## **Minutes**

## of the Physics Department meeting held on Monday, Sep 16, 2013 in UH168.

Present: Benjamin, Boukahil, Constantinescu, Nawash, Rybski, Sahyun, Yavuzcetin

- I. Meeting called to order at 6:33pm.
- II. Rybski/Sahyun moved approval of minutes of Aug 29, 2013 meeting. Motion passed.
- III. Old Business
  - a. Departmental Policy on Peer Evaluation of Teaching. Discussion was postponed.
- IV. New Business
  - a. Discussion on Student Resume Policy
    - i. There was a discussion on what guidance we provide for student resumes. Boukahil asked whether we can bring in outside people to provide advice on student resumes. Rybski pointed out that the department should look at the different professional approaches for different resumes (like engineering vs. physics). He also suggested that someone from business should be invited to the department to help provide advice. Constantinescu pointed out that advice provide from a UW-W workshop was not very useful for the needs of our particular students. She also noted that the technical writing course (English 372) course covers resume writing.
    - ii. There was a discussion on who in the department will review resumes and on what schedule. Students should develop an initial in Physics 190 that is evaluated by the 190 instructor. From that point on, advisor should make a review of the resume part of the advising process. We will add a category for resume review to the standard advising form that we all use. There was a discussion on how many faculty/staff members should review each resume. It was generally felt that senior/junior faculty should pair up to review resumes. The scheduling/coordination for these assignments was left undecided.
    - iii. There was a discussion regarding the policy regarding access to and availability of resumes. Sahyun pointed out that we would need a FERPA form to release any information. Sahyun also suggested that all students must be required to provide their resume for any departmental job or interships available through the department. He also suggested that we point out to students in concrete terms where the resume will be needed.

iv. Benjamin volunteered to write up the discussion for a set of policy actions to be discussed for the next meeting.

## V. Announcements

- a. Chair's Announcements
  - i. Departmental Budget Update
    - 1. Reminder: Each faculty member has access to \$250/year for travel to present at conferences and \$250/year for computer/software expenses. If you don't use this by late March (or let the chair know that you intend to use it), the funds may be allocated for other purposes. Our yearly discretionary budget is \$11,400, of which 7\*\$500=\$3500. This leaves a total of \$7900 for the year.
    - 2. The chair has approved the purchase of \$2256 for MATLAB licenses so that each faculty member has one copy and we have a lab of 13 licenses. This lowers our available discretionary yearly budget to \$5644 for the remainder of the year.
    - 3. Our student worker budget is \$3200/semester. At a rate of \$8.50/hr, this corresponds to 364 hours of student work or 25 hours total per week. The 180 learning assistant program takes 2x8 hours per week, leaving only 9 hours per week available for the department. For the time being, please limit the number of tutoring hours per course to two hours/week. I'm expecting that more funds will become available.
  - ii. Updates from Administrative Council
    - 1. Plans for the "course grid" continue with implementation to being in Fall 2014.
    - 2. Overload policies have been clarified; you should all have received e-mail.
    - 3. Assessment Day scheduled for February 25.
    - 4. College plans to reactivate "spotlight" feature on CLS website.
- b. University, College and Department Committee Reports
  - i. Constituency Standards Committee rep: Boukahil
  - ii. International Education Committee rep: Nawash
  - iii. Student rep for Dean's Advisory Council: Benjamin has suggested Martin Gostisha for this semester.
- c. Other Announcements

- Rybski announced the schedule for the upcoming sure-to-be popular Whitewater Observatory Lecture series. The scheduled talks, to be held at 8pm in Upham 140, revolve around a common theme, The Dangerous Earth:
  - October 4: "The Mayan Prophecy and the Mayan Calendar: the Anthropological and Astronomical Facts" by Joanne Burkholder, Dept. of Sociology, Anthropology and Criminal Justice, and Paul Rybski, Dept. of Physics.
  - October 11: "Recent Asteroid Discoveries and Possible Collisions with Earth" by Paul Rybski, Dept. of Physics.
  - October 18: "Did a Cosmic Event Kill the Pleistocene Megafauna?" by Rex Hanger, Dept. of Geography and Geology
  - o November 1: "Will Life on Earth Survive Deneb's Supernova?" by Robert Benjamin, Dept. of Physics.
  - o November 8: "Reversal of Earth's Magnetic Field -- what really will happen?" by Juliana Constantinescu, Dept. of Physics.
  - November 15: "What Do We Know About the Russian Meteor Event?" by Paul Rybski, Dept. of Physics.
- ii. Sahyun described his summer activities. Her served as an Invited Visiting Professor at Hebei Normal University, Shijiazhuang, China from June 1 July 24, and provided a series of guest lectures about Physics Education and Physics communication to about 25 physics Graduate Students. He also worked with HebTNU faculty and graduate students by editing research papers (7) and visiting class lectures and laboratories. On August 12-14, he participated in the UWW Science Detectives Camp 2013. This camp provided three days of Physics activities to students in grades 3 through 9: Aug. 12, Physics of Sound (19 students, grades 3-5), Aug 13 Physics of Light (15 students, grades 6-9), and Aug 14, Fiber optic telephone (5 students, grades 3-8). He also attended the Innovation Center program on August 1, and the CourseLeaf Catalog System Informational meeting August 5.
- iii. Benjamin described his summer activities. He had four presentations at international astronomical conferences. These included an invited talk on *The Bar-Spiral Connection of the Milky Way* (Granada, Spain May 13-17), an invited talk *GLIMPSE360: Completing the Mid-Infrared View of the*

Galactic Disk (Indianapolis, June 3-6), a contributed poster *The Role of Vertical ISM Structure in Molecular Cloud Formation: MHD Models and Observational Tests* (Ringberg Castle, Tegernsee Germany, June 24-28), and a 50 minute opening address *The Structure of the Milky Way Galaxy* (Petit Jean Mountain, Arkansas, Aug 12-16). This last meeting was the first international astronomical conference in Arkansas, and he was (possibly) the first astronomer to ever use clickers during a scientific astronomical presentation! (The clickers were loaned to him courtesy of the Admissions Office). He also supervised a 10 week REU project on variables stars working with a student from Old Dominion University and developed techniques to search for variable stars with Constantinescu. Five students presented posters of their own at the American Astronomical Society in Indianapolis: Loryn Zachariasen, Ashton Falduto, Stephanie Bessler, Alexandre Fernandes, and Martin Gostisha.

- iv. Nawash described his summer activities. He mentored two students in two different undergraduate research projects. Physics major Junxiang (Isaac) Xu worked on developing the plasma project using a SURF grant (see <a href="https://uww.courses.wisconsin.edu/d21/eP/presentations/presentation\_preview\_popup.d21?presId=142911&ou=552779&contextId=142911">https://uww.courses.wisconsin.edu/d21/eP/presentations/presentation\_preview\_popup.d21?presId=142911&ou=552779&contextId=142911</a>), and physics major Rebecca Holzer worked on investigating the efficiency of solar cells at high altitude. The two projects started in May/early June. The plasma project ended by the end of summer, but the balloon project will continue throughout the academic year. Over the summer, he also taught Physics 140 course with the associated lab. There were 13 students in the class/lab; some of these students were from campuses other than Whitewater. The class lasted for 6 weeks running from mid-June to the end of July.
- v. Yavuzcentin announced the successful installation of a sputter coater in his lab. Any faculty member interested in using this system should contact him. Some possible uses include: enhanced imaging for electron microscopy, education (can be used as a quick demo to show nano-scale deposition and nano-lithography), fabrication of metallic thin films for optics and plasmonics, and fabrication of metallic contacts for devices and bio-samples. Some of the specs of the coater include: Cressington 108 Auto Sputter Coater, wide variety of metals/alloys can be coated (Ag, Ag,

Cu, Ni, Cr, ITO, Fe, Ir, currently Pt/Pd), fast (average process time is 5 minutes), precise coating thickness (down to 0.1 nm), conformal coating on rough surfaces, real-time thickness monitoring with QCM

VI. Rybski/Boukahil moved adjournment at 7:15 pm. Motion passed.

Submitted by B. Benjamin, secretary of the day

Cc: Dean David Travis