

COLLEGE OF NATURAL SCIENCE and MATHEMATICS

Minutes of Council of Chairs Meeting – October 27, 2014

A meeting of the Council of Chairs of the College of Natural Sciences and Mathematics was held on Monday, October 27, 2014. Stephen Addison presided, members present: Ginny Adams, Jeff Allender, Ben Cash, Pat Desrochers, Ramesh Garimella, Uma Garimella, and Balraj Menon (for Carl Frederickson). Members absent: Carl Frederickson. Guests: Rick Scott and Patricia Smith from Schedler Honors College.

Agenda Items:

- Rick Scott and Patricia Smith led a discussion on changes to the Exemplary Studies program. They would like to see more uniformity between the Colleges and the Honors Program and will work to collect, evaluate, and disseminate the information as quickly as possible. Dr. Scott noted that the CNSM is unique in the number of students doing the type of work, publications, oral presentations, etc., without the defined parameters and designated honors. He asked Chairs to send their departmental programs to him so he can commission the Honors Council in the spring. Discussion followed regarding faculty incentives to work with students including release time, incentive pay, or some kind of mentorship award. There was also discussion on adding Honors courses or having honors designated work within our courses.
- Minutes from October 13th meeting were approved with minor revisions.
- Dean Addison led a discussion on programs of distinction within the college. He suggested that the CNSM use student research as a program of distinction as long as it is authentic research and not just a student project. Programs will receive support from reallocations and fund raising. Other possible suggestions for a program of distinction are the Environmental Science program and STEMteach.

Other Items:

- Dean Addison announced that he met with the architects for the new building and that they were \$1.5 million over budget but managed to get it down to \$500,000. The project will move forward once it is within budget.
- Dean Addison commented that he uses a Power Point presentation during Bear Facts Days that features students and faculty based on the demographics of those attending. He asked Chairs to submit information to Berdie Eubank that can be included in the presentation so he has a more diverse pool of slides to work with.
- Dean Addison announced that Dr. Brent Hill will serve as Interim Chair of Biology when Dr. Cash steps down. Dr. Hill will serve for one and a half years and a search will be initiated during the next academic year.

Chair Reports:

Biology: No Report

Chemistry

Dr. Desrochers reported:

- Bill Taylor paper accepted to *Journal of Physical Chemistry A*, "State-Specific Reactions of Cu+(1S,3D,1D) with the Super Greenhouse Gas SF₅CF₃" William S. Taylor *, Jerald M. Manion, Christopher M. Church, Xavier S. Redmon, and Benjamin A. Scheuter, accepted October 21, 2014.
- Bill Taylor participated as a panelist for a Science Café discussion on pollution held at The Locals coffee shop in downtown Conway on October 21, 2014.
- KC Weaver sponsored a tabletop NMR instrument seminar demo from Thermo Scientific on October 21, 2014.
- Student ACS sponsored several National Chemistry Week public outreach activities during October 20-24, 2014.
- Rob Mauldin prepared a new text for CHEM 1301. Royalties from the sale of this text will be deposited into the Chemistry Teaching Program account (Fund ID 0462).
- Donations in Memory of Jerry Manion to the Jerry Manion Endowed Fund for Chemistry (Fund ID 0843) have totaled over \$8000 since July.

Computer Science

Dr. Ramesh Garimella reported:

- A paper, "Wine Informatics: Applying Data Mining on Wine Sensory Reviews Processed by the Computational Wine Wheel", co-authored by Dr. Chen has been accepted by *IEEE ICDM – DDDM 2014 Conference* in Shenzhen, China on December 14-17, 2014. Other co-authors are Christopher Rhodes, a current masters student in Computer Science, Aaron Crawford, an undergraduate/master graduate of Computer Science, and Lorri Hambuchen.
- Representing the ABET/CAC, Dr. Hu evaluated a computer science degree program from September 20-23, 2014 on site for its accreditation.

Geography

Dr. Allender reported:

- Three Geography faculty presented research papers at the Southwest Association of American Geographers Conference: University of New Mexico, October 23, 24, 25.
 - Twitter, "Hate" Maps, and Immigrants: The Viability of Mapping Tweets to Identify Anti-Immigrant Places and Sentiments", M.S. Passe-Smith (1), and John Passe-Smith (2)
 - "We went over really well--editor of Geographical Review approached us about publishing our work. It was a packed house! We had never presented to so many people."
 - "Comparing the Spatial Distribution of Texas Municipal Water Consumption Drivers using Linear and Non-linear Data Reduction Methods", Matthew H. Connolly
 - "Revisiting the Functional Region: Two Case Studies of Cargo Transport and Economic Development", Michael S. Yoder.

Mathematics

Dr. Ramesh Garimella reported:

- A paper, "Effects of Regional Brain Injury on the Newborn Autonomic Nervous System," co-authored by R.B. Lenin has been accepted for publication in the journal *Early Human Development*.

STEM Institute

Dr. Uma Garimella reported:

- STEM Institute is collaborating with Dr. Jason Martin to host monthly seminars on UCA Research in STEM Education. We are funding lunch for the participants.
- STEM Institute is collaborating with Arkansas School for Mathematics, Science and the Arts to host half a day Science and Engineering Institute for 6-10 grade students on November 8, 2014
- Two school districts, Mt. Vernon-Enola and Hector are partnering in a new equipment grant from STEM Coalition.
- Publication:
 - Hu, H. & Garimella, U. (2014). iPads for STEM Teachers: A Case Study on Perceived Usefulness, Perceived Proficiency, Intention to Adopt, and Integration in K-12 Instruction. *Journal of Educational Technology Development and Exchange*, 7(1), 49-66.
- Conference Presentations:
 - 1. US Department of Education 2014 MSP Conference, October 1, 2014, Washington DC. *Umadevi Garimella & Gail Hughes (AR)*. Enhancing Teacher Content Knowledge and Teaching Skills that Prepare Students for Success in the CCSS Mathematics.
 - 2014 Mid-South educational Research Association (MSERA) Conference, November 5--7, Knoxville, TN, *Umadevi Garimella & Gail Hughes (AR)*. Mathematics and Science Partnership: Increasing Content Knowledge and Student Success in Elementary Mathematics.
 - Arkansas Curriculum Conference 2014, November 6-7, 2014, Little Rock, AR. Minnietta Ready and Umadevi Garimella, STEM Robotics.
 - Arkansas Curriculum Conference 2014, November 6-7, 2014, Little Rock, AR, Feng Shoudong and Caroline Pinchback/UCA. Integrate Literacy into STEM.
 - National Association of Biology Teachers Professional Development Conference 2014, November 12 - 15, 2014 Cleveland, OH, Umadevi Garimella, Using Manipulative to Teach Surface Area Volume Ration.

Physics: No report