University System of Georgia Board of Regents Physics and Astronomy Academic Advisory Committee Minutes of the April 17, 2009 Meeting

The Physics and Astronomy (P&A) Academic Advisory Committee (AAC) of the Board of Regents of the University System of Georgia met jointly with the Chemistry AAC at Macon State College on Saturday, April 17, 2009. The meeting was jointly called to order by Bill Dennis (Physics and Astronomy, UGA) and Paul Cerpovicz (Chemistry, East Georgia College) at approximately 9:20 am.

The P&A AAC members present were: Mellissa Bryan (Darton College), Tom Colbert (August State University), Richard Collison (Dalton Bill Dennis (Chair, University of Georgia), Mariam State College), Dittmann (Bainbridge College), Mark Edwards (Chair-elect, Georgia Southern University), Imad El-Jeaid (Middle Georgia College), Leon Jaynes (Armstrong Atlantic State University), Pengfei Li (Savannah State University), Ntungwa Maasha (College of Coastal Georgia), James L. Mack (Fort Valley State University), Taha Mzoughi (Kennesaw State University), Martin Okafor (Georgia Perimeter College), Michael Pangia (Georgia College & State University), Mark Pergrem (Georgia Highlands College), Bob Powell (University of West Georgia), Dick Prior (North Georgia College & State University), Arun Saha (Albany State University), Deborah Sauder (Georgia Gwinnett College), Shawn Seat (Abraham Baldwin Agricultural College), Malav Shah (Macon State College, Guest Visitor), J.B. Sharma (Gainesville State College), Michael Torbett (Macon State College), Andrea Wallace (College of Coastal Georgia), Zodiac Webster (Columbus State University), and Chris Wozny (Waycross College). The attending members represented 24 out of the 35 or 69% of the institutions of the University System of Georgia (USG). This constituted a quorum of the P&A AAC since a quorum requires a representation of at least 40% of the USG institutions. After everyone around the room introduced themselves, it was also determined that the Chemistry AAC members present also constituted a quorum for that committee and thus motions could be voted on jointly.

Judy Awong-Taylor (BOR-USG) provided the following agenda for the joint meeting.

1. Core Curriculum Update

- 2. Merger of 2-year USG Colleges with Technical Colleges
- 3. ISCI 2001 Course Update Judy Awong-Taylor
- 4. High School: 4th Science Requirement Judy Awong-Taylor
- 5. USG STEM Initiative Judy Awong-Taylor
- 6. Elections and other business

The meeting proceeded as follows.

- 1. <u>Core Curriculum Update</u> There was extensive discussion centered on the documents entitled "USG Core Curriculum Evaluation Committee: Core Curriculum Policy" dated April 6, 2009. This document is available on the web at <u>http://core.usg.edu/uploads/CorePolicy2009-04-06.pdf</u>. The discussion focused on the proposal that at least 7 semester credit hours be required in Area D of the new core curriculum. In particular the following questions/comments/concerns were expressed:
 - Members expressed the general concern that reduction of the requirement to only 7 hours of science in Area D was yet another cutback in the required science education of USG students.
 - Judy Awong-Taylor (BOR-USG) stated that it was up to each institution to set the number of science hours in Area D.
 - There was large opposition to this requirement with the general sentiment that most institutions would take the inexpensive route of requiring only the minimum number of hours since lab sciences are expensive to run.

- Judy Awong-Taylor (BOR-USG) told the joint committees that they needed to make their sentiments known to the USG Core Curriculum Committee very soon as that committee was meeting the same day.
- After some discussion, J.B. Sharma (Edwards 2nd) made the following motion:

"The Physics & Astronomy and Chemistry Academic Advisory Committees jointly recommend to the USG Core Curriculum Committee that there be at least 8 hours of science courses required in Area D to minimize transfer problems and prepare students for the 21st century."

- This motion passed with a vote of 31 ayes, 2 nays, 0 abstentions.
- Per Judy Awong-Taylor's suggestion that the USG Core Curriculum Committee be apprised of this recommendation, Debbie Sauder posted the motion and the vote totals to the Core Curriculum blog.
- 2. <u>Merger of 2-year USG Colleges with Technical Colleges</u> Most of the discussion of this item focused on two motions introduced by Chris Wozny (Waycross College). The first of these motions (which was seconded by Shawn Seat (ABAC) read as follows:

"<u>Resolution 1: In Opposition to the Realignment of USG Institutions</u> – As faculty members of the USG and institutional representatives to the AAC's on Chemistry and Physics/Astronomy, we affirm the significance and importance of all 35 institutions functioning together under the same governing board. We believe that one of our key strengths as a University System is the diversity of all institutions working together. We assert that the institutional designations of research university, regional university, state university, state college, and two-year college represent nuances of focus, and not differences between our fundamental goals and mission as USG members.

Archived minutes of the AAC's confirm time and again the importance of having all designations present at the discussion of academic policies and standards that affect the education of Georgia citizens. Our open discussions and different institutional perspectives are critically important for determining the best policies for those seeking associate, baccalaureate, and graduate degrees. We also learn from each other and gain a greater appreciation for our different roles and institutional structures through our interactions. Therefore, to separate some institutions and place them under the authority of a governing body with a different mission and goals would be detrimental not only to those institutions which have been moved but also to those that remain under the Board of Regents, and ultimately to the citizens of Georgia."

- Most of the subsequent discussion centered on the necessity of shortening the resolution.
- A wordsmith session ensued.
- The group decided that Bob Powell (West Georgia) and J.B. Sharma (Gainesville State) would draft a shorter version and this was agreeable to Chris Wozny (Waycross).
- Bob Powell offered a Friendly Amendment to the above motion. This amendment was accepted by Wozny.
- The new motion was that Chris Wozny moved that:

"The following resolution be adopted by the Joint Chemistry and Physics/Astronomy AAC's and forwarded to the Office of the Governor: The Technical Colleges and Two-Year Colleges have different missions. The Two-Year Colleges are institutions that are a critical part of the higher education pipeline in Georgia providing open access to the baccalaureate degree. This committee recommends that the Two-Year Colleges remain under the umbrella of the BOR of the USG to assure a better educated Georgia."

- The motion was voted on and passed unanimously.
- Chris Wozny made a second motion. He moved that:

"the following Resolution be adopted and sent to the BOR of the USG. <u>Resolution – Expanding the Mini-Core</u> – The AAC's on Chemistry and Physics/Astronomy are against expanding the number and types of courses that may be transferred from the technical college to USG institutions (also known as the mini-core). The stated mission of the technical colleges is "education and training focused on

building a well-educated, globally competitive workforce for Georgia". The current mini-core of English and mathematics courses represent the fundamental skills of written communication and mathematical reasoning that the USG identifies as Essential Skills. The rest of the USG general education core in the humanities, social sciences, natural sciences and mathematics focuses on the study of "analytical, historical, critical and/or appreciative material," not workplace preparation. In particular, the physical science courses we teach have a different purpose than technical physics and chemistry courses and are not equivalent to courses designated as technical science courses.

We assert that expanding the mini-core beyond 15 hours is detrimental to the mission of the technical college system. An individual enrolling at a technical college, completing 30 hours of general course work, and then transferring to a USG institution did not intend to complete a technical program and then enter the workforce. Logically, such a person should begin their education within the USG and accrue all the benefits that result from our state mission and goals, which are different from the technical college system."

- 1. Following subsequent discussion, Zodiac Webster (Columbus State) called the question (Dick Prior seconded) and the vote on whether to cut off debate passed unanimously.
- 2. The vote on the motion then occurred and passed with Ayes -32, Nays -2, and Abstentions -3.
- 3. The sense of the meeting was that the content of the first Wozny motion should be sent to Felita T. Williams, Interim Assistant Vice Chancellor for Academic Planning.
- 3. <u>ISCI 2001 Course Update</u> Judy Awong-Taylor (BOR-USG) updated the Joint Physics/Astronomy/Chemistry meeting about the need for the BOR-mandated Integrated Science Courses to be taught by faculty who are accredited to teach science by the Southern Association of Colleges and Schools (SACS). She also stated that more information could be found by searching the USG BOR web site. Awong-Taylor also mentioned that there were workshops available for training ISCI faculty.

- 4. <u>High School 4th Science Requirement</u> Judy Awong-Taylor also informed the members at the Joint meeting that the BOR is asking members of all of the Academic Advisory Committees to review High School science courses in the Career, Technical, and Agricultural (CTAE) track which may be used to satisfy the fourth science requirement and give their feedback. She told the committees that these courses were currently under review by both the Georgia Department of Education (GA DOE) and by the USG. Members were asked to review the course descriptions (found on the GA DOE web site) and evaluate them for their potential to prepare students to be successful at USG institutions. She added that a web site to accept this feedback was being established.
- 5. <u>STEM Initiative Update</u> Judy Awong-Taylor also updated the joint meeting on the status of the USG BOR Science, Technology, Engineering, and Mathematics (STEM) Initiative. She informed the AAC's that the budget for this initiative was not yet known.
- 6. <u>Elections and other business</u> The Physics/Astronomy and Chemistry AAC's met in separate sessions. The P&A AAC held elections for the positions of Chair-elect and members of the Executive Committee. Mark Pergrem (Georgia Highlands College) was elected unanimously as Chair-elect and, after caucusing, the makeup of the Executive Committee was determined to be:
 - Chair Mark Edwards (Georgia Southern University)
 - Chair-Elect Mark Pergrem (Georgia Highlands College)
 - Past Chair Bill Dennis (UGA)
 - Research 1 Representative Bill Dennis (UGA)
 - Four-Year College Representative Taha Mzoughi (Kennesaw State University)
 - Two-Year College Representative Martin Okafor (Georgia Perimeter College)

Finally there was some discussion about the content of calculus-based introductory physics classes PHYS 2211/2212. The committee was concerned that subjects such as thermodynamics were consistently left out of these courses due to lack of time to present them. The committee finally decided to have the Chair contact Judy Awong-Taylor to determine if the BOR approved the curriculum recommendations approved by the Physics/Astronomy AAC in 2005.

The meeting was adjourned at 1 pm.