

Minutes of April 26, 2013 Teleconference Meeting

The meeting was convened at 3:30pm with a quorum of 15 out of 31 institutions.

Leon Jaynes (Armstrong University), Tatiana Krivosheev (Clayton State University), Kimberly Shaw (Columbus State University), Emma Cooley (Dalton State College), Michael J. Pangia (Georgia College & State University), Jim Guinn (Georgia Perimeter College), Brian Thomas (Georgia State University), Robert Bacon (Georgia State College), Nikolaos Kidonakis for Ted LaRosa (Kennesaw State University), Charles W. Johnson (South Georgia College), William Dennis (University of Georgia), and David H. Johnson (University of West Georgia).

Presented by Andy Hauger.

Minutes were given by committee chair Andy Hauger from Georgia Regents University.

The 2012 meeting minutes were considered and approved as written.

Discussion of officers was then discussed. Chad Davies (Gordon State University) will be chair for 2014. Then Jim Guinn (Georgia Perimeter College) was nominated and elected for the chair-Elect for next year.

Discussion of officers raised the issue of the potential need for changes in the PAAAC bylaws. See www.usg.edu/academic_planning/committees/view/physics_and_astronomy

and Georgia State University. Several programs mentioned increasing numbers of expected graduates in these targeted areas. Other examples of model programs include the UTeach program which offers the BS degree in physics (with certification) but requires matching funds. Some general comments about increasing enrollments and degree production in physics through increased opportunities for undergraduate research and other characteristics featured in the document SPIN-UP (Strategic Programs for Innovations in Undergraduate Physics Programs, <http://www.aapt.org/Programs/projects/spinup/>) published by the American Association of Physics Teachers (AAPT) in 2010.

Barriers to physics degree production included deficient mathematics preparation.

7) There was discussion of the use of laboratory fees for paying laboratory assistants. Many programs use such funds for purchase of consumables or laboratory equipment. However, each university must have BOR approval and so individual programs will have different limitations.

8) The next meeting will occur in early April 2014.

Calculus Sequence

1. Students will apply methods of integration and differentiation in one variable to solve problems. (Calc I)
2. Students will apply advanced integration techniques, Taylor's theorem, the general binomial theorem to solve problems. (Calc II)
3. Students will use double and triple integration, partial derivatives and vector-valued functions to solve problems. (Calc III)

Phys 2211

1. Analyze and solve kinematical problems for systems moving in one and two dimensions using pictorial, graphical, physical, or mathematical representations (including calculus and vectors) of the system, and other representations as appropriate.
2. Analyze and solve statics and dynamics problems using Newton's laws in one and two dimensions using multiple representations including free-body diagrams and mathematical descriptions (including calaphical1.iwr6iptions (including-calaphicald