to participate.
4. Mentoring visits are to span both lecture and laboratory as well as different courses (preferably to give a breadth of instructional settings) as the faculty members schedules allow.
5. Peer Mentoring of Teaching is a reciprocal process. Faculty members who are being mentored are encouraged to visit the instructional settings of their mentoring faculty (but are not required too).
6. Feedback is to be given using the College form for Peer Review of Instruction for Mentoring available in the Dean’s office as well as via a memorandum to the faculty member describing the observational visits and perceptions of the faculty interaction.

Rotation Schedule
A. Items related to promotion and post-tenure review: Faculty will be assigned at rank or above and will serve during the application period.
B. For items related to the probationary period towards tenure:
   One faculty member is assigned for the duration of the 6 year probationary period.
   A second faculty member is assigned on a one (or two year) rotation schedule.
attachment #5

minutes
general chemistry committee
10 oct 2013

members in attendance: sabitra brush, gary guillet, catherine mcgowan, lea padgett, yvonne roach, mitch weiland

1. the main topic of discussion was the current list of proposed outcomes for the d1 core slo that were recently produced by the d1 assessment committee. we reviewed the list of outcomes in the light of our course and redrafted the results of that brainstorming session into a list that we felt was reasonable and obtainable in the general chemistry classes. this was completed for one of the two parts of the official slo:

new draft that will be returned to the d1 assessment committee:

slo: students will accurately evaluate data in scientific reasoning problems

suggested outcomes from each course

1) data collection using proper techniques
2) appropriate use of lab materials and instrumentation
3) mathematical processing and treatment of data and observations
4) use of data to support conclusions

for the second slo part we discussed some concerns but did not generate any concrete statements. there was some concern over what would be reasonable to expect students at this level to achieve in the design and evaluation of an experiment. it was also noted that safety was not a concern addressed explicitly in either list.

2. the course objectives currently on file need to be edited to reflect current practice. a copy will be sent to the committee members so that this can be addressed and prepared for approval by the department during the next meeting.

3. two projects were chosen to work on for the immediate future in addition to the alignment with core area assessment. we will examine changing the math requirement for chem 1211 to have algebra as a pre-requisite rather than a co-requisite. we will also be preparing materials to put chem 1200 forward again as a class to add to the catalog.