Regents' Academic Advisory Committee On Physics & Astronomy Minutes of Thursday January 31, 2002 meeting

The meeting was convened at 4:50 PM; the following members were present Ian Gatland (Georgia Tech), William Nelson (Georgia State), F. Todd Baker (University of Georgia), Wil Grant (Georgia Southern), Surendra Pandey (Albany State), Roy Wood (Armstrong Atlantic State), Ron Ezell (Augusta State), Shawn Cruzen (for Tsun-Hsiung Kao Columbus State), Michael Pangia (Georgia College & State University), Rolf Schimmrigk (Georgia Southwestern), Ted LaRosa (Kennesaw State), Kailash Chandra (Savannah State), Ntungwa Maasha (Coastal Georgia Community College), David Wycherley (Dalton State), Soumitra Chattopadhyay (Floyd College), Marriam Dittman (Georgia Perimeter College), J. B. Sharma (Gainesville College), Charles Johnson (South Georgia College), Dr. Javier Hasbun (State University of West Georgia), and Chris Wozny (Waycross College)

- 1) The first item on the agenda was the approval of the old minutes. Dr. Ron Ezel of Augusta pointed out a correction to the minutes. Item 2 in the minutes of 2001 regarding "trigger mechanisms" should read: "the BOR Review policy includes a 'trigger mechanism' so that programs with 10-15 students or less, or 10 or fewer graduates or less, by a three-year average may be reviewed earlier than the proposed timetable"; that is, the old number 5 was corrected to the new number 10.
- 2) The next item involved the current read of the algebra and calculus based course descriptions. Dr. Chris Wozny of Waycross made the motion to replace the current

An introductory course that will include material from electromagnetism, optics, and modern physics. Elementary calculus will be used. Laboratory exercises supplement the lecture material.

The PROPOSED descriptions are:

PHYS 1111k - Introductory Physics I Pre-requisite (or co-requisite): MATH 1113

The introductory physics sequence (PHYS 1111k and PHYS 1112k) is a survey of the primary fields of physics: mechanics, electromagnetism, optics, thermodynamics, and modern physics. Elementary algebra and trigonometry will be used in the course, with laboratory exercises supplementing the lecture material. The first course of the sequence will focus on the field of classical mechanics and its applications.

PHYS 1112k - Introductory Physics II Pre-requisite: PHYS 1111k or consent of instructor

The introductory physics sequence (PHYS 1111k and PHYS 1112k) is a survey of the primary fields of physics: mechanics, electromagnetism, optics, thermodynamics, and modern physics. Elementary algebra and trigonometry will be used in the course, with laboratory exercises supplementing the lecture material. The second course of the sequence will focus on the field of electromagnetism and its applications.

PHYS 2211k - Principles of Physics I Pre-requisite (or co-requisite): MATH 2351

The Principles of Physics sequence (PHYS 2211k and PHYS 2212k) is a survey of the primary fields of physics: mechanics, electromagnetism, optics, thermodynamics, and modern physics. Elementary calculus will be used in the course, with laboratory exercises supplementing the lecture material. The first course of the sequence will focus on the field of classical mechanics and its applications.

PHYS 2212k - Principles of Physics II Pre-requisite: PHYS 2211 The Principles of Physics sequence (PHYS 2211k and PHYS 2212k) is a survey of the primary fields of physics: mechanics, electromagnetism, optics, thermodynamics, and modern physics. Elementary calculus will be used in the course, with laboratory

exercises supplementing the lecture material. The second course of the sequence will focus on the field of electromagnetism and its applications.

After considerable discussion, the question was called. The motion passed unanimously.

3) The next order of business involved physics lab in Ecore. Drs. Kailash Chandra of Savannah and Dr. Charles Johnson of South Georgia who are the development team members explained their current work. In particular the question was asked as to what kinds of labs can be done. Could these labs be computer simulated? Discussion by the committee members revolved around the idea that experimental data is a crucial part of the scientific process. The suggestion was made that students can

collect data at home. Some pointed out that String-Sticky-Tape experiments can be useful.

Dr. Todd Baker of UGA made the motion: that 1/2 of the Ecore labs not be simulations but data taken with home equipment. Dr. Ian Gatland of Gtech seconded the motion. After considerable discussion, and the question called, the motion passed unanimously.

Dr. Chris Wozny followed up with the motion: that a resolution be sent to the BOR programs committee in order to make possible that

Griffin Technical College - Shana Keaton, Program Director