



CHE  
05/01/03  
Agenda items 3.02.A.1-7

May 1, 2003

**MEMORANDUM**

**To:** Mr. Dalton B. Floyd, Jr., Chairman, and Members, Commission on Higher Education

**From:** Ms. Dianne Chinnes, Chairman, Committee on Academic Affairs and Licensing

**Analyses of Seven New Program Proposals**

Please find attached the staff summaries and analyses for seven new program proposals, Agenda item 3.02.A.1-7.

The Committee on Academic Affairs and Licensing will consider these seven items at its meeting on April 30, 2003, and will make its recommendations to the Commission on May 1, 2003.

As always, please do not hesitate to call me or Dr. Gail Morrison should you have any questions or concerns about our analyses or recommendations.

/kj

**New Program Proposal**  
**Bachelor of Science in Genetics**  
**Clemson University**

**Summary**

Clemson University requests approval to offer a program leading to the Bachelor of Science degree in Genetics, to be implemented in August 2003.

The proposal was approved by the Clemson University Board of Trustees on September 24, 2002, and submitted for Commission review on January 31, 2003. The proposal was reviewed without substantive comment and voted upon favorably by the Advisory Committee on Academic Programs at its meeting on April 2, 2003.

The purpose of the program is to prepare graduates for careers in the fast-developing area of genetics. The emphasis in the program will be on preparing students to become the basis of an educated workforce for the developing genetics industry in South Carolina, and to enter graduate programs in genetics and biomedical fields in South Carolina's three research universities. The need for the program is based upon the demand among South Carolina residents for the University of Georgia's B.S. program in Genetics, currently the undergraduate degree in the Academic Common Market most requested by South Carolina students; and upon the increased opportunities in the state's nascent genetics industry. This emerging industry is centered to a large degree upon the Greenwood Genetic Center, the Center's entrepreneurial "bio-incubator" area, and Clemson's Biosystems Research Complex. The program also fits well with Clemson's newly established DNA Learning Center for informing teachers and students in K-12 about genetics and biotechnologies.

The curriculum consists of a minimum of 118-120 credit hours. Of these, 44 are in general education, 22-24 are in genetics core courses, 15 in free or science electives, and the remainder in science-related requirements, including chemistry and biochemistry. Students are required to take two research semesters in a faculty member's laboratory. Students also will have the opportunity to perform their research projects in medically related human genetics, as well as multiple plant and animal departmental venues at Clemson. No other free-standing degree programs at the bachelor's level exist in Genetics in South Carolina. However, Lander University does offer a concentration/track in Genetics in its Biology major. Approval of this degree program at Clemson will end the eligibility of undergraduate students for Academic Common Market programs in Genetics, since the proposed degree is less than 50% different in

content from the Georgia degree program. Clemson is the only institution which offers graduate degrees (both a master's and Ph.D.) in Genetics in South Carolina.

The proposal states that four new full-time tenure-track faculty members (3.0 FTE) will be hired in the third and fourth years of implementation of the program. All faculty members will need to be credentialed at the doctoral level and will enter at the assistant professor level. A total of 10 headcount (2.5 FTE) faculty will work with the program in the first year, rising to 14 headcount (5.5 FTE) faculty by the fifth year of the program's implementation.

Enrollment in the proposed program is estimated to begin at 10 headcount (11.5 FTE) students in FY 2003-2004, rising to 100 headcount (100 FTE) students in the fifth year of the program's implementation. Estimates are based on total enrollment in the program as submitted by the institution. If the enrollment projections are met, the program will meet the current CHE program productivity standards for enrollment.

The program proposal recognizes the need to coordinate lower-division coursework in the program with lower-division coursework offered in the concentration in Genetics in the Bachelor of Science in Biology degree at Lander University in order to allow students in either institution to transfer to the other's undergraduate genetics program of study. This is especially important, as the proposal recognizes, since both the Lander genetics concentration in the Biology program of study and the proposed Clemson program of study will be using the Greenwood Genetic Center as a place for undergraduates to gain research credit experience.

Lander University fully supports this program proposal. Lander's chief academic officer seconded the motion at the Advisory Committee meeting to approve the program. When contacted by CHE staff, academic personnel at both Lander and Clemson reiterated their institutional intentions to coordinate and cooperate in the areas listed above. However, no memorandum of understanding has yet been developed to formalize this relationship. Such an agreement should be completed by the two institutions prior to the implementation of the proposed Clemson program.

No specialized accreditation is available for this program. No state licensure is required for the operation of this program.

The proposal states that there are \$82,980 of equipment requirements for the proposed program. No facilities requirements are necessary for the proposed program. The proposal states that, because Clemson already supports a master's and a Ph.D. degree in Genetics, library resources necessary for the new program are already adequate. New costs for the program are estimated to begin at \$206,200 in the first year, then to rise to \$690,880 in the second year, and remain at \$510,300 in each of the third, fourth and fifth years of the program's implementation. Categories of costs over the first five years of the

program's implementation include faculty salaries (\$988,800); graduate assistants (\$54,000); supplies and materials (\$30,000); equipment (\$82,980); other (\$207,200) and faculty start-ups (\$1,065,000). Total estimated new costs for the program during the first five years will be \$2,427,980.

Shown below are the estimated Mission Resource Requirement (MRR) costs to the state and new costs not funded by the MRR associated with implementation of the proposed program for its first five years. (These figures are calculated from the base of estimated "new" student enrollments, not the "total" student enrollments anticipated for the program.) Also shown are the estimated revenues projected under the MRR and the Resource Allocation Plan as well as student tuition.

Year	Estimated Existing Costs (Instructional)	Estimated New Costs	Total Costs	State Appropriation	Tuition	Total Revenue
2003-04	\$69,804	\$0	<b>\$69,804</b>	\$0	\$52,117	<b>\$52,117</b>
2004-05	118,129	0	<b>118,129</b>	25,241	88,307	<b>113,548</b>
2005-06	161,085	0	<b>161,085</b>	42,674	120,161	<b>162,835</b>
2006-07	161,085	0	<b>161,085</b>	58,289	120,161	<b>178,450</b>
2007-08	161,085	0	<b>161,085</b>	58,289	120,161	<b>178,450</b>

These data demonstrate that if the institution can meet the projected student enrollments and contain costs as they are shown in the proposal, the program will be able to cover new costs with revenues it generates by the third year of its implementation.

In summary, the institution will offer a program leading to the B.S. degree in Genetics that will be unique as a stand-alone program in Genetics in South Carolina and will work cooperatively at the Greenwood Genetic Center with the concentration in Genetics of the B.S. in Biology offered by Lander University. The Clemson University degree program will allow students to obtain the skills and knowledge needed to work in the growing field of genetics, particularly with human-medical genetics. The program is designed to produce graduates who can meet the workforce needs of the state's nascent, growing genetics industry.

**Recommendation**

The staff recommends that the Committee on Academic Affairs and Licensing recommend that the Commission approve the program leading to the Bachelor of Science in Genetics at Clemson University, to be implemented in August, 2003, provided that 1) no "unique cost" or other special state funding be required or requested; and, 2) provided further that, in keeping with the issues of coordination raised in the proposal itself, by August 2003, Clemson University conclude and file with the Commission on Higher Education a memorandum of understanding with Lander University for coordination of undergraduate curricula, transfer processes in the respective institutions in the similar

genetics programs, and undergraduate research opportunities at Greenwood Genetic Center.

**CHE Recommendation**

The Committee on Academic Affairs and Licensing will consider this agenda item at its meeting on April 30, 2003, and will make its recommendation to the Commission on May 1, 2003.

**New Program Proposal**  
**Bachelor of Arts in Early Childhood Education**  
**University of South Carolina-Columbia**

**Summary**

USC-Columbia requests approval to offer a program leading to the Bachelor of Arts degree in Early Childhood Education, to be implemented in Fall 2003.

The proposal was submitted for Commission review on February 14, 2003. The proposal was reviewed without substantive comment and voted upon favorably by the Advisory Committee on Academic Programs at its meeting on April 2, 2003. The Board of Trustees approved the proposal on April 16, 2003.

The purpose of the program is to prepare graduates who will be eligible for certification as early childhood teachers. The proposed program will replace the current undergraduate minor/Masters of Arts in Teaching (M.A.T.) option that is a five-year teacher education program. The current program requires students to earn a B.A. or B.S. degree outside the College of Education and then enter into the M.A.T. program in Early Childhood Education during their fifth year. In 2001-02, the College of Education's dean charged a task force to examine its five-year programs and the task force's recommendation was for the College to develop new undergraduate programs in early childhood, elementary, and middle-level education. The University will continue to offer the M.A.T. degree to career changers but the proposed B.A. degree will be the main avenue for students interested in attaining early childhood certification.

USC-Columbia offered a four-year early childhood education program until 1985 when it transitioned to an "extended" baccalaureate and then in 1995 to an M.A.T. fifth-year program. The proposed four-year program has been redesigned around the standards of the professional association, the National Association for the Education of Young Children (NAEYC).

The need for the program is based upon state and national data that indicate a continued need for early childhood educators. South Carolina is expected to have a teacher shortage of approximately 10,000 teachers over the next ten years with two to three thousand of these in early childhood education. Demand for early childhood educators has been high in South Carolina because of state mandated class-size reduction in the early grades and the implementation of the First Steps program although early childhood is no longer on the list of critical shortage fields.

The curriculum consists of 127-128 credit hours. Of these, 43- 44 are in general education, 18 in specialized content courses, and 66 are in education. The 66 credit hours in education consist of 18 in the education core, 29 in the early childhood core, and 19 in practica and internships. Nineteen new courses will be required for the proposed program. These courses have been developed to meet the needs of an undergraduate program as well as the standards of the professional association, NAEYC. There are similar programs at seven public institutions and at fourteen private institutions. As noted above, the demand for early childhood educators is high and the offering of such degrees forms the core of many teacher education programs along with elementary education programs.

As of this writing, staff of the State Department of Education has not shared any comments about this proposal.

USC indicated that three new faculty and one part-time staff person will need to be hired. The proposal states that the College of Education has decreased its faculty by over 10 positions in the past few years and that the new faculty will fill these vacant positions. New faculty will be required to hold a terminal degree in early childhood education and have a minimum of three years teaching experience in early childhood education. Faculty currently serving in the M.A.T. program will increase their support of the proposed program as the number of M.A.T. students decreases. The undergraduate program will be the primary route to early childhood certification and the five-year track (M.A.T.) will only serve career changers, thus reducing the need for faculty in the M.A.T. program. A clinical faculty member and administrative staff will provide part-time support. These two positions will also support the proposed programs in Elementary Education and Middle–Level Education. Faculty serving the program will begin at seven headcount (1.83 FTE) in FY 2003-04 and increase to ten headcount faculty (7.83 FTE) in FY 2006-07 and remain at that level for the remainder of the first five years of the program.

Enrollment in the proposed program is estimated to begin at five headcount students (3.7 FTE) in FY 2003-04 and increase to 120 headcount (69.3 FTE) by 2007-08. Estimates are based on current enrollment in the five-year program, the number of freshmen who indicate interest in early childhood education, and enrollment in the early childhood undergraduate minor courses. If the enrollment projections are met, the program will meet the current CHE program productivity standards for enrollment.

The program will be required to seek accreditation from the National Council for the Accreditation of Teacher Education (NCATE) and receive approval from the National Association for the Education of Young Children. The current five-year program will be reviewed by these two national organizations during USC's accreditation visit in October 2003. The proposed programs will undergo review during the next review cycle in five years.

There are no physical plant requirements for the proposed program. Equipment needs are related to computers for new faculty. The proposal did not present a quantitative analysis of library holdings for the program because there is a currently offered graduate degree program and the holdings have been deemed sufficient under the University's last NCATE review.

Estimated new costs begin at \$27,060 and include \$16,500 for faculty salaries, \$9,240 for support personnel and \$1,320 for equipment. This amount increases to \$175,740 by year five and includes \$166,500 for faculty salaries and \$9,240 for support personnel. The total estimated new costs for the first five years of the program are \$586,020.

Shown below are the estimated Mission Resource Requirement (MRR) costs to the state and new costs not funded by the MRR associated with implementation of the proposed program for its first five years. Also shown are the estimated revenues projected under the MRR and the Resource Allocation Plan as well as student tuition.

Year	Estimated MRR Cost for Proposed Program	Extraordinary (Non-MRR) Costs for Proposed Program	Total Costs	State Appropriation	Tuition	Total Revenue
2003-04	\$31,039	\$0	\$31,039	\$0	\$24,125	<b>\$24,125</b>
2004-05	53,210	0	53,210	13,055	41,642	<b>54,697</b>
2005-06	106,419	0	106,419	22,607	83,284	<b>105,891</b>
2006-07	345,862	0	345,862	45,214	271,483	<b>316,697</b>
2007-08	576,437	0	576,437	146,723	453,074	<b>599,797</b>

These data demonstrate that if the University of South Carolina can meet the projected student enrollments and contain costs as they are shown in the proposal, the program will be able to cover new costs with revenues it generates by the fifth year of its implementation.

In summary, the University of South Carolina will offer a newly designed program leading to the bachelor's degree in Early Childhood Education. This degree has been designed around the new performance-based standards of the National Association for the Education of Young Children. The degree will allow students to obtain the necessary skills and knowledge to qualify for teacher certification in early childhood education by the South Carolina Department of Education. The program will be one of many in the State that serves the needs of school districts in hiring and attracting early childhood educators. While there is not a "critical" need for such teachers, there is still high demand for teachers in the field of early childhood because of class size reduction and the

First Steps program. In addition, the federal *No Child Left Behind* legislation requires a highly qualified teacher in every classroom by 2005-2006 (2002-03 for Title I schools), and this requirement will increase the pressure on school districts to ensure that early childhood educators in their schools have the requisite training.

### **Recommendation**

The staff suggests that the Committee on Academic Affairs and Licensing recommend that the Commission approve the program leading to the Bachelor of Arts degree in Early Childhood Education at the University of South Carolina-Columbia, to be implemented in Fall 2003, provided that no “unique cost” or other special state funding be required or requested.

### **CHE Recommendation**

The Committee on Academic Affairs and Licensing will consider this agenda item at its meeting on April 30, 2003, and will make its recommendation to the Commission on May 1, 2003.

**New Program Proposal**  
**Bachelor of Arts in Elementary Education**  
**University of South Carolina-Columbia**

**Summary**

USC-Columbia requests approval to offer a program leading to the Bachelor of Arts degree in Elementary Education, to be implemented in Fall 2003.

The proposal was submitted for Commission review on February 14, 2003. The proposal was reviewed without substantive comment and voted upon favorably by the Advisory Committee on Academic Programs at its meeting on April 2, 2003. The Board of Trustees approved the proposal on April 16, 2003.

The purpose of the program is to prepare graduates who will be eligible for certification as elementary teachers. The proposed program will replace the current undergraduate minor/Masters of Arts in Teaching (M.A.T.) option that is a five-year teacher education program. The current program requires students to earn a B.A. or B.S. degree outside the College of Education and then enter into the M.A.T. program in Elementary Education during their fifth year. In 2001-02, the College of Education's dean charged a task force to examine its five-year programs and the task force's recommendation was for the College to develop new undergraduate programs in early childhood, elementary, and middle-level education. The University will continue to offer the M.A.T. degree to career changers but the proposed B.A. degree program will be the main avenue for students interested in attaining early childhood certification.

USC-Columbia offered a four-year elementary education program until 1985 when it transitioned to an "extended" baccalaureate and then in 1995 to an M.A.T. fifth-year program. The proposed four-year program has been redesigned around the standards of the professional association, the Association of Childhood Education International (ACEI).

The need for the program is based upon state and national data that indicate a continued need for elementary educators. South Carolina is expected to have a teacher shortage of approximately 10,000 teachers over the next ten years as well as an increasing demand in the early grades due to growth in the school age population. Demand for elementary educators has been high in South Carolina because of state mandated class-size reduction in the early grades although Elementary Education is no longer on the list of critical shortage fields.

The curriculum consists of 127-129 credit hours. Of these, 46 are in general education, 18 in specialized content courses, and 66 are in education. The 63 credit hours in education consist of 19 in the education core, 25 in the elementary core, and 19 in practica and internships. Nineteen new courses will be required for the proposed program. These courses have been developed to meet the needs of an undergraduate program as well as the standards of the professional association, ACEI. There are similar programs at nine public institutions and at 18 private institutions. As noted above, the demand for elementary educators is high and the offering of such degrees forms the core of many teacher education programs along with early childhood education programs.

As of this writing, staff of the State Department of Education has not shared any comments about this proposal.

USC indicated that four new faculty and one part-time staff person (clinical instructor) will need to be hired. The proposal states that the College of Education has decreased its faculty by over 10 positions in the past few years and that the new faculty will occupy these vacant positions. New faculty will be required to hold terminal degrees in elementary education and have a minimum of three years teaching experience in elementary education. Faculty currently serving in the M.A.T. program will increase their support of the proposed program as the number of elementary students in the graduate-level M.A.T. program decreases. The undergraduate program will be the primary route to elementary certification and the five-year track (M.A.T.) will only serve career changers, thus reducing the need for faculty in the M.A.T. program. A clinical faculty member and administrative staff will provide part-time support. These two positions will also support the proposed programs in Early Childhood Education and Middle-Level Education. Faculty serving the program will begin at seven headcount (1.83 FTE) in FY 2003-04 and increase to 11 headcount faculty (8.83 FTE) in FY 2006-07 and remain at that level for the remainder of the first five years of the program.

Enrollment in the proposed program is estimated to begin at five headcount students (3.7 FTE) in FY 2003-04 and increase to 190 headcount (112 FTE) by 2007-08. Estimates are based on current enrollment in the five-year program, the number of freshmen who indicate interest in elementary education, and enrollment in the elementary undergraduate minor courses. If the enrollment projections are met, the program will meet the current CHE program productivity standards for enrollment.

The program will be required to seek accreditation from the National Council for the Accreditation of Teacher Education (NCATE) and receive approval from the Association of Childhood Education International. The current five-year program will be reviewed by these two national organizations during USC's accreditation visit in October 2003. The proposed new programs will undergo review during the next review cycle in five years.

There are no physical plant requirements for the proposed program. Equipment needs are related to computers for new faculty. The proposal did not present a quantitative analysis of library holdings for the program because this is a currently offered graduate degree program and the holdings have been deemed sufficient under the University's last NCATE review.

Estimated new costs begin at \$27,060 and include \$16,500 for faculty salaries, \$9,240 for support personnel and \$2,000 for equipment. This amount increases to \$227,740 by year five and includes \$216,500 for faculty salaries, \$9,240 for support personnel, and \$2,000 for equipment. The total estimated new costs for the first five years of the program are \$688,700.

Shown below are the estimated Mission Resource Requirement (MRR) costs to the state and new costs not funded by the MRR associated with implementation of the proposed program for its first five years. Also shown are the estimated revenues projected under the MRR and the Resource Allocation Plan as well as student tuition.

Year	Estimated MRR Cost for Proposed Program	Extraordinary (Non-MRR) Costs for Proposed Program	Total Costs	State Appropriation	Tuition	Total Revenue
2003-04	\$31,039	\$0	<b>\$31,039</b>	\$0	\$24,125	<b>\$24,125</b>
2004-05	53,210	0	<b>53,210</b>	13,062	41,642	<b>54,704</b>
2005-06	341,428	0	<b>341,428</b>	22,618	268,178	<b>290,796</b>
2006-07	589,740	0	<b>589,740</b>	145,044	463,484	<b>608,528</b>
2007-08	931,168	0	<b>931,168</b>	250,506	731,164	<b>981,670</b>

These data demonstrate that if the University of South Carolina can meet the projected student enrollments and contain costs as they are shown in the proposal, the program will be able to cover new costs with revenues it generates by the fourth year of its implementation.

In summary, the University of South Carolina will offer a newly designed program leading to the bachelor's degree in Elementary Education. This degree has been designed around the new performance-based standards of the Association of Childhood Education International. The degree will allow students to obtain the necessary skills and knowledge to qualify for teacher certification in elementary education by the South Carolina Department of Education. The program will be one of many in the State that serves the needs of school districts in hiring and attracting elementary educators. While there is not a "critical" need for elementary education teachers, there is still high demand for teachers in the field because of class size reduction and retirements. In addition, the federal *No Child Left Behind* legislation requires a highly qualified teacher in every

classroom by 2005-2006 (2002-03 for Title I schools), and this requirement will increase the pressure on school districts to ensure that elementary educators in their schools have the requisite training.

### **Recommendation**

The staff suggests that the Committee on Academic Affairs and Licensing recommend that the Commission approve the program leading to the Bachelor of Arts degree in Elementary Education at the USC-Columbia, to be implemented in Fall 2003, provided that no “unique cost” or other special state funding be required or requested.

### **CHE Recommendation**

The Committee on Academic Affairs and Licensing will consider this agenda item at its meeting on April 30, 2003, and will make its recommendation to the Commission on May 1, 2003.

**New Program Proposal**  
**B.A. and B.S. in Middle Level Education**  
**University of South Carolina-Columbia**

**Summary**

USC-Columbia requests approval to offer a program leading to the Bachelor of Arts and Bachelor of Science degrees in Middle Level Education, to be implemented in Fall 2003.

The proposal was submitted for Commission review on February 14, 2003. The proposal was reviewed without substantive comment and voted upon favorably by the Advisory Committee on Academic Programs at its meeting on April 2, 2003. The Board of Trustees approved the proposal on April 16, 2003.

The purpose of the program is to train teachers to serve in the grade spans of the middle school by offering specialized training focused on the unique needs of adolescents. The need is based on the new middle-level certification requirements of the State Board of Education. In January 2002, the State approved middle-level certification of teachers, and there is a great need for the specialized training required to attain this certification. After September 1, 2005, any graduate of a teacher education program wishing to teach in grades 5-8 must complete an approved middle-level teacher education program. Under the federal *No Child Left Behind* Act, any teacher in a middle school must have a middle-level certification in order to be termed “highly qualified.” These fast approaching deadlines have created a sense of urgency in the State because of the expected high retirement rate over the next five years of currently practicing teachers. This proposal represents USC’s response to this need by developing an appropriate middle-level teacher education program designed to lead to initial certification.

The need for the program is based upon the state and federal legislation requiring teachers of middle-level students to hold a middle-level certificate. Many of South Carolina’s middle-level teachers are currently elementary certified and do not have the requisite training in the discipline areas to be considered “highly qualified” under federal regulations. The proposed program will ensure that teachers in the middle grades will have the necessary content to teach middle school students.

The Commission has already approved middle-level teacher education programs. These are located at the University of South Carolina-Spartanburg, Coastal Carolina University, College of Charleston, and Winthrop University. Because of the unique demand the new certification requirement places on teacher recruitment, it is very important that the Commission support the development of middle-level programs at the

public institutions as noted in the above paragraphs. The demand for these teachers certified at the middle-level will be great, and the institutions have been called upon by both the S.C. Department of Education and the General Assembly to develop programs that will address this need

The curriculum consists of 129-135 credit hours. Of these, 40-43 are in general education, 36-41 in specialized content area courses, 50 are in education, and 3 are in electives. The 50 credit hours in education consist of 14 in the education core, 18 in the middle-level core, and 18 in practica and internships. Students in the B.A. degree program will complete 27 hours in liberal arts and 14 hours in science and mathematics along with concentrations in English and social studies. Students in the B.S. degree program will complete 24 hours in liberal arts and 19 hours in science and mathematics along with concentrations in science and mathematics. Twelve new courses will be required for the proposed program. These courses have been developed to meet the needs of an undergraduate program as well as the standards of the professional association, the National Middle School Association (NMSA).

As of this writing, staff of the State Department of Education has not shared any comments about this proposal.

USC indicates that four new faculty and one part-time staff person (clinical instructor) will need to be hired. Three of the new faculty will be in the College of Education and one in the Mathematics Department. New faculty will be required to hold a terminal degree in middle-level education and have a minimum of two years teaching experience in middle-level education. Two faculty currently serving in the elementary and secondary M.A.T. programs, which are largely transitioning to four year programs, will increase their support of the proposed program as the number of elementary and secondary students in the graduate-level M.A.T. program decreases. A clinical faculty member and administrative staff will provide part-time support. These two positions will also support the proposed programs in Early Childhood Education and Elementary Education. Faculty serving the program will begin at five headcount (3 FTE) in FY 2003-04 and increase to seven headcount faculty (5 FTE) in FY 2005-06 and remain at that level for the remainder of the first five years of the program.

Enrollment in the proposed program is estimated to begin at ten headcount students (10 FTE) in FY 2003-04 and increase to 50 headcount (50 FTE) by 2007-08. Estimates are based on the assumption that approximately 30 percent of current students in the elementary and secondary education programs will choose to pursue middle-level certification.

The program will be required to seek accreditation from the National Council for the Accreditation of Teacher Education (NCATE) and receive approval from the National Middle School Association. USC's next accreditation visit is in October 2003, but the

proposed program will undergo review during the next review cycle in five years after there has been a cohort of graduates.

There are no physical plant requirements for the proposed program. Equipment needs are related to computers for new faculty. The proposal did not present a quantitative analysis of library holdings against national standards but did examine the holdings for middle schools, middle grades and middle-level education materials. This analysis yielded over 600 holdings in these areas with approximately 50 percent newer than 1992. In addition, more than 300 holdings are available in middle school content areas as well as journals from each of the professional teaching organizations (i.e., middle-level education, mathematics, English, science, and social studies).

Estimated new costs begin at \$142,560 and include \$130,000 for faculty salaries, \$9,240 for support personnel and \$3,320 for equipment. This amount increases to \$264,240 by year five and includes \$255,000 for faculty salaries and \$9,240 for support personnel. The total estimated new costs for the first five years of the program are \$1,155,520.

Shown below are the estimated Mission Resource Requirement (MRR) costs to the state and new costs not funded by the MRR associated with implementation of the proposed program for its first five years. Also shown are the estimated revenues projected under the MRR and the Resource Allocation Plan as well as student tuition.

Year	Estimated MRR Cost for Proposed Program	Extraordinary (Non-MRR) Costs for Proposed Program	Total Costs	State Appropriation	Tuition	Total Revenue
2003-04	\$83,140	\$0	<b>\$83,140</b>	\$0	\$65,268	<b>\$65,268</b>
2004-05	166,280	0	<b>166,280</b>	35,286	130,536	<b>165,822</b>
2005-06	249,420	0	<b>249,420</b>	70,571	195,804	<b>266,375</b>
2006-07	415,700	0	<b>415,700</b>	105,857	326,340	<b>432,197</b>
2007-08	415,700	0	<b>415,700</b>	176,429	326,340	<b>432,197</b>

These data demonstrate that if the USC-Columbia can meet the projected student enrollments and contain costs as they are shown in the proposal, the program will be able to cover new costs with revenues it generates by the third year of its implementation.

In summary, USC-Columbia will offer a program leading to the bachelor's degree in Middle Level Education. This degree has been designed around the new performance-based standards of the National Middle School Association. The degree will allow students to obtain the necessary skills and knowledge to qualify for teacher certification in middle-level education by the South Carolina Department of Education. The program will be one of a few in the State that serves the needs of school districts in hiring and

attracting middle-level educators. While there is no data yet to determine that this area is a “critical” need, there is expected to be high demand for teachers in the field because of impending retirements and the new state-mandated middle-level certification. In addition, the federal *No Child Left Behind* legislation requires a highly qualified teacher in every classroom by 2005-2006 (2002-03 for Title I schools), and this requirement will increase the pressure on school districts to ensure that middle-level educators in their schools have the requisite training.

### **Recommendation**

The staff suggests that the Committee on Academic Affairs and Licensing recommend that the Commission approve the program leading to the Bachelor of Arts and Bachelor of Science degrees in Middle Level Education at the University of South Carolina-Columbia, to be implemented in Fall 2003, provided that no “unique cost” or other special state funding be required or requested.

### **CHE Recommendation**

The Committee on Academic Affairs and Licensing will consider this agenda item at its meeting on April 30, 2003, and will make its recommendation to the Commission on May 1, 2003.

**New Program Proposal**  
**Master of Arts in Teaching in Middle Grades Education**  
**Clemson University at the University Center of Greenville**

**Summary**

Clemson University requests approval to offer a program leading to the Master of Arts in Teaching degree in Middle Grades Education at the University Center of Greenville, to be implemented in Fall 2003.

The proposal was submitted for Commission review on February 14, 2003. The Board of Trustees approved the proposal on March 10, 2003. The proposal was reviewed without substantive comment and voted upon favorably by the Advisory Committee on Academic Programs at its meeting on April 2, 2003.

The purpose of the program is to train teachers to serve in the grade spans (5-8) of the middle school by offering specialized training focused on the unique needs of adolescents. Clemson's program objectives are: 1) to promote the entrance of content-ready individuals into the South Carolina classroom in a timely manner; 2) to provide a source of middle-grades certified teachers in South Carolina, and 3) to provide a rigorous yet plausible route for individuals seeking to change careers and enter teaching. The need is based on the new middle-level certification requirements of the State Board of Education. In January 2002, the State approved middle-level certification of teachers, and there is a great need for the specialized training required to attain this certification. After September 1, 2005, any graduate of a teacher education program wishing to teach in grades 5-8 must complete an approved middle-level teacher education program. Under the federal *No Child Left Behind Act*, any teacher in a middle school must have middle-level certification in order to be termed "highly qualified." These fast approaching deadlines have created a sense of urgency in the State because of the expected high retirement rate over the next five years of currently practicing teachers. This proposal represents Clemson's response to this need by developing an appropriate middle-level teacher education program designed to lead to initial certification for those who already have a bachelor's degree in an appropriate discipline.

The need for the program is based upon the state and federal legislation requiring teachers of middle-level students to hold a middle-level certificate. Clemson has decided to offer a graduate degree for career changers that will allow them to complete the requirements for certification within one calendar year. The proposed program will ensure that teachers in the middle grades will have the necessary content to teach middle school students.

The Commission has already approved middle-level teacher education programs. These are located at the University of South Carolina-Spartanburg, Coastal Carolina University, College of Charleston, and Winthrop University. However, Clemson's program will be the first M.A.T. program in middle grades education the state. Winthrop University is the only institution offering a graduate program in middle-level education but this program is a Master of Education for currently certified teachers. Because of the unique demand the new certification requirement places on teacher recruitment, it is very important that the Commission support the development of middle-level programs at the public institutions as noted in the above paragraphs. The demand for these teachers certified at the middle-level will be great, and the institutions have been called upon by both the S.C. Department of Education and the General Assembly to develop programs that will address this need

The curriculum consists of 36 credit hours. Of these, 27 are in the core courses (education, middle school focused courses, and practicum courses) and nine are in content. The nine content hours will be in areas where the student is deficient in meeting the National Middle School Association and state certification requirements and will ensure that students have sufficient content in two content areas. No new courses will be required for the proposed program. The program has been developed to have an intensive field-based component. During the fall semester block, students will begin their field experience when public schools open in order to gain experiences with respect to the opening of school, a need noted by many district personnel. They will spend full days at the schools until classes begin at the University. At that time they will spend mornings in the middle school and take classes in the afternoon at UCG. The program has been designed to be completed in one calendar year. Clemson has indicated that current courses are being redesigned to include a middle school focus. The program has been developed to meet the needs of career changers as well as the standards of the professional association, the National Middle School Association (NMSA).

As of this writing, staff of the State Department of Education has not shared any comments about this proposal.

Clemson indicated that four new faculty and one staff person will need to be hired. New faculty will be required to hold a terminal degree in middle-level education and have a minimum of three years teaching experience in middle-level education. Two faculty will be hired in FY 2003-04 and two additional faculty will be hired in FY 2005-06. Faculty serving the program will begin at two headcount (1.5 FTE) in FY 2003-04 and increase to four headcount faculty (3.5 FTE) in FY 2005-06 and remain at that level for the remainder of the first five years of the program.

Enrollment in the proposed program is estimated to begin at twenty headcount students (30 FTE) in FY 2003-04 and increase to 40 headcount (60 FTE) by 2007-08. Estimates are based on the number of students who currently enroll in Coverse College's

M.A.T. in Spartanburg (not for middle-level education). UCG has indicated that they refer at least 50 students per year to the Converse program and that Greenville County residents must commute to Spartanburg for such a program and pay higher tuition than Clemson.

The program will be required to seek accreditation from the National Council for the Accreditation of Teacher Education (NCATE) and receive approval from the National Middle School Association.

There are no physical plant requirements or equipment needs for the proposed program. The proposal notes that the library subscribes to 80 percent of the periodicals indexed in the *Education Index* and 60 percent of those in the *Current Index to Journals in Education*. UCG students are also connected to numerous online resources including the Online Libraries Catalogue. No quantitative comparison to national standards such as the American Library Association was provided in the proposal.

Estimated new costs begin at \$134,000 and include \$76,000 for faculty salaries, \$30,000 for program administration, \$9,000 for graduate assistants, \$11,000 for supplies, \$2,000 for library support, and \$6,000 in other expenses (phone, travel, advertising, etc.). This amount increases to \$268,000 by year five and includes \$176,000 for faculty salaries, \$30,000 for program administration, \$12,000 for graduate assistants, \$30,000 for clerical support, \$7,000 for supplies, \$5,000 for library support, and \$8,000 in other expenses (phone, travel, advertising, etc.) The total estimated new costs for the first five years of the program is \$1,070,500.

Shown below are the estimated Mission Resource Requirement (MRR) costs to the state and new costs not funded by the MRR associated with implementation of the proposed program for its first five years. Also shown are the estimated revenues projected under the MRR and the Resource Allocation Plan as well as student tuition.

Year	Estimated MRR Cost for Proposed Program	Extraordinary (Non-MRR) Costs for Proposed Program	Total Costs	State Appropriation	Tuition	Total Revenue
2003-04	\$506,910	\$0	<b>\$506,910</b>	\$0	\$277,023	<b>\$277,023</b>
2004-05	506,910	0	<b>506,910</b>	155,709	277,023	<b>432,732</b>
2005-06	1,013,820	0	<b>1,013,820</b>	155,709	554,045	<b>709,754</b>
2006-07	1,013,820	0	<b>1,013,820</b>	311,420	554,045	<b>865,464</b>
2007-08	1,013,820	0	<b>1,013,820</b>	311,420	554,045	<b>865,464</b>

These data demonstrate that if the Clemson University can meet the projected student enrollments and contain costs as they are shown in the proposal, the program will not be able to cover new costs with revenues it generates by the fifth year of its implementation.

In summary, Clemson University will offer a program leading to the M.A.T. degree in Middle Grades Education at the University Center of Greenville. This degree has been designed around the new performance-based standards of the National Middle School Association and will be the only M.A.T. degree available in the State for those with bachelor's degrees who wish to become middle school teachers. The degree will allow students to obtain the necessary skills and knowledge to qualify for teacher certification in middle-level education by the South Carolina Department of Education within one calendar year. While there is no data yet to determine that this area is a "critical" need, there is expected to be high demand for teachers in the field because of impending retirements and the new state-mandated middle-level certification. In addition, the federal *No Child Left Behind* legislation requires a highly qualified teacher in every classroom by 2005-2006 (2002-03 for Title I schools), and this requirement will increase the pressure on school districts to ensure that middle-level educators in their schools have the requisite training.

### **Recommendation**

The staff suggests that the Committee on Academic Affairs and Licensing recommend that the Commission approve the program leading to the Master of Arts in Teaching degree in Middle-Level Education at Clemson University, to be implemented in Fall 2003, at the University Center of Greenville provided that no "unique cost" or other special state funding be required or requested.

### **CHE Recommendation**

The Committee on Academic Affairs and Licensing will consider this agenda item at its meeting on April 30, 2003, and will make its recommendation to the Commission on May 1, 2003.

**New Program Proposal**  
**Master of Science in Environmental Health Physics**  
**Clemson University**

**Summary**

Clemson University requests approval to offer a program leading to the Master of Science in Environmental Health Physics, to be implemented in Fall 2003.

The proposal was submitted for Commission review on January 13, 2003. The proposal was reviewed and voted upon favorably by the Advisory Committee on Academic Programs at its meeting on April 2, 2003, after extended discussion about the relationship of the proposed program to an existing track.

Clemson proposes to take the existing “Nuclear Environmental” track/focus area currently offered under the Master of Science in Engineering program and make it a free-standing degree program. Uniting statements in the proposal with clarifying institutional responses received before, during, and after the Advisory Committee meeting, the proposal to establish a free-standing degree program is made so that students can pursue national scholarships and faculty competitive research more easily. Also, the focus area/track, renamed and placed as a separate degree program, can better attract a larger number of qualified students.

The purpose of the master’s program in Environmental Health Physics is to prepare students to measure natural and human-created radioactivity in the environment, to manage nuclear waste and nuclear transport, and to determine risks associated with exposure to radioactivity. Although the written proposal states that the Nuclear Environmental focus area of the M.S. in Environmental Engineering and Science will be retained, Clemson University has subsequently agreed to remove the focus area from the curriculum simultaneously with implementation of the new degree program.

The program proposal states that the curriculum consists of a minimum of 24 credit hours and six research credit hours for the thesis option; or 30 course hours and 3 credit hours of a special project for the non-thesis option. However, a subsequent email message received from Clemson officials states that the new degree program will be different from the existing track *in requiring* a thesis (six semester hours) and one additional course in the degree, EE&S 611 ( three semester credit hours), for all students.

The proposal states that the program will seek accreditation by ABET-RAC (Accreditation Board for Engineering and Technology—Related Accreditation Commission) because in 2002 ABET-RAC was replaced by the ASAC (i.e., the “Applied

Science Accrediting Commission”), it is now the ASAC which would accredit the program.

Assuming that the program proposal is approved and the Nuclear Environmental focus area in Clemson’s M.S. in Environmental Engineering and Science program of study is simultaneously eliminated, the new program will be the only masters-level program of this type in the state. A Health Physics track is available at Francis Marion, but only as an undergraduate program within that institution’s Bachelor of Science in Physics program of study. An undergraduate Nuclear Engineering program has just been approved at South Carolina State University and a graduate program in Nuclear Engineering has just been approved at USC-Columbia. The proposal states that all these existing degree programs will be “feeders” to the proposed program.

The proposal states that no new tenure-track faculty member will be hired in the first five years of the program’s operation. Likewise, no new adjunct faculty member will be hired in that time period. All four faculty members necessary for the program are already part of the Clemson faculty teaching in the M.S. in Environmental Engineering and Science program’s Nuclear Environmental focus area.

Total enrollment (i.e., existing and new students at Clemson who choose to become majors) in the proposed program is estimated to begin at six headcount (12.67 FTE) students in FY 2003-2004, rising to 12 headcount (24 FTE) students in the fifth year of the program’s implementation. These figures are based on the institutional estimate of rising student interest in and demand for the program and upon current institutional capacity to care adequately for a total of 24 students in the program. If the enrollment projections are met, the program will meet the current CHE program productivity standards for enrollment.

Since the proposed new program will replace a track/focus area already existing within another degree program, according to the proposal there will be no new costs incurred for physical plant or equipment requirements, for library resources, for faculty, for administration, or for any other category except accreditation. Accreditation costs are said to be \$5,000 in the first year and \$1,000 for the next four years for a total of \$9,000 over the first five years of the program’s implementation.

Shown below are the estimated Mission Resource Requirement (MRR) costs to the state and new costs not funded by the MRR associated with implementation of the proposed program for its first five years. Also shown are the estimated revenues projected under the MRR and the Resource Allocation Plan as well as student tuition.

Year	Estimated Existing Costs (Instructional)	Estimated New Costs	Total Costs	State Appropriation	Tuition	Total Revenue
2003-04	\$341,937	\$0	<b>\$341,937</b>	\$0	\$103,974	<b>\$103,974</b>
2004-05	431,920	0	<b>431,920</b>	124,019	130,899	<b>254,918</b>
2005-06	539,900	0	<b>539,900</b>	156,335	163,453	<b>319,788</b>
2006-07	593,890	0	<b>593,890</b>	195,584	180,415	<b>375,999</b>
2007-08	647,880	0	<b>647,880</b>	215,544	196,691	<b>411,235</b>

These data demonstrate that even if the institution meets the projected student enrollments and contain costs as they are shown in the proposal, the program will not be able to cover new costs with revenues it generates by the fifth year of its implementation. The institution is committed to this program, as it was to its successor focus area/track.

In summary, the institution will offer a program leading to the Master of Science degree in Environmental Health Physics that will be unique in South Carolina at the same time that it discontinues a virtually indistinguishable Nuclear Environmental focus area/track in a program of study leading to the M.S. degree in Environmental Engineering and Science. The new stand-alone program is expected to enhance the pool of students interested in the area and lead to increased competitiveness for Clemson students for scholarships and for Clemson faculty for national funding and recognition.

### **Recommendation**

The staff suggests that the Committee on Academic Affairs and Licensing recommend that the Commission approve the program leading to the M.S. degree in Environmental Health Physics at Clemson University to be implemented in Fall 2003, provided that Clemson University discontinue the existing Nuclear Environmental focus area/track under the M.S. program in Environmental Engineering and Science in Fall 2003.

### **CHE Recommendation**

The Committee on Academic Affairs and Licensing will consider this agenda item at its meeting on April 30, 2003, and will make its recommendation to the Commission on May 1, 2003.

**New Program Proposal**  
**Master of Retailing**  
**University of South Carolina-Columbia**

**Summary**

USC-Columbia requests approval to offer a program leading to the Master of Retailing, to be implemented in January 2004.

The proposal was submitted for Commission review on November 14, 2002. The Board of Trustees approved the proposal on April 16, 2003. The proposal was reviewed without substantive comment and voted upon favorably by the Advisory Committee on Academic Programs at its meeting on April 2, 2003.

The purpose of the program is to prepare students for careers at the corporate level with retail companies. USC-Columbia notes in its proposal that the main focus within the proposed Master of Retailing will be on technology. According to the proposal, this emphasis is unique among programs of this type nationally and should enable the new program to gain recognition among prospective students and employers as well as scholars in the field. In fact, USC is the recipient of new retailing software—a gift valued at over \$2 million.

The need for the program is well justified in the proposal. USC makes a compelling argument that employment opportunities for graduates at the master's level in retailing are quite good in South Carolina. The state is home to distribution centers for several major retailers, including Wal-Mart, Ross Stores, Piggly Wiggly, and Target. Also, several students have voiced the need for a stand-alone master's program in retailing; USC-Columbia currently offers a concentration in retailing within the existing Master of Hotel, Restaurant, and Tourism Management (MHRTM).

The curriculum consists of 36 credit hours. Students take 15 hours of core courses (Statistical Methods, International Retailing, Competitive Strategies in Retailing, Retail Category and Space Management, and Applied Research in Hospitality, Retail, and Sport Management. Also, students have the choice of opting for a thesis track or a non-thesis track. Thesis track students take six credits of research devoted to thesis research and writing while non-thesis students enroll in a field project for six credits. Finally, students will be required to take 15 hours of electives that will focus on a specific area of interest related to their career goals. The University will not need to add any new courses to implement the program leading to the Master of Retailing. All graduate level courses are already in place as part of the existing concentration in the MHRTM program. There is no other master's level degree program in retailing offered in South Carolina. Several

schools around the nation offer similar degree programs, including Auburn, Georgia, Kentucky, and Tennessee. However, USC makes the case that none of these programs focuses on technology in the industry, as the proposed new USC program will. USC-Columbia is the only institution in South Carolina to offer a baccalaureate degree program in retailing.

USC-Columbia states that it will not need to add any new faculty or staff in order to implement the new program. Current total faculty FTE and headcount are 9.75 and nine, respectively, where they are predicted to remain over the first five years of the Master of Retailing's operation (2003-04 through 2007-08). The existing Center for Retailing at USC, which is externally funded, will underwrite the costs for new graduate assistantships in the program (a total of \$10,000 per year).

New enrollment in the proposed program is projected to begin with five headcount (3.1 FTE) in Spring 2004 and increase incrementally to 40 headcount (40 FTE) in Fall 2007, where it is slated to remain constant. These enrollment projections, if met, will enable the program to meet the Commission's program productivity standards. Currently, there is no accreditation required for programs in this field of study.

There are no new facilities or equipment needs required to implement the program leading to the Master in Retailing. All new costs are associated with graduate assistantships (\$10,000 per year) and new supply costs (\$1,000 per year). Thus, over the first five years of operation, the program should incur new costs of \$55,000. As noted above, the Center for Retailing will underwrite the costs of the assistantships.

Shown below are the estimated Mission Resource Requirement (MRR) costs to the state and new costs not funded by the MRR associated with implementation of the proposed program for its first five years. Also shown are the estimated revenues projected under the MRR and the Resource Allocation Plan as well as student tuition.

Year	Estimated MRR Cost for Proposed Program	Extraordinary (Non-MRR) Costs for Proposed Program	Total Costs	State Appropriation	Tuition	Total Revenue
2003-04	\$28,934	\$0	<b>\$28,934</b>	\$0	\$20,150	<b>\$20,150</b>
2004-05	138,885	0	<b>138,885</b>	11,351	94,152	<b>105,503</b>
2005-06	231,475	0	<b>231,475</b>	53,349	156,920	<b>210,269</b>
2006-07	277,770	0	<b>277,770</b>	88,915	188,304	<b>277,219</b>
2007-08	370,360	0	<b>370,360</b>	106,699	251,072	<b>357,771</b>

These data demonstrate that if USC-Columbia can meet the projected student enrollments and contain costs as they are shown in the proposal, the program will be not able to cover new costs with revenues it generates by the fifth year of its implementation. However, with the \$10,000 annual supplement from the Center for Retailing to offset some new costs, the program will likely come close to breaking even by year four (2006-07).

In summary, the Master of Retailing is a unique program in South Carolina, and with its focus on technology within the field of retailing, possibly unique in the country. The identified need for the program is adequate, and institutional new costs associated with its implementation are minimal.

### **Recommendation**

The staff suggests that the Committee on Academic Affairs and Licensing recommend that the Commission approve the program leading to the Master of Retailing at USC-Columbia, to be implemented in January 2004, provided that no “unique cost” or other special state funding be required or requested.

### **CHE Recommendation**

The Committee on Academic Affairs and Licensing will consider this agenda item at its meeting on April 30, 2003, and will make its recommendation to the Commission on May 1, 2003.