Minutes of the Academic Advisory Committee on Mathematical Subjects February 17-18, 2005

The Academic Advisory Committee on Mathematical Subjects (ACMS) met on February 17-18 on the campus of Clayton College & State University in Morrow, GA. The meeting was called to order at 1:00 pm by Jim Brawner, who thanked Anthony Giovannitti and Cathie Aust for arranging to host the meeting at Clayton College & State University. Anthony Giovannitti gave some logistical information regarding the meeting and the banquet for the evening of February 17.

Chair Jim Brawner introduced Dorothy Zinsmeister, the Board of Regents Liaison, who began a discussion of the charges to the academic committees.

1. Dr. Zinsmeister reported that the Chancellor has asked the advisory committees to

curriculum, which needs to be aligned with the GPS). Wayne Bosché announced that an article in the Atlanta Journal-Constitution reported that the new GPS were highly rated (by the Fordham Foundation) when compared to those of other states.

- 3. Dr. Zinsmeister announced that Dr. Frank Butler has requested that each academic committee create a set of by-laws. Several sets of by-laws have been developed, for example, Arts & Sciences and Educator Preparation each have posted by-laws on the USG website. Jim Brawner indicated that an ad hoc subcommittee of the ACMS would work to develop a set of by-laws. Dr. Zinsmeister requested that, if possible, the by-laws be developed and adopted by the end of the current semester. The ad hoc subcommittee was appointed on February 18.
- 4. Dr. Zinsmeister commended the ACMS upon timely availability of the minutes of the meetings.
- 5. Dr. Zinsmeister reported that Dr. Dan Papp is interested in knowing how budget cuts have affected the work on USG campuses in terms of quality. As opposed to being public information, she indicated that these data will be used to talk with the Chancellor, Board, and legislators. Comments should be based on data and hard evidence. She gave an example of how the situation on a campus may have changed relative to the budget cuts: "Class size has increased." The quality issue involved is that class size adversely affects instructional quality. She indicated that there should be some data to support such a claim. The data seem to support the claim that lowering class size does not make a positive difference until it is reduced to 12 or 14. There appears to be no difference in student learning with class sizes ranging from 25-40. One factor that can be cited, however, is that an increase in class size results in more papers for the instructor to grade. The impact on quality could be that fewer student assignments are made. The quality issues on which the committee should focus include: equipment, instruction, research, and supplies. It was noted that legislators place a higher priority upon undergraduate education. Wayne Bosché pointed out that if we do not collect ammunition to support getting the funding returned, the universities will be at the same point they were five or more years ago. Mylan Redfern indicated that at Valdosta State University, important areas other than instruction are being adversely affected by budget cuts. In particular, funding has been cut in plant operations, which has a tremendous potential impact on cooling (which is a significant concern in Valdosta). Dr. Zinsmeister indicated that issues such as these are worth mentioning. Wanda Eanes asked about whether tangible anecdotes, such as an increased dependence on part time faculty, were worth noting. Dr. Zinsmeister pointed out that studies generally indicate that there is no significant difference with student satisfaction and grade distributions with part time faculty vs. full time faculty. However, while a heavy dependence upon part time faculty may not have adverse affect on instructional quality, it does have an impact on the department (advisement, service, etc.). Tim Howard added that he would have needed 4 more full time math faculty positions (33% more) at Columbus State University to cover his estimates for student demand in fall 2004 and that it will be difficult to find part time faculty who will be willing to worry about alignment of instruction with the GPS. Dr. Zinsmeister requested that the

ACMS compile a list of quality issues and submit to her. Members should send items to Jim Brawner and he will compile and send to Dr. Zinsmeister.

Dr. Zinsmeister opened a discussion on the top three issues with respect to the discipline; for example, are there problems with system policies or are there issues that the committee would want the system to address. She asked whether faculty morale was a problem on our campuses. Several items that adversely affect faculty morale and well-being were mentioned that deal with compensation and benefits: changes to health care (increase in premiums and reductions in coverage), delayed raises, salary compression and inversion, decrease in university system contributions to the optional retirement plans. It was noted that faculty members are not willing to do a lot of extra work and that while more faculty are looking for positions elsewhere, it is hard to hire top candidates.

There was a question from the floor regarding how regents communicate with the legislature. Dr. Zinsmeister indicated that while the Chancellor wants to be the primary source of communication, or to have USG lobbyists have direct communication, it is true that most board members have their own connections and some of them do approach legislators directly. She cited Georgia Southern University's Wild Game Supper as a way for public relations folks to make contact with legislators since this annual event coincides with the legislative session. She also pointed out that some of the larger institutions have lobbyists.

Wayne Bosché opened a discussion on the MATH 1001 Quantitative Skills course. At Dalton State College, he is teaching one section of the course. He reported that the course is going well, however, enrollment is not as high as he had hoped because the word did not get out to advisors. The course was designed from the course outline approved by the ACMS last year and it is an Area A choice for non-science majors at Dalton State.

Dr. Zinsmeister asked which institutions were planning to offer the course in the fall and which are considering offering the course. The following institutions will be teaching MATH 1001 next year: Dalton State College, Armstrong Atlantic State University, Gordon College, Coastal Georgia Community College. Discussions are ongoing at the

prerequisite course for elementary statistics and sophomore courses for education students. He noted that MATH 1101 was not an appropriate prerequisite for sciences that

College, Georgia Perimeter College, Clayton College & State University, Albany State University.

There was additional discussion about the 9-12 Georgia Performance Standards. It was recommended that the standards be circulated among colleagues to get feedback. Wayne Bosché noted that the new document addressed at least 80% of last year's ad hoc committee's concerns. Tim Howard noted that the previous draft included sample tasks but they are not in the revised version—only content standards are included. It was noted that tasks are currently in the process of being developed.

The group was reminded that the new standards have topics from Algebra and Geometry woven vertically into the Math I and II curriculum rather than having distinct Algebra and Geometry courses. In the revised standards, Precalculus replaced Math IV. The core

Gordon College Kennesaw State University

Allen Fuller Victor Kane

Faculty Development: Alvina Atkinson(Chair), Johannes Hattingh, Bruce Landman, Zephyrinus Okonkwo, Mylan Redfern. Alvina Atkinson proposed two workshop ideas for Faculty Development which could possibl

They are looking for effective placement testing procedures. Several institutions have advocated mandatory placement testing for all incoming students. Valerie Miller provided excellent details about a comprehensive placement testing program at Georgia State University that has been highly successful for students who follow the placement recommendations. She distributed detailed information about the testing program, cut scores, and data that has been collected that documents the effectiveness of the testing program. She indicated that an online version of the COMPASS test could provide a centralized database that could be used statewide to be able to access student test scores.

Martha Abell indicated that at Georgia Southern, the B.S. in Education degree (leading to secondary certification) will be discontinued. The College of Education has proposed that students obtain a B.S. in Mathematics with a fifth year MAT that leads to certification. She asked how other institutions were handling the revision of the preparation for secondary teachers. Tim Howard reported that at Columbus State they now have a B.A. in Mathematics degree with Teacher Certification. On paper, the degree can be completed with 123 total credit hours but, with the foreign language and a technology requirement, it will possibly involve 128 hours of coursework. Jim Brawner reported that at Armstrong Atlantic, the degree leading to secondary certification is a B.S. in Mathematics with Teacher Certification. The problem in developing an undergraduate program that provides a major in the content area with teacher certification is the number of hours in education and student teaching.

Wanda Eanes requested that members share syllabi for mathematics courses for early childhood education majors. In light of the new degree program in early childhood education recently approved for Macon State, they are in the process of developing content courses for the degree.

Victor Kane asked the group about numbers of minors in mathematics. He wondered about the pros and cons of a minor in mathematics. Tim Howard said that at Columbus State students have an option to take non-proof-oriented courses that lead to a minor in mathematics.

Jack Morrell requested that members take a look at the online Calculus Inventory and make changes as necessary.

It was suggested that the Executive Committee could possibly seek National Science Foundation funding through ATE or EISE for a workshop on Quantitative Reasoning.

Jim Brawner thanked the committee members for their attendance at the meeting.

The meeting was adjourned at 11:30 am.

Respectfully submitted, Lila Roberts