Comprehensive Program Review
University System of Georgia

CPR

Report Submitted!

Thank you for submitting a Comprehensive Program Review Report. Below is the information you sent on June 30, 2003. *Please note* this is a temporary web page and cannot be bookmarked. You may wish to print this page for your records. You will also receive confirmation via email.

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5	**Institution:**	Kennesaw State University
6	**Review Status:**	Triggered Review
7	**Degree level:**	Bachelors
8	**Degree acronym:**	BS
9	**Degree/Major:**	BS with a major in Biology Education
10	**CIP Code:**	13132200
11	**College, School/Division:**	College of Science & Mathematics
12	**Department:**	Department of Biological & Physical Sciences
13	**CPR Plan followed:**	Yes
14	**Future institutional plans for program:**	Consolidate with another program(s)
15	**Plan for resources in this program:**	maintain
16	**Supplemental file:**	CPR FINDINGS to BOR - B.S. Science Education.doc
17	**File Type:**	MS Word
18	**CPR Web Addr.:**	www.kennesaw.edu/ie

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**CPR FINDINGS AND PLANS
FOR THE
B.S. WITH A MAJOR IN SCIENCE EDUCATION (Formerly)
B.S. WITH A MAJOR IN BIOLOGY EDUCATION (Presently)
B.S. WITH A MAJOR IN CHEMISTRY EDUCATION (Presently)
AT KENNESAW STATE UNIVERSITY**

MAJOR FINDINGS ON THE PROGRAM'S QUALITY, PRODUCTIVITY, & VIABILITY

Soon after KSU's B.S. in Science Education was originally triggered in 2001 for special review by the System Office and in keeping with the Regents' reforms of teacher education, that "broad field" secondary teacher education program was discontinued and converted into two single field programs, a B.S. in Biology Education and a B.S. in Chemistry Education. During the same year, a comprehensive program review of the B.S. in Science Education was conducted with the understanding that this review would cover the former and future program configurations for the baccalaureate-level preparation of secondary science teachers. The content of this CPR report applies to the three separate identities that this program has had since 2001. It is important to note that many of the courses taught at KSU for the B.S. in biology and the B.S. in chemistry also serve the B.S. degree programs for secondary teacher preparation in those fields. Course enrollments in those non-teaching companion programs are sufficiently strong to remain viable, even without a viable number of majors pursuing science education degrees.

The program's self-study and the University Program Review Council were in substantial agreement about the ratings of this program's quality, productivity and viability. Both rated the overall quality of the program strong, the over productivity of the program weak, and the viability of the program weak. The program was considered strong largely because of its curricular adherence to national standards (the program was PSC approved and NCATE accredited); graduates were well prepared and had a 100% pass rate on the Praxis II exam; the faculty were award winning; the use of advanced instructional technology was very strong; advising was strong; and thoughtful as well as systematic curriculum improvements had been achieved. However, despite the critical shortage of science teachers and the availability of this quality teacher education program, enrollments of science education majors and degree completions from this program were judged to be weak. Because key productivity indicators were so weak, the program's fundamental viability was questioned seriously and rated as weak. Although the conversion from a multi-disciplinary broad field preparation program to single discipline teach field specializations streamlined program completion requirements, student interest in this area of study remains exceptionally low and in need of a major new recruitment strategy. Career and employment options for biology and chemistry majors in industry and in health care are much more attractive than options in secondary education which helps to explain why the numbers of science education majors is so small. The Council recommended redirecting faculty effort to the development of post-baccalaureate alternative teacher certification options, much like those being pursued in the

preparation of foreign language teachers at KSU. The state's needs for secondary science teachers is great, and the inability of traditional baccalaureate teacher education programs to

serve those needs requires the pursuit of alternative solutions, including alternative teacher certification.

PLANS FOR IMPROVING THE PROGRAM'S QUALITY, PRODUCTIVITY, & VIABILITY

Some of the more notable plans for improvement include: establishing alternative routes for post-baccalaureate initial teacher certification in the sciences; developing outreach programs for middle school and high school science students and science teachers; engaging more KSU freshmen in learning community activities geared toward majoring and pursuing scientific careers; initiating intense, focused recruitment efforts for science education; seeking grant funding for instructional innovations and upgraded scientific equipment; and contributing to PTEU-wide preparations for NCATE reaccreditation in 2004.

NEW RESOURCE ALLOCATIONS FOR IMPROVEMENT

Kennesaw State's funding and expenditures per FTE student have been substantially below average throughout the university's relatively brief history. New funding and facilities have lagged KSU's exceptional rate of growth over the years. Consequently, the student/faculty ratio at KSU is exceptionally high, and the institution would need another 150 full-time faculty to reach the average of the other state and regional universities in the USG. In that context, there is substantial justification for enhancing most degree programs with additional investments in full-time faculty support. However, this review and its recommendations were completed in the context of a statewide and national economic downturn, significant budget cutbacks in the State's, the University System's, and KSU's operating budgets, and little prospect of KSU receiving special catch-up funding from state appropriations in the near term.

Although alternative certification options and recruitment efforts should be enhanced, no new resource allocations were recommended for such improvements by the UPRC.

PLANS FOR INCREASING PROGRAM PRODUCTIVITY ABOVE THRESHOLD

Unless the program's new recruitment strategies are highly successful, it is unlikely that the baccalaureate degree programs for teacher education in biology or chemistry can attract sufficient enrollments to become viable. The B.S. in science education was originally "triggered" for special review by the System Office because its degree productivity for FY98 to FY00 averaged 6.3 graduates per year. That three-year average has dropped slightly for the period from FY00 to FY02 and now stands at an average of 6 graduates per year. However, the total number of declared majors in this program (broad-field and single-discipline combined) has been falling from a high of 52 in Fall 2000 to a low of 40 in Fall 2002. Since the conversion from a single broad-field degree in 2001, all of the newly declared majors interested in secondary teaching in the sciences

have selected Biology Education over Chemistry Education. However, the numbers of declared majors are substantially below Regents' thresholds for both programs (7 in Biology Education and 0 in Chemistry Education for Fall 2002 plus 33 continuing completion of the discontinued broad-field Science Education program). These statistics suggest that the likelihood is very low that any of these programs will exceed the Regents' threshold of 10 graduates per year in the foreseeable future.