

Board of Regents Academic Advisory Committee on Physics & Astronomy
Minutes of Friday April 1, 2005 Meeting at Gordon College, Barnesville, GA

Mariam Dittmann called the meeting to order at 10:10 AM.

The following were present:

Dorothy Zinsmeister (University System Office Liaison), Leon Jaynes (Armstrong Atlantic State University), Tatiana Krivosheev (Clayton College & State University), Ntungwa Maasha (Coastal Georgia Community College), Soumitra Chattopadhyay (Floyd College), J. B. Sharma (Gainesville College), Michael Pangia (Georgia College & State University), Michael Schatz (Georgia Institute of Technology), Mariam Dittmann (Georgia Perimeter College), William Nelson (Georgia State University), Chad Davies (Gordon College), Michael Torbett (Macon State College), Edwynn Wallace (Middle Georgia College), Richard Prior (North Georgia College & State University), Charles W. Johnson (South Georgia College), Javier Hasbun (University of West Georgia).

Jessica Somers of Advanced Learning Technology was present as a guest.

- 1) The minutes of the 2004 meeting were approved.
- 2) Jessica Somers updated the committee on WebCT Vista.
- 3) Effects of budget cuts on Physics.
The committee identified a need for more faculty and competition for lab space as effects budget cuts have had on physics. These problems stem from increased enrollments. It was also cited that for most of our institutions it is difficult to find part-time physics instructors.
- 4) Bylaws
Michael Pangia and Michael Torbett volunteered to create a set of bylaws for the committee. It will be an agenda item for next year's meeting.
- 5) Advanced Placement Credit for Physics.
The committee learned from Dorothy Zinsmeister that at some point in the future course credit given as a result of taking an AP Exam at one USG institution might have to be accepted at another USG institution for a transfer student. With this in mind, the committee wanted to establish a uniform set of passing scores for the University System. After much discussion, a vote was conducted to determine which course(s) a student should be credited for each of the possible scores. This is a proposal that the entire committee will be asked to vote on electronically.

The proposal is:

AP Physics B	
Score	Course(s) to be Credited
0, 1, 2 or 3	No credit
4	PHYS 1111 (4 hrs)
5	PHYS 1111 (4 hrs) and PHYS 1112 (4 hrs)

AP Physics C Mechanics	
Score	Course to be Credited
0, 1, 2 or 3	No credit
4	PHYS 1111 (4 hrs)
5	PHYS 1111 (4 hrs) or PHYS 1211/2211 (4 hrs)

AP Physics C Electricity and Magnetism	
Score	Course to be Credited
0, 1, 2, 3 or 4	No credit
5	PHYS 1112 (4 hrs)

6) Review of Learning Outcomes

- a. No changes were made to ASTR 1010 and ASTR 1020.
- b. For PHYS 1111 / 1112 Learning Outcomes, insert the word “Minimum” in “General Learning Outcomes”.
- c. For PHYS 1111 course description, change “... will include material from mechanics, thermodynamics and waves.” to “... will include mechanics (kinematics, dynamics, work and energy, momentum and collisions, and rotational motion and statics), and may also include thermodynamics and waves.”
- d. For PHYS 1112 course description, change “... will include material from electromagnetism, optics and modern physics.” to “... will include electrostatics, electric current and circuits, and electromagnetism, and may also include optics and modern physics.”
- e. For PHYS 1211/2211 and 1212/2212 Learning Outcomes, insert the word “Minimum” in “General Learning Outcomes”.
- f. For PHYS 1211/2211 course description:
 - change “... will include material from mechanics, thermodynamics and waves.” to “... will include mechanics (kinematics, dynamics, work and energy, momentum and collisions, and rotational motion and statics), and may also include thermodynamics and waves.”
 - delete “differential”.
- g. For PHYS 1212/2212 course description:
 - change “... will include material from electromagnetism, optics and modern physics.” to “... will include electrostatics, electric current and circuits, and electromagnetism, and may also include optics and modern physics.”
 - delete “differential and integral”.

7) New Course Proposal.

Chad Davies informed the committee of a 1-semester-hour course for allied health majors that Gordon College is proposing. It would be lower division, but not part of core.

8) Top issues in Physics

The committee identified the following concerns:

- shortage of faculty.
- High School Physics Teacher preparation and shortage.

- modern physics pedagogy.
- modern physics education for non-physics majors.

9) Elections

- Michael Schatz was elected chair-elect.
- William Nelson (or GSU substitute) was elected to be on the executive committee representing the research and regional universities.
- Leon Jaynes was elected to be on the executive committee representing the state universities.
- Charles Johnson was elected to be on the executive committee representing the two-year colleges.

Meeting adjourned at 12:20 PM.

Respectfully submitted by,

Michael Pangia
Georgia College & State University