COLLEGE OF NATURAL SCIENCE and MATHEMATICS Minutes of Council of Chairs Meeting - November 19, 2018

A meeting of the Council of Chairs of the College of Natural Sciences and Mathematics was held on Monday, November 19, 2018. Stephen Addison presided, members present: Ginny Adams, Pat Desrochers, Carl Frederickson, Ramesh Garimella, Uma Garimella, Brent Hill, and Steve O'Connell. Members absent: Emre Celebi. Guests: Diana Watkins, representing Computer Science, and Aimee Poynter, CNSM Development Officer.

Agenda Items:

- 1. Minutes of November 5, 2018 meeting will be sent out electronically for approval.
- 2. Dr. Frederickson gave a report on Physics Day that was held November 16th. 38 students from Conway and Vilonia attended and participated in several events throughout the day including a student panel discussion, trip to the Maker Space, an Alumni panel discussion, and tours of our labs and classrooms. There was a lot of positive feedback from the teachers. Discussion followed on how to expand the program to include other departments.
- 3. Dean Addison led a discussion on the need to develop programs to increase retention rates. Discussion followed on the status of G2C, Meta Majors, and the development of alternative AMAPs for students who don't meet minimum admission standards.
- 4. Dean Addison reported that the CNSM Boot Camp is only running two sections with less than 30 students participating. Discussion followed on the need to continue the program or find better use of funding to reach more students.
- 5. Day of Giving will be March 7, 2019. Dr. Addison announced that he will issue a challenge match for the Dean's Discretionary Fund and would like to see other challenges for every department.

Other Items/Announcements

- Dean Addison announced that UCA was awarded four STEM SURF awards.
- Dr. Ramesh Garimella led a discussion on the need for vetting a tutor list for parents of minor children who call looking for tutors.
- Dr. Desrochers led a discussion on issues with student teaching placements and scheduling.

Chair Reports:

Biology

Dr. Hill reported:

No report

Chemistry

Dr. Pat Desrochers reported:

- Bill Taylor and Faith Yarberry were part of the steering/organizing committee for the recent American Chemical Society's Southwest Regional Meeting held in Little Rock 11/7-10/18. Both worked over the past year with the committee. Bill was in charge of all undergraduate programming (oral and poster presentations). Faith organized activities for participating student ACS chapters. Undergraduate activities include a career advice panel Q&A session, a chemical scavenger hunt around the River Market, a chemistry demo exchange, a graduate school breakfast and recruiting fair. In addition, 14 students and 8 faculty from the department participated in the meeting, giving oral and poster presentations of original research from UCA.
- The department installed a new atomic absorption spectrometer (CNSM funds) capable of analyzing samples for trace metal contamination down to the low-ppb level. This instrument will be valuable as a tool in upper division chemistry and environmental science courses. Rob Mauldin is the point person to contact to use this instrument.

Computer Science

Dr. Emre Celebi reported:

No Report.

Geography

Dr. Stephen O'Connell reported:

- Stephen O'Connell attended National Geographic's Education Summit in Washington, DC, on October 28-29.
- Stephen O'Connell attended the fall meeting of the Arkansas GIS Users Forum in Little Rock on Friday, November 2nd. Several UCA Geography graduates were in attendance and presented during the event.
- The Geography Department celebrated Geography Awareness Week from November 12-16. On Wednesday, November 14, 24 students from St. Joseph's in Conway took part in a Geography Clubhosted event focused on field data collection. A humanitarian mapathon was held on both Tuesday & Thursday; buildings were mapped in rural portions of Tanzania to support local efforts to eliminate female genital mutilation through education outreach...

Mathematics

Dr. Ramesh Garimella reported:

- The fifth annual calculus tournament took place on November 15th, 2018. Held in the Math Resource Lab, nine teams competed for the title for the best calculus students of the year. The winning team, from Dr. Fred Hickling's calculus class, consisted of Madeleine Peters, Rachel Barnhardt, and Jessica Allred. Each member of the winning team will receive a \$15 gift card, a copy of The Code Book, and an invitation to represent the UCA's Mathematics Department at the Mathematical Association of America's Math Jeopardy Contest in the Spring 2019 to be held on the Northeastern State University in Tahlequah, OK.
- The Math Department mini fund drive for this fall raised \$485 for the Math Service Foundation Fund from nine faculty members. In addition, two other faculty members contribute to a math

fund on a monthly basis. This brings the total number of contributors for this fall to 11, which represents 52% of the math faculty members.

Physics

Dr. Carl Frederickson reported:

• No report.

STEM Institute

Dr. Uma Garimella reported:

- Collaborated with Dr. Todd Abel and Ms. Michelle Buchanan to provide project-based learning to Horace Mann Middle School in Little Rock. 16 teachers participated and we are planning a followup day.
- Working with Mr. Jerry Mimms on Scanning Electron Microscope training. We had seven teachers from various school districts trained on SEM. These teachers brought several specimens to scan and were excited to share with their students.
- We had 63 middle grade students from Greenbrier come to UCA for a campus tour. Dr. Scott Austin offered two planetarium shows and the specialists provided an Ozobot competition.
- STEM Institute has expanded our regions and reached out to Heber Springs, Clinton and others. Pulaski County School District has approached UCA STEM Institute to provide necessary teachers training to improve their student scores.

Development Officer
Aimee Poynter reported:

No Report