



The University of Georgia

University Council
Athens, Georgia 30602

March 28, 2007

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Dear Colleagues:

The attached revised proposal to offer the major in Microbiology under the B.S. as an external degree on the Griffin campus will be an agenda item for the April 2, 2007, Full University Curriculum Committee meeting.

Sincerely,

Dr. William K. Vencill, Chair
University Curriculum Committee

cc: Dr. Arnett C. Mace, Jr.
Professor Jere W. Morehead

TO: Hugh Ruppensburg
Associate Dean
Franklin College of Arts & Sciences

FROM: Charles Kotal
Associate Dean,
Franklin College of Arts & Sciences

DATE: February 2, 2007

RE: External Degree in Microbiology to be offered on the Griffin Campus

Attached is a proposal for an External Degree in Microbiology to be offered on the Griffin Campus. The Microbiology degree was identified by the people of Griffin as one of the majors needed to serve the area. The major will concentrate on the upper-division classes for transfer students from the surrounding colleges. All admission criteria will be the same as those for students transferring to the Athens campus. The program of study will be the same as that on the Athens campus program, except that students on the Griffin Campus would not have the full array of upper-division science courses to select from that their main campus counterparts do. The Franklin College at Gwinnett biology majors also do not have access to the full inventory of upper-division science courses from which to select their major courses. However, they have still been able to take the courses needed to fulfill the major requirements for the BS in Biology degree, and several of them have already gone on to pharmacy school, vet school, and optometry school. Thus, even with the smaller inventory of major courses, Franklin College at Griffin microbiology majors--like the Franklin College at Gwinnett biology majors before them--would still be able to take the courses needed to fulfill the requirements for their major. In fact, Franklin College at Griffin microbiology majors will have an important advantage that the biology majors at Gwinnett did not have: the Franklin College at Griffin microbiology majors would have ample opportunities to benefit from the practical experiences that can be provided by the research environment of the Griffin Campus. The Executive Committee of the Biological Sciences Division reviewed and voted unanimously to support the proposal at their meeting on January 4, 2007.

If you have any questions regarding this proposal, please do not hesitate to contact me.

Proposal for an External Degree
The University of Georgia

Institution: The University of Georgia

Date: February 8, 2007

College: Franklin College of Arts & Sciences

Department: Division of Biological Sciences

Degree: Bachelor of Science (B.S.)

Major: Microbiology

CIP Code:

Proposed Start Date: Fall 2007

1. Assessment

The B.S. degree with a major in Microbiology is a liberal arts degree with the major course work concentrated in the biological sciences. A major in Microbiology offers an excellent background for a variety of careers and advanced training. A bachelor's degree in microbiology also provides the necessary foundation to continue one's education in the medical, veterinary, dental, or legal fields. The career opportunities to choose from as a microbiologist will depend on the level of education and training one receives. A baccalaureate degree in microbiology will help individuals qualify for many technical, research, and clinical positions. Some of these positions include: (1) Research assistant, providing technical support to conduct research working in a team with other scientists and a research director. They may work in an industrial, government, university, or medical school lab; (2) Food, industrial or environmental microbiologists, quality assurance technologists, working in industry, hospitals, or the government. These individuals check for the quality and safety of vitamins, vaccines, antibiotics, and antiseptics. They also identify harmful microorganisms in water, food, dairy, pharmaceutical and environmental products; (3) Sales or technical representative, providing information about pharmaceuticals and other medical or scientific products to prospective customers; (4) Clinical and veterinary microbiologists, medical technologists, generally working in veterinary clinics or hospitals to identify disease-causing microorganisms in humans and animals. In addition to these laboratory and technical jobs, there are several other career paths one can take with a bachelor's degree in microbiology. Combining microbiology with another discipline, such as education, business, or journalism, provides an even wider range of career options, including regulatory affairs, scientific sales, science writing for the general public, public relations, public policy, or teaching in high school. And the demand for educated workers in careers related to the biological sciences is expected to grow substantially in the coming years. According to the Georgia Department of Labor, Workforce Information and Analysis Division, the demand for educated workers in careers related to the biological sciences is expected to increase between 30-50% by 2010.

Because the UGA Griffin Campus is a world-renowned research facility with 40+ faculty and 280+ support staff heavily engaged in research, offering the BS in Microbiology degree at the Griffin Campus will afford students a unique opportunity to combine classroom and research experiences. Furthermore, offering the BS in Microbiology degree at the Griffin Campus will expand the educational opportunities available to the rapidly increasing population of south metro-Atlanta and middle Georgia. These areas are already seeing substantial growth as evidenced by U.S. census data showing that one county in the area, Henry County, currently the second fastest-growing county in Georgia, had a 103% increase in population between 1990 and 2000 and a 38% increase between 2000 and 2005. (Henry County is adjacent to Spalding County, where the Griffin Campus is located.) Rapid population growth in Henry County and other counties in the south-metro Atlanta area, particularly Fayette and Coweta, is expected to continue for the next several years. Thus, there should be an adequate pool of qualified students to enroll in this major.

2. Admission Requirements

The admission requirements for the BS in Microbiology degree at the Griffin Campus will be the same as those for the existing degree on main campus. Since the BS in Microbiology degree program at the Griffin Campus will be a degree-completion program, applicants must meet the University of Georgia's transfer admissions requirements for students who have completed at least 60 semester hours of transferable course work as well as additional admission requirements for the Microbiology major. Thus, students desiring to enter the BS in Microbiology degree program should have completed these courses with a grade of "C" or better: MATH 1113 Pre-calculus, BIOL 1107-1107L Principles of Biology I, BIOL 1108-1108L Principles of Biology II, CHEM 1211 and CHEM 1211L Freshman Chemistry I, CHEM 1212 and CHEM 1212L Freshman Chemistry II, and CHEM 2211 and CHEM 2211L Modern Organic Chemistry I.

3. Program Content

See the attached check sheet. This is the same program of study for the BS in Microbiology degree offered on the Athens campus, but with a smaller inventory of major courses from which to select than that available on main campus. All criteria for electives and substitutions will be equivalent to those on main campus.

4. Student Advising

The students enrolled in the Franklin College's degree programs offered on the Gwinnett Campus are advised by the Franklin College at Gwinnett academic advisor, a Franklin College academic advisor with duties exclusively on the Gwinnett Campus. Likewise, students enrolled in the BS in Microbiology degree program on the Griffin Campus will be advised by the Franklin College academic advisor hired to serve the College's Griffin Campus students. As has been the case at the Gwinnett Campus, the Franklin College at Griffin academic advisor's duties will include the following: academic advising; recruiting and mentoring students; providing career guidance; maintaining the program's FileMaker database; doing graduation check for students as they complete their studies; and maintaining regular communication with the College's Coordinator of Academic Advising and the associate dean who handles student academic affairs.

5. Resident Requirements

The resident requirements for the Microbiology major on the Griffin Campus will be identical to those on the Athens campus.

6. Program Management

The management of the BS in Microbiology degree program will follow the model that has proven successful for the College's undergraduate degree programs offered on the Gwinnett Campus. The Microbiology degree program will be administered through the Dean's Office of the Franklin College of Arts & Sciences, specifically the office of the associate dean responsible for the College's undergraduate instructional programs on UGA's external campuses. The day-to-day operation of the Franklin College of Arts & Sciences undergraduate programs at the Griffin Campus will be managed by a Program Coordinator III who will serve in the capacity of Coordinator/Director of Undergraduate Programs for the Franklin College at Griffin and report to the associate dean responsible for the College's external undergraduate instructional programs. The coordinator's responsibilities will include the following: guiding the implementation of Franklin College degree programs at the Griffin Campus; hiring, training, and supervising the academic advisor and clerical support staff; developing and publishing program materials, including those for the Franklin College at Griffin web site; overseeing admission to the major process for eligible applicants; consulting with department heads on the Athens campus to develop course offerings; developing the schedule of classes each term; overseeing staffing of classes taught by part-time faculty; conducting academic area meetings for newly admitted students at New Student Orientation each semester; handling student problems and complaints; responding to faculty needs, concerns, and complaints; conducting outreach and marketing the Franklin College at Griffin degree programs.

Individual courses and instructors will be evaluated each term using the same standardized end-of-term student evaluations that their home department on the Athens campus uses. Peer-review will be conducted on a periodic basis.

There is only one undergraduate degree program in Microbiology offered in the state; therefore, extending UGA's undergraduate degree program in Microbiology to the Griffin Campus would meet the needs of students in that portion of the state and would not duplicate any programs in the area. Because the Griffin Campus is a world-renowned research center where more than 40 faculty are heavily engaged in research, offering the Microbiology major on the Griffin Campus will afford students a unique opportunity to combine classroom and research experiences. Furthermore, as the job opportunities in career fields related to the biological sciences continue to increase, the demand for the Microbiology major should grow.

Proposed Class Schedules for academic years 2007-2008 and 2008-2009:

Fall 2007	Spring 2008	Summer 2008	Fall 2008	Spring 2009
BCMB(CHEM)BIOL 3100	BCMB(CHEM)BIOL 3100	BCMB(CHEM)BIOL 3100	BCMB(CHEM)BIOL 3100	BCMB(CHEM)BIOL 3100
MIBO 3500	GENE(BIOL) 3000	MIBO 3500	GENE(BIOL) 3200	CBIO(BIOL) 3400
MIBO 3510L	MIBO 4600L/6600L	MIBO 4900L	MIBO 3500	CBIO 3710
PSYC 3300	PSYC 3810	AFAM(PSYC) 4500/6500	MIBO 3510L	MIBO 4600L/6600L
			MIBO Selective	MIBO Selective
			PSYC(GRNT) 4700/6700	PSYC Elective

NOTE: These courses, as are identical to those listed in the proposal for the B.S. in Biology degree program, constitute a **representative** array of the courses now anticipated for offering at the Griffin Campus. Students in either the Biology or Microbiology degree programs will have a more comprehensive course listing available through the various instructional delivery methods available and will, moreover, be required to take distinct courses depending on the degree program selected. **A typical Biology degree program of study is available for review upon request.**

7. Library and Laboratory Resources

The existing library at the Griffin campus will be available for students to use. Since there are a number of the research scientists on the Griffin Campus who are microbiologists and entomologists, the library will have some of the holdings needed. Many of the library resources of UGA and the other 34 institutions in the University System of Georgia are available online to any UGA student enrolled in classes. Thus, students will have access to a wealth of scholarly journals for any research they may need to do.

Currently, research lab space in the Redding Building is being renovated to provide the Griffin Campus instructional programs a quality teaching lab and an adjoining prep room. The Griffin Campus teaching lab is being modeled on the teaching lab at the Gwinnett Campus in which the lab courses for the College's BS in Biology degree program were taught. Because the Gwinnett program's former biology lecturer and all of the other Franklin College instructors who taught in this lab praised it so highly, the architects have designed the teaching lab being constructed in the Redding Building to be as much like the Gwinnett teaching lab as possible. The Redding Building teaching lab will be configured like the Gwinnett teaching lab, but will be smaller (it will be a lab for 12 students rather than 24).

8. Budget (TOTAL COST: \$401,500 as itemized below)

Item	Amount
Personnel	
Biology Lecturer*	\$62,000
Program Coordinator	\$61,000
Academic Advisor	\$42,000
Administrative Asst.	\$31,000
Student Worker (lab asst. @ \$7/hour))	\$2,500
Adjunct Faculty (3 courses @ \$5,000/course)	\$15,000
Instruction EFT** (3 courses @ \$10,000/course)	\$30,000
Estimated Expenditures	
Lab Equipment (initial set-up of lab)	\$140,000
Lab supplies and Office supplies & equipment	\$15,000
Travel***	\$3,000

In FY08, instruction will be delivered in a traditional face-to-face format on the Griffin Campus, both by UGA tenured and tenure-track faculty on the Griffin Campus with expertise in Biology and Microbiology and by a Franklin College full-time Lecturer. Part-time tenure track faculty will also be used to teach upper level non-major courses required in the degree program. In FY09, this will be supplemented by distance education instruction delivery taught by tenured and tenure-track Franklin College faculty on the Athens campus. The FY08 budget reflects this buy-out by Franklin College of instruction EFT time of the Griffin faculty.

As these degree programs and student enrollment grow, Franklin College will initiate the hiring of tenure-track faculty for siting on the Griffin Campus. In Years 3 to 5 of these programs, a review will be conducted to evaluate and ensure that there is an appropriate level of dedicated Franklin College tenure-track faculty on the Griffin Campus for these degree programs.

*The Biology Lecturer would have a 12-month appointment and would have responsibilities including the following: management, maintenance, and general oversight of the laboratory equipment and other items involved in the College's biological sciences laboratory programs offered on the Griffin Campus; supervising the student worker hired to assist with the operation of the lab; teaching up to two upper-division biological sciences courses/semester in the College's BS degree programs; and recommending improvements necessary to maintain a contemporary biological sciences laboratory program.

**For FY08, the College would buy out EFT up to 3 courses of the Griffin Campus faculty interested in teaching courses in the BS in Biology and BS in Microbiology programs.

***This amount includes money for travel between the Griffin Campus and the Athens campus. It also includes money for travel between the Griffin Campus and the Gwinnett Campus since the program coordinator and the academic advisor will have duties on both of these external

campuses until the Gwinnett Campus program closes its doors at the end of Spring Semester 2008.

NOTE: This budget covers the costs of both the BS in Biology and the BS in Microbiology degree programs to be offered at the Griffin Campus.

9. Program Costs Assessed to Students

The only additional costs to students other than regular University tuition will be lab fees assessed for the lab courses that the Franklin College will teach at the Griffin Campus. These fees currently range from \$20.00 for BIOL 3500L Ecology Lab to \$50.00 for BIOL 3110L Basic Skills in the Laboratory, MIBO 3510L Introductory Microbiology Laboratory, and MIBO 4600L Experimental Microbiology Laboratory.

10. Accreditation

The Griffin Campus program will fall under the same accreditation procedures as those followed on main campus.

BS in Microbiology Major Requirement Planning Sheet

FALL 2007

BCMB(BIOL)(CHEM) 3100	Introductory Biochemistry and Molecular Biology	4 hrs	Major: Required Course
MIBO 3500	Introductory Microbiology	3 hrs	Major: Required Course MIBO
3510L	Introductory Microbiology Laboratory	3 hrs	Major: Required Course
PSYC 3300	Social and Personality Development	3 hrs	General Elective
		13 hrs	

SPRING 2008

GENE(BIOL) 3000	Evolutionary Biology	4 hrs	Major: Biology Elective
MIBO 4600L/6600L	Experimental Microbiology Laboratory	3 hrs	Major: Intensive Lab
PSYC 3810	Psychology of Health	3 hrs	General Elective
		10 hrs	

SUMMER 2008

MIBO 4900L	Directed Research	4 hrs	Major: MIBO Elective
HIST, SPCM, or PSYC Upper-level Course		3 hrs	General Elective (Multi-Cultural Requirement)
		7 hrs	

FALL 2008

GENE(BIOL) 3200	Genetics	4 hrs	Major: Required Course
MIBO Selective (MIBO 4090/6090 Prokaryotic Biology, MIBO(POPH) 4220/6220 Pathogenic Bacteriology, MIBO 4300/6300 Environmental Microbiology and Biotechnology, POPH(MIBO)(IDIS) 4450/6450-4450L/6450L Microbial Genetics and Genomics, or MIBO 4500/6500 Bacterial Symbioses)		3-4 hrs	Major: Major Choice/Selective
PSYC(GRNT) 4700/6700	Psychology of Aging	3 hrs	General Elective
		10-11 hrs	

SPRING 2009

MIBO Selective (see list above)		3-4 hrs	Major: Major Choice/Selective
PSYC Upper-level Course or CBIO 3710 Principles of Physiology		3 hrs	General Elective
		6-7 hrs	

Total UGA Hrs 47-48 hrs*

***45 of the last 60 semester hours for the BS in Microbiology degree must be UGA credit hours**