

VALDOSTA STATE UNIVERSITY

ACADEMIC COMMITTEE PACKET

ACADEMIC COMMITTEE

**MONDAY,
December 8, 2008**

2:30 p.m.

**ROSE ROOM
UNIVERSITY CENTER**

**Stanley Jones
Interim Registrar/Secretary of the Academic Committee**

ACADEMIC COMMITTEE
AGENDA
December 8, 2008

1. Minutes of the November 10, 2008 meeting. (pages 1-2)
2. **LIBRARY SCIENCE**
 - a. Revised course description MLIS 7000 (pages 3-6)
3. **COLLEGE OF EDUCATION**
 - a. Revised curriculum for the MAT in Special Education – Adapted Curriculum Track (pages 7-9)
 - b. Revised credit hours for SEAC 5050 (pages 10-17)
 - c. Revised curriculum for the MAT in Special Education – Deaf Education Track (pages 18-20)
 - d. New course DEAF 2999 (pages 21-27)
 - e. New course DEAF 6000 (pages 28-39)
 - f. New course DEAF 6010 (pages 40-48)
 - g. New course DEAF 6110 (pages 49-56)
4. **COLLEGE OF ARTS AND SCIENCES**
 - a. Revised course description removal of cross listing for ASTR 3220 (pages 57-60)
 - b. Revised senior college curriculum for the BS in Computer Science (pages 61-63)
 - c. Revised credit hours and description for PADM 9999 (pages 64-67)
 - d. Revised course description and prerequisites for PHIL 3220 (pages 68-71)
 - e. New course BIOL 1200 (pages 72-77)
 - f. Revised course description BIOL 2651 (pages 78-80)
 - g. Revised course description BIOL 2652 (pages 81-84)
 - h. New course BIOL 3960 (pages 85-94)
 - i. New course BIOL 5960 (pages 95-104)
 - j. New course BIOL 4800 (pages 105-111)
 - k. New course BIOL 6800 (pages 112-118)
 - l. New proposal for the BA in Biology – ****FOR INFORMATION ONLY**** (pages 119-182)

VALDOSTA STATE UNIVERSITY
ACADEMIC COMMITTEE MINUTES
November 10, 2008

The Academic Committee of the Valdosta State University Faculty Senate met in the University Center Rose Room on Monday, November 10, 2008. Dr. Sharon Gravett, Assistant Vice President for Academic Affairs, presided.

Members Present: Dr. Lai Orenduff, Dr. Marvin Smith, Dr. Bruce Caster, Mr. Alan Bernstein, Dr. William Faux, Mr. Mike Savoir, Dr. Kathe Lowney, Dr. Frank Flaherty, Dr. Ray Elson, Dr. Iris Ellis, Dr. Diane Holliman and Ms. Deborah VanPetten.

Members Absent: Dr. Lucia Lu, Dr. Selen Lauterbach, Dr. Bill Buchanan, Dr. James Ernest, Dr. James Humphrey, and Dr. Deborah Weaver.

Visitors Present: Ms. Teresa Williams, Dr. Phil Gunter, Dr. Lynn Minor, Dr. Anita Hufft, and Dr. Melissa Benton.

The Minutes of the October 20, 2008, Academic Committee meeting were approved with corrections to the following items: C-8, C-13, and D-34 the course title abbreviation were corrected. (pages 1-6-).

A. College of Education

1. Information item – Online Teaching Certificate. (pages 7-11).
2. Revised admission requirements for the MAT degree were approved effective Spring Semester 2009 with item #2 changed to read ..all combined undergraduate and graduate coursework previously attempted. (pages 12-14).

B. Division of Social Work

1. Revised Special Admission requirements for the MSW program was approved effective Fall Semester 2009. (pages 15-17).
2. Revised Educational Outcomes, Program Admission Requirements, Program Retention, Dismissal and Readmission Policies, and graduation requirements for the MSW was approved effective Spring Semester 2009. (pages 18-24).
3. Revised course description, Social Work (SOWK) 6301, “Generalist Practice I Individuals and Families”, (GENRLST PRACTCE I INDVDUL/FAM – 3 credit hours, 3 lecture hours, 0 lab hours, and 3 contact hours), was approved effective Fall Semester 2009 with the description changed to read ...to the planned intervention... . (pages 25-27).
4. Revised course description and title, Social Work (SOWK) 7300, “Advanced Practice with Individuals in Changing Communities”, (ADV PRAC INDVDLS CHNGNG COMMU – 3 credit hours, 3 lecture hours, 0 lab hours, and 3 contact hours), was approved effective Fall Semester 2009 with the description changed to read ...7310. Complex practice models compatible... and the last sentence of the description deleted. (pages 28-30).
5. Revised course title, Social Work (SOWK) 7310, “Advanced Practice with Families in Changing Communities”, (ADV PRAC FAMILY CHNGNG COMMU – 3 credit hours, 3 lecture hours, 0 lab hours, and 3 contact hours), was approved effective Fall Semester 2009. (pages 31-33).
6. Revised course description and title, Social Work (SOWK) 7400, “Advanced Social Welfare Policy and Practice”, (ADV SOCIAL WELFR POLICY & PRAC – 3 credit hours, 3 lecture hours, 0 lab hours, and 3 contact hours), was approved effective Fall Semester 2009 with the description changed to read ...program. A continuation of SOWK 6400; An analysis of legislative and judicial contributions to the creation, development,... . (pages 34-36).
7. Revised course description, Social Work (SOWK) 7500, “Advanced Research and Program Evaluation”, (ADV RESEARCH/PROGRAM EVALUTN – 3 credit hours, 3 lecture hours, 0 lab hours, and 3 contact hours), was approved effective Fall Semester 2009. (pages 37-39).
8. Revised course description, Social Work (SOWK) 7611, “Advanced Social Work Practicum I”, (ADV SOCIAL WORK PRACTICUM I – 4 credit hours, 0 lecture hours, 8 lab hours, and 8 contact hours), was approved effective Fall Semester 2009. (pages 40-42).
9. Revised course description, Social Work (SOWK) 7612, “Advanced Social Work Practicum II”, (ADV SOCIAL WORK PRACTICUM II – 4 credit hours, 0 lecture hours, 8 lab hours, and 8 contact hours), was approved effective Fall

Semester 2009. (pages 43-45).

10. Revised course description, Social Work (SOWK) 7700, "Social Work with Older Adults", (SOWK WITH OLDER ADULTS – 3 credit hours, 3 lecture hours, 0 lab hours, and 3 contact hours), was approved effective Fall Semester 2009. (pages 46-48).
11. Revised course description, Social Work (SOWK) 7800, "Social Work Practice in Health Settings", (SOWK PRACTICE HEALTH SETTINGS – 2 credit hours, 2 lecture hours, 0 lab hours, and 2 contact hours), was approved effective Fall Semester 2009. (pages 49-51).
12. Revised course description, Social Work (SOWK) 7830, "Social Work Practice in Mental Health", (SOWK PRACTICE MENTAL HEALTH – 2 credit hours, 2 lecture hours, 0 lab hours, and 2 contact hours), was approved effective Fall Semester 2009 with the correction of the word "and" in the last sentence. (pages 52-54).
13. Revised course description, Social Work (SOWK) 7850, "Social Work Practice in Schools", (SOWK PRACTICE SCHOOLS – 2 credit hours, 2 lecture hours, 0 lab hours, and 2 contact hours), was approved effective Fall Semester 2009 with the description changed to read ...graduate students. Issues and laws... . (pages 55-57).
14. Revised course description, Social Work (SOWK) 7860, "Grant Writing in Human Services", (GRANT WRITING HUMAN SERVICES – 3 credit hours, 3 lecture hours, 0 lab hours, and 3 contact hours), was approved effective Fall Semester 2009 with the description changed to read ...students. Knowledge, skills, and process of human services grant writing. (pages 58-60).

C. College of Nursing

1. Revised course description and credit hours, Nursing (NURS) 7332, "Advanced Nursing for Health Restoration of Adults", (ADV NUR HLTH RESTORATION ADULT – 3 credit hours, 3 lecture hours, 0 lab hours, and 3 contact hours), was approved effective Spring Semester 2009. (pages 61-63).
2. Reactivated course, Nursing (NURS) 7332K, "Advanced Nursing for Health Restoration of Adults: Lab", (ADV NUR HLTH RSTR AD CL LAB – 3 credit hours, 0 lecture hours, 6 lab hours, and 6 contact hours), was approved effective Spring Semester 2009. (pages 64-66).

Respectfully submitted,

Stanley Jones
Interim Registrar

Request for a Revised Course

Valdosta State University

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NOV 20 2008
VALDOSTA STATE UNIVERSITY
GRADUATE SCHOOL

Date of Submission: 11/17/2008 (mm/dd/yyyy)

Department Initiating Request: MLIS

Faculty Member Requesting Revision: Yontz

Current Course Prefix and Number: MLIS 7000

Current Credit

Hours: 3

Current Course Title: Foundations of Library and Information Science

Mark all that apply:

- Revised Title Revised Course Number Revised Credit Hours
 Revised Course Description Other

Semester/Term/Year to be Effective: Spring 2009

Estimated Frequency of Course Offering: Fall and Spring semesters

Indicate if Revised Course will be Requirement for Major, or Elective

Course

*****For the following items, complete only those items being revised.**

Revised Course Prefix and Number:

(See Course Designation Abbreviations in the Catalog for approved prefixes.)

Revised Course Title:

Revised Course Title Abbreviation (for student transcript; 30 character limit):

Revised Total Contact Hours:

Revised Lecture Hours:

Revised Lab Hours:

Revised Credit Hours:

Revised Course Description: (box expands indefinitely)

Prerequisite: Admission to the MLIS program as a degree-seeking student. An introduction to the library and information science field, its history, and future directions. The focus is on the history, concepts, and technological development of the discipline. Students will gain familiarity with library and information theory, the discipline and sub-disciplines within the information sciences, and ethical practices and standards.

Justification: *Select one or more of the following to indicate why the revised course will be beneficial and give justification. Please include or append relevant supporting data.*
(box expands indefinitely)

- Improving student learning outcomes:
- Adopting current best practice(s) in field:
- Meeting mandates of state/federal/outside accrediting agencies:
- Other: This change adds "Prerequisite: Admission to the MLIS program as a degree-seeking student" to the course description. This change will insure that all seats in the course are available to the intended audience, students who have been admitted to the MLIS program as degree-seeking students. This approach is similar to what has been used for SOWK courses.

Assessment Plan: (box expands indefinitely)

Monitoring, each semester, that students enrolled in MLIS 7000 have been admitted to the MLIS program.

Approvals: (Print out for signatures & dates)

Dept. Head(s) <u>Wallace (Coe)</u>	Date <u>11-17-2008</u>
Dean(s)/Director(s) <u>[Signature]</u>	Date <u>11-17-08</u>
College Exec. Comm. <u>N/A [Signature]</u>	Date <u>11-17-08</u>
Graduate Exec. Comm. <u>Karla M. Hull [Signature]</u>	Date <u>12-1-08</u>
Academic Comm. _____	Date _____

Indicate How Course will be Taught: Face to Face

If course is online:

Does proposed new course alter the percentage of the degree program available online? No

As a result of this new course, how much of the program will now be available online?
50% or more

***If more than 25%, notify SACS Liaison and Asst. Director for Distance Learning.**

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DEC 01 2008

VALDOSTA STATE UNIVERSITY
GRADUATE SCHOOL

**Request for Curriculum Change
Valdosta State University**

Choose area of change:

(Please click grey area below for drop box)

Core Curriculum (Area A, B, C, D, E, F)

Other Curriculum (Specify): Area of Concentration

Current Catalog page number: 86

Proposed effective date for Curriculum Change: January 2009 (Month/Year)

Degree & Program name (e.g., BFA, Art): MAT

Present Requirements:

M.A.T. Core Curriculum in Special Education (9 hours):

SEAC 6010 Integrated Instruction: I.E.P. 3 hours

SEAC 5190 Physical & Health Manage of Stud w/Dis 3 hours

SEAC 5140 Collaborative Roles in Education 3 hours

Major Area of Concentration (21 hours):

SEAC 5500 Characteristics of Students w w/ Low Inc Dis 3 hours

SEAC 5510 Curric for Students w/ Low Inc Disabilities 3 hours

SEAC 5520 Assess for Students w/ Low Inc Disabilities 3 hours

SEAC 5530 Systematic Instruction 3 hours

SEAC 5540 Positive Behavior Support 3 hours

SEAC 5550 Comm Strat for Students w/ Low Inc Disab 3 hours

SEEC 5050 Assistive Technology 2 hours

Elective 1 hour

Research Core: (6 hours)

SEAC 5030 Single Subject Research in Special Education 3 hours

SEAC 6110 Capstone Course 3 hours

TOTAL Credits 36

Proposed Requirements (Underline changes after printing this form):

M.A.T. Core Curriculum in Special Education (9 hours):

SEAC 6010 Integrated Instruction: I.E.P. 3 hours
SEAC 5190 Physical & Health Manage of Stud w/Dis 3 hours
SEAC 5140 Collaborative Roles in Education 3 hours

Major Area of Concentration (21 hours):

SEAC 5500 Characteristics of Students w w/ Low Inc Dis 3 hours
SEAC 5510 Curric for Students w/ Low Inc Disabilities 3 hours
SEAC 5520 Assess for Students w/ Low Inc Disabilities 3 hours
SEAC 5530 Systematic Instruction 3 hours
SEAC 5540 Positive Behavior Support 3 hours
SEAC 5550 Comm Strat for Students w/ Low Inc Disab 3 hours
SEAC 5050 Assistive Technology 3 hours

Research Core: (6 hours)

SEAC 5030 Single Subject Research in Special Education 3 hours
SEAC 6110 Capstone Course 3 hours
TOTAL Credits 36

Justification:

Select one or more of the following to indicate why the requested change will be beneficial, giving your justification. Please include and/or append relevant supporting data.

(text boxes are expandable)

- Improving student learning outcomes:
- Adopting current best practice(s) in field:
- Meeting mandates of state/federal/outside accrediting agencies:
- Other: expands 2-credit hour class to 3-credit hour class with lab in order to adequately address the standards for assistive technology needs for P-12 students as well as the teaching requirements for all educators.

Plan for Assessing Proposed Change:

Cumulative case study

Approvals:

Department Head: Lynn C. Minor Date: 11-19-08
 Dean(s)/Director(s): [Signature] Date: 12/1/08
 College Exec. Committee: [Signature] Date: 12/1/08
 Grad. Exec. Committee: Karla M. Hull Date: 12-1-08
 Academic Committee: _____ Date: _____

Program offered: Off Campus

If the program is to be offered off campus:

Where will the course be offered?

Does VSU already offer courses at this site? Yes

For VSU's SACS Liaison (Office of Strategic Research and Analysis)

	Yes	No
Does proposed change require notification of a substantive change to SACS? (if no, stop here)	<input type="checkbox"/>	<input type="checkbox"/>
If yes; Has the department proposing the change submitted the required information to you?	<input type="checkbox"/>	<input type="checkbox"/>
Does proposed effective date meet SACS notification requirements?	<input type="checkbox"/>	<input type="checkbox"/>
Has the VPAA been notified?	<input type="checkbox"/>	<input type="checkbox"/>

SACS Liaison: _____ Date: _____

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VALDOSTA STATE UNIVERSITY
GRADUATE SCHOOL

Request for a Revised Course

Valdosta State University

Date of Submission: 10/20/2008 (mm/dd/yyyy)

Department Initiating Request: Early Childhood and Special Education

Faculty Member Requesting Revision: Kelly Heckaman

Current Course Prefix and Number: SEAC 5050

Current Credit Hours: 02

Current Course Title: Assistive Technology

Mark all that apply:

Revised Title Revised Course Number Revised Credit Hours
 Revised Course Description Other

Semester/Term/Year to be Effective: Spring 2009

Estimated Frequency of Course Offering: Twice a year (fall and spring)

Indicate if Revised Course will be Requirement for Major, or Elective Course

*****For the following items, complete only those items being revised.**

Revised Course Prefix and Number:

(See Course Designation Abbreviations in the Catalog for approved prefixes.)

Revised Course Title:

Revised Course Title Abbreviation (for student transcript; 30 character limit):

Revised Total Contact Hours: 3

Revised Lecture Hours: 3

Revised Lab Hours: 1

Revised Credit Hours: 03

Revised Course Description: (box expands indefinitely)

A study of various applications of technology for children with disabilities that support inclusive services. Topics to be addressed include assistive technology assessment of children with disabilities, selection and use of a variety of forms of assistive technology, and methods of securing funding for assistive technology.

Justification: *Select one or more of the following to indicate why the revised course will be beneficial and give justification. Please include or append relevant supporting data.*

(box expands indefinitely)

Improving student learning outcomes:

Adopting current best practice(s) in field:

Meeting mandates of state/federal/outside accrediting agencies:

Other: expands 2-credit hour class to 3-credit hour class with lab in order to adequately address the standards for assistive technology needs for P-12 students as well as the teaching requirements for all educators.

Assessment Plan: (box expands indefinitely)

Cumulative case study

Approvals: (Print out for signatures & dates)

Dept. Head(s)	<u>Lynn C. Minor</u>	Date	<u>11-19-08</u>
Dean(s)/Director(s)	<u>[Signature]</u>	Date	<u>12/1/08</u>
College Exec. Comm.	<u>[Signature]</u>	Date	<u>12/1/08</u>
Graduate Exec. Comm.	<u>Carla M. Hull</u>	Date	<u>12-1-08</u>
Academic Comm.	_____	Date	_____

Indicate How Course will be Taught: Online

If course is online:

Does proposed new course alter the percentage of the degree program available online? No

As a result of this new course, how much of the program will now be available online? 50% or more

***If more than 25%, notify SACS Liaison and Asst. Director for Distance Learning.**

**SEAC 5050
ASSISTIVE TECHNOLOGY
3 CREDIT HOURS**

**College of Education
Valdosta State University
Department of Special Education and Communication Disorders
Conceptual Framework: Guiding Principles
(adapted from the Georgia Systemic Teacher Education Program Accomplished Teacher Framework)**

Dispositions Principle: Productive dispositions positively affect learners, professional growth, and the learning environment.

Equity Principle: All learners deserve high expectations and support.

Process Principle: Learning is a life-long process of development and growth.

Ownership Principle: Professionals are committed to, and assume responsibility for, the future of their disciplines.

Support Principle: Successful engagement in the process of learning requires collaboration among multiple partners.

Impact Principle: Effective practice yields evidence of learning.

Technology Principle: Technology facilitates teaching, learning, community building, and resource acquisition.

Standards Principle: Evidence-based standards systematically guide professional preparation and development.

REQUIRED TEXTBOOK

All participants in this class will purchase access online to the ATSTAR curriculum. You will be able to purchase the program online through PayPal for a cost of \$100. See ATSTAR Getting Started for information. No additional textbook will be required.

COURSE DESCRIPTION

A study of various applications of technology for children with disabilities that support inclusive services. Topics to be addressed include assistive technology assessment of children with disabilities, selection and use of a variety of forms of assistive technology, and methods of securing funding for assistive technology.

COLLEGE OF EDUCATION CONCEPTUAL FRAMEWORK PRINCIPLES

The following College of Education Conceptual Framework Principles will be addressed in this course:

1. Teachers are committed to students and their learning.
2. Teachers know the subjects they teach and how to teach those subjects to students.
3. Teachers are responsible for managing and monitoring student learning.
4. Teachers think systematically about their practice and learn from experience.
5. Teachers are members of learning communities.

COURSE OBJECTIVES

The student will:

1. List major areas of proficiency associated with the use of technology with young children with disabilities. (Principles 1, 2, 4)
2. Identify the characteristics and use of a variety of hardware and software. (Principle 2)
3. Identify and use adaptive hardware for input of information and reception of information. (Principle 2, 4)
4. Knowledge of basic assessment strategies for use hardware and software technology with a range of students with disabilities in grades PK-12. (Principle 3)
5. Identify funding sources for access to assistive technology. (Principle 3, 5)
6. Demonstrate the use of various hardware and software for students with disabilities in inclusive early childhood programs. (Principle 2)

COURSE ACTIVITIES/ASSIGNMENTS/REQUIREMENTS

- I. Activities/Assignments (group and individual): Activities are used to assess application of skills targeted in course content. Students are required to participate in all individual/group activities. (Principles 3 and 5, Objectives 4 and 5)
- II. ATSTAR Quizzes: Eight (8) quizzes are scheduled to assess knowledge of information from the ATSTAR Curriculum. Each quiz is given after the completion of each unit. Students may not move forward to the next unit until the quiz is completed. It is up to the student to track his/her test scores. Scores will not be given to the professor until late into the semester. (Principles 1, 2, 3, and 4, Objectives 1, 2, 3, and 6)
- III. Midterm and Final Exam
- IV. Lab -The Lab for this class is a Cumulative Case Study and will be placed in LiveText. This electronic portfolio will contain the Cumulative Case Study and all of its components.
- V. Discussion Postings, 1 post by you, 2 posts responding to someone else!

General Requirements:

1. Each class member is responsible for all readings, lecture notes, handouts, videos, class discussion and class and individual assignments.
2. Each student is responsible for all information on the course syllabus.
3. Each student is responsible for all information on the course schedule.
4. Assignments are NOT accepted late.

APA STYLE

The Department of Early Childhood and Special Education have officially endorsed the style of the American Psychological Association (APA) for the completion of all written assignments unless otherwise stated. Procedures for APA style are found in:

American Psychology Association. (2002). *Publication Manual of the American Psychological Association* (5th ed.). Washington, DC: Author.

COURSE EVALUATION

Unit Assignments (8 total at 25 pts each)	200 points
Midterm	50 points
Final	100 points
Lab - Cumulative Case Study Turned in at the end of the Semester	80 points
ATSTAR Unit Quizzes (8 total at 10 pts each)	80 points
Discussion Postings (6 total at 15 pts each) 1 post by you, 2 posts responding to someone else!	90 points
Total	600 points

Final grades will be earned using the following criteria:

600 – 540	A
539 – 432	B
431 – 302	C
301 – 181	D
180 and below	F

ATTENDANCE POLICY

Students must participate in all activities to receive full credit.

DEPARTMENTAL PLAGIARISM POLICY

Below is information directly quoted from the Academic Honesty Policies and Procedures:

Academic integrity is the responsibility of all VSU faculty and students. Faculty members should promote academic integrity by including clear instruction on the components of academic integrity and clearly defining the penalties for cheating and plagiarism in their course syllabi. Students are responsible for knowing and abiding by the Academic Integrity Policy as set forth in the Student Code of Conduct and the faculty members' syllabi. All students are expected to do their own work and to uphold a high standard of academic ethics.

The full text of Academic Honesty Policies and Procedures is available in the on the Academic Affairs website

(<http://www.valdosta.edu/academic/AcademicHonestyatVSU.shtml>).

The consequences for acts of academic dishonesty in the Dewar College of Education are:

FIRST OFFENSE:

1. The faculty member will administer an academic response (e.g. resubmit / retake assignment, failure of the assignment, failure of the course).
2. The faculty member will complete a Level Two Dewar College of Education Concern form (<http://www.valdosta.edu/coe/studentsinfo.shtml>).
3. The faculty member will complete a Valdosta State University Report of Academic Dishonesty (<http://www.valdosta.edu/academic/AcademicHonestyatVSU.shtml>).

SECOND OFFENSE:

1. The faculty member will administer an academic response (e.g. resubmit / retake assignment, failure of the assignment, failure of the course).
2. The faculty member will complete a Level Two Dewar College of Education Concern form (<http://www.valdosta.edu/coe/studentsinfo.shtml>). According to the Dewar College of Education Concern Form Policy, "a second level two concern form will result in the student being dismissed from his/her program of study. This dismissal will result in an automatic review by the COE Undergraduate Policies Committee."
3. The faculty member will complete a Valdosta State University Report of Academic Dishonesty (<http://www.valdosta.edu/academic/AcademicHonestyatVSU.shtml>). According to the Academic Honesty Policies and Procedures document, "after a second Conduct Office in the Dean of Students Office, official charges will be drawn up and the disciplinary matter will be referred to the Valdosta State University Judicial Committee."

SPECIAL NEEDS STATEMENT

Valdosta State University is an equal opportunity educational institution. It is not the intent of the institution to discriminate against any applicant for admission or any student or employee of the institution based on the sex, race, religion, color, national origin or handicap of the individual. It is the intent of the institution to comply with the Title VI of the Civil Rights Act of 1964 and subsequent executive orders as well as Title XI in Section 504 of the Rehabilitation Act of 1973. Students requesting classroom accommodations or modifications because of a documented disability must contact the Access Office for Students with Disabilities located in Room 1115 Nevins Hall. The phone numbers are (229) 245-2498 (voice) and (229) 219-1348 (tty).

DIVERSITY STATEMENT

The Department of Early Childhood and Special Education maintain a strong and sustained commitment to value the diverse and unique nature of the learner and to include all students in the high expectation for success.

Instructor: Charles R. Campbell, Ed.D.
Phone: 229-219-1311
Office: Room 137

**Request for Curriculum Change
Valdosta State University**

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NOV 24 2008

VALDOSTA STATE UNIVERSITY
GRADUATE SCHOOL

Choose area of change:

(Please click grey area below for drop box)

Graduate Curriculum Other Curriculum (Specify):

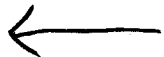
Current Catalog page number: p. 98

Proposed effective date for Curriculum Change: 9/2009 (Month/Year)

Degree & Program name (e.g., BFA, Art): MAT in Special Education-Deaf Education

Present Requirements:

Core Course:.....	21 hours
SPEC 6000, SPEC 6040.....	7 hours 6
SPEC 6010, SPEC 6020, SPEC 6030.....	9 hours
SPEC 6100, SPEC 6110.....	6 hours
Area of Specialization- Deaf and Hard of Hearing.....	15 hours
DEAF 5370, DEAF 5380, DEAF 5450, DEAF 5310, SPEC 5320	
Total Hours Required for the Degree.....	36 hours



Proposed Requirements (Underline changes after printing this form):

All Admission criteria remain the same	
Core Course:.....	19 hours
DEAF 2999.....	0 hours
DEAF 6000, ACED 7400.....	7 hours
DEAF 6010, PSYC 7010,	6 hours
RSCH 7100, DEAF 6110.....	6 hours
Area of Specialization- Deaf and Hard of Hearing.....	17 hours
DEAF 5370, DEAF 5380, DEAF 5450, DEAF 5310, DEAF 5290	
Total Hours Required for the Degree.....	36 hours

Justification:

Select one or more of the following to indicate why the requested change will be beneficial, giving your justification. Please include and/or append relevant supporting data.

(text boxes are expandable)

- Improving student learning outcomes:
- Adopting current best practice(s) in field:
- Meeting mandates of state/federal/outside accrediting agencies:
- Other: The change is necessary because the Special Education courses will only be offered through GOML and campus based graduate courses with SPEC prefixes will be deactivated. Requested program changes have been adapted from the Special Education curriculum and DEAF prefixes added. Appropriate courses from other departments have been added to replace SPEC courses in psychology, research, and technology. The addition of DEAF 2999, Admission to Teacher Education, will bring the program in conformity with other teacher certification programs. Two additional corrections are requested for program of study Area of Specialization to change from 15 hours to 17 hours: there is no SPEC 5320 course and DEAF 5290 (4 hours credit) is the correct course, and DEAF 5380 was not previously recorded on the program (p. 98) as a 4 hour course although the course description (p. 154) has the description for a 4 hour course.

Plan for Assessing Proposed Change:

Educational Outcomes and Outcome Assessments listed on P. 97 of Graduate Catalog will remain the same. All candidates for degrees will Candidates will develop professional portfolios with key assessments required in each course which will be maintained in Live Text. These portfolios include the following areas that are assessed: 1) Content & Curriculum: Teachers demonstrate a strong content knowledge of content area(s) appropriate for their certification levels, 2) : Knowledge of Students & Their Learning: Teachers support the intellectual, social, physical, and personal development of all students, 3) Learning Environments: Teachers create learning environments that encourage positive social interaction, active engagement in learning, and self-motivation, 4) Assessment: Teachers understand and use a range of formal and informal assessment strategies to evaluate and ensure the continuous development of all learners, 5) Planning & Instruction: Teachers design and create instructional experiences based on their knowledge of content and curriculum, students, learning environments, and assessment, and 6) Professionalism: Teachers recognize, participate in, and contribute to teaching as a profession. Candidate evaluation for successful completion will be determined by course requirements and completion of the portfolio during the capstone course. Matrices exist and additional ones will be developed aligned with NCATE/PSC standards. Students will submit online work for evaluation with rubrics in the portfolio in areas of Knowledge of Content and Curriculum, Students and Their Learning, Learning Environments, Assessment, Planning and Instruction, and Professionalism. Portfolio artifacts will be evaluated as part of each course's requirements. In addition, this degree program will provide evidence of teachers' impact on student learning through the results of completed action research projects. Examination of data from candidates' work will provide information for program and course evaluation. These data are also required for program approval and accreditation requirements by Georgia Professional Standards Commission, the Board of Regents, and the National Council for Accreditation of Teacher Education. End of course and faculty evaluations will be used each semester in accordance with VSU policies.

Approvals:

Department Head: Barbara K. Stanley Date: 11/20/08
 Dean(s)/Director(s): [Signature] Date: 11/21/08
 College Exec. Committee: [Signature] Date: 11/21/08
 Grad. Exec. Committee: Karla M. Hull Date: 12-1-08
 Academic Committee: _____ Date: _____

Program offered: Online

If the program is to be offered off campus:

Where will the course be offered?

Does VSU already offer courses at this site? Yes

For VSU's SACS Liaison (Office of Strategic Research and Analysis)

Yes No

Does proposed change require notification of a substantive change to SACS? (if no, stop here)	<input type="checkbox"/>	<input type="checkbox"/>
If yes, Has the department proposing the change submitted the required information to you?	<input type="checkbox"/>	<input type="checkbox"/>
Does proposed effective date meet SACS notification requirements?	<input type="checkbox"/>	<input type="checkbox"/>
Has the VPAA been notified?	<input type="checkbox"/>	<input type="checkbox"/>
SACS Liaison: _____	Date: _____	

RECEIVED

NOV 24 2008

VALDOSTA STATE UNIVERSITY
GRADUATE SCHOOL

Request for a New Course
Valdosta State University

Date of Submission: 11/21/08(mm/dd/yyyy)

Department Initiating Request: Middle, Secondary, Reading, and Deaf Education

Faculty Member Requesting: Nanci Scheetz

Proposed New Course Prefix & Number: DEAF 2999

(See Course Description Abbreviations in the Catalog for approved prefixes.)

Proposed New Course Title: Entry to the Profession

Proposed New Course Title Abbreviation: Entry to the Profession

(For student transcript, limit to 30 characters and spaces)

Semester/Term/Year to be Effective: Fall 2009

Estimated Frequency of Course Offering: every term

Indicate if Course will be: Requirement for Major or Elective Course

*****If this new course is to be included in the curriculum, be sure to initiate a Curriculum Change Form.*****

Total Contact Hours: 10

Lecture Hours: 0

Lab Hours: 0

Credit Hours: 0

Proposed Course Description: (box expands indefinitely)

Graded "Satisfactory" or "Unsatisfactory". A required non-credit course for all Deaf Education initial certification candidates pursuing a VSU recommended program of study. The courses must be successfully completed prior to or co-requisite with first semester of professional courses DEAF 6000, DEAF 6010, RSCH 7100, PSYC 7010, DEAF 6110, DEAF 5370, DEAF 5380, DEAF 5450, DEAF 5310, DEAF 5290. Candidates are required to establish an electronic portfolio,

have passed or exempted the Regents exams, have a 2.5 GPA, have a satisfactory criminal background check and purchase liability insurance. If an "Unsatisfactory" grade is earned, the course must be repeated until a "Satisfactory" grade is received.

Justification: *Select one or more of the following to indicate why the requested new course will be beneficial and give justification. Please include or append relevant supporting data.*

(box expands indefinitely)

Improving student learning outcomes: Candidates in DEAF Education need to have adequate literacy skills to be able to interpret another person's language. Meeting basic literacy requirements for admission to the program would be necessary.

Adopting current best practice(s) in field:

Meeting mandates of state/federal/outside accrediting agencies:

Other: All programs for candidates seeking initial certification for teaching require meeting requirements for admission to teacher education which is accomplished in 2999 courses. The addition of this course is in conformity with other programs.

Plans for assessing proposed course: (box expands indefinitely)

To receive a "Satisfactory" grade a candidate must have a 2.5 GPA, have passed or exempted the Regents Exams, have passed or exempted GACE Basic Skills Assessment, have established an electronic portfolio, have a satisfactory criminal background check, and purchased liability insurance.

*** ATTACH A COURSE SYLLABUS WITH COURSE OUTCOMES/ASSESSMENTS AND GENERAL EDUCATION OUTCOMES/ASSESSMENTS.

Approvals: (Print out for signatures & dates)

Dept. Head(s) _____	<u>Robert K. Stanley</u>	Date _____	<u>11/20/08</u>
Dean(s)/Director(s) _____	<u>[Signature]</u>	Date _____	<u>11/21/08</u>
College Exec. Comm. _____	<u>[Signature]</u>	Date _____	<u>11/21/08</u>
Graduate Exec. Comm. _____	<u>Karla M. Hull</u>	Date _____	<u>12-1-08</u>
Academic Comm. _____		Date _____	

Indicate How Course will be Taught: Hybrid

If course is online:

Does proposed new course alter the percentage of the degree program available online? No

As a result of this new course, how much of the program will now be available online? 50% or more *if more than 25%, notify SACS Liaison and Asst. Director for Distance Learning.

DEAF 2999
ENTRY TO THE EDUCATION PROFESSION
0 Semester Hours

College of Education
Valdosta State University
Department of Middle, Secondary, Reading, and Deaf Education
Conceptual Framework: Guiding Principles
(adapted from the Georgia Systemic Teacher Education Program Accomplished Teacher Framework)

Dispositions Principle: Productive dispositions positively affect learners, professional growth, and the learning environment.

Equity Principle: All learners deserve high expectations and support.

Process Principle: Learning is a life-long process of development and growth.

Ownership Principle: Professionals are committed to, and assume responsibility for, the future of their disciplines.

Support Principle: Successful engagement in the process of learning requires collaboration among multiple partners.

Impact Principle: Effective practice yields evidence of learning.

Technology Principle: Technology facilitates teaching, learning, community building, and resource acquisition.

Standards Principle: Evidence-based standards systematically guide professional preparation and development.

11/22/2008

REQUIRED TEXTBOOK

In lieu of a textbook, all students are required to have access to College LiveText, Students may purchase membership on-line or purchase a CD of LiveText from the University Bookstore. This software will be used throughout your professional program and is introduced in this course. (Purchasing on-line is the safest way to make sure you have the correct edition).

www.livetext.com

Purchase on-line (left side)

Click here to purchase your membership on-line

Select \$89 version – 3 years

Student Membership with unitedstreaming™ \$109

COURSE DESCRIPTION

A non-credit, required course for all teacher education candidates. Students must meet all admission to teacher education requirements to successfully exit the course. The course must be repeated each semester until all admission requirements are met.

COLLEGE OF EDUCATION CONCEPTUAL FRAMEWORK STANDARDS (CFS)

I. CONTENT AND CURRICULUM: Teachers demonstrate a strong content knowledge of content area(s) appropriate for their certification levels.

II. KNOWLEDGE OF STUDENTS AND THEIR LEARNING: Teachers support the intellectual, social, physical, and personal development of all students.

III. LEARNING ENVIRONMENTS: Teachers create learning environments that encourage positive social interaction, active engagement in learning, and self-motivation.

IV. ASSESSMENT: Teachers understand and use a range of formal and informal assessment strategies to evaluate and ensure the continuous development of all learners.

V. PLANNING AND INSTRUCTION: Teachers design and create instructional experiences based on their knowledge of content and curriculum, students, learning environments, and assessment.

VI. PROFESSIONALISM: Teachers recognize, participate in, and contribute to teaching as a profession.

11/22/2008

COURSE OBJECTIVES

Students will meet all admission to teacher education requirements and document meeting those requirements in their LiveText portfolios and submission of Teacher Education page from BANNER. **It is each student's responsibility to submit "Admission to Teacher Education" page from BANNER to verify completion of all requirements. Hand in to departmental secretary. Submission must be according to the dates cited below.**

COURSE REQUIREMENTS

These requirements are:

1. a minimum GPA of 2.5 on all previously attempted coursework –
2. a minimum of 30 hours of coursework must be completed prior to enrollment in this course.
3. purchase access to LiveText:
www.livetext.com
Purchase on-line (left side)
Click here to purchase your membership on-line
Select \$89 version – 3 years or \$109 version with United Streaming
4. take and pass GACE I Basic Assessment Tests
Exemption scores are: SAT - 1000
ACT - 43 (Math + English)
GRE - 1030 (Verbal + Quantitative)
5. pass Regent's Reading and Essay Tests (or exemption scores).
Exemption scores are: Regent's Reading:
SAT - I Verbal scores of at least 510
ACT - Reading scores of at least 23

Regent's Essay:
AP English scores of at least 3
SAT II English Writing scores of at least 650
6. satisfactory completion of a criminal background check (can be completed in Advising Center COE)
7. evidence of professional liability insurance (can be completed in Advising Center COE)
8. Attend Live Text orientation and complete all required forms during.
9. **ALL Communication will be through your VSU email account. Check daily.**

HAND ALL PROOF OF COMPLETING ABOVE REQUIREMENTS TO TO RECEIVE A "S" FOR DEAF 2999

COURSE OUTCOMES/ASSESSMENTS:

In order to receive an "S" (satisfactory) grade in this course, the following assessments/activities are required:

1. GPA review – students must provide a copy of their Banner page that documents the required GPA for admission to teacher education
2. Take and Pass GACE I Basic Skills Assessment
3. Take and Pass Regent's Exam
4. Completion of the criminal background check
5. Purchase of professional liability insurance
6. Purchase Live Text
7. Attend Live Text Orientation and complete all required forms
8. Any additional requirements as indicated by instructor toward meeting teacher certification requirements.

11/22/2008

ATTENDANCE POLICY

Attendance is mandatory initial meeting and submission of Banner page at midterm or end of term..

POLICY STATEMENT ON PLAGIARISM AND CHEATING

The full text of this policy is available in the College of Education Dean's Office. The following penalties will be enforced, as stated in the Policy:

FIRST OFFENSE: The student will earn a "0" on the assignment, test, project, etc.

SECOND OFFENSE: The student will earn the letter grade "F" for the course.

THIRD OFFENSE: The student will earn the letter grade "F" for the course, and further action involving referral of the matter (with documentation) to the appropriate college (university) officials within the administrative structure will be taken.

SPECIAL NEEDS STATEMENT

Valdosta State University is an equal opportunity educational institution. It is not the intent of the institution to discriminate against any applicant for admission or any student or employee of the institution based on the sex, race, religion, color, national origin or handicap of the individual. It is the intent of the institution to comply with the Title VI of the Civil Rights Act of 1964 and subsequent executive orders as well as Title XI in Section 504 of the Rehabilitation Act of 1973.

Students requesting classroom accommodations or modifications because of a documented disability must contact the Access Office for Students with Disabilities located in Room 1115 Nevins Hall. The phone numbers are (229) 245-2498 (voice) and (229) 219-1348 (tty).

COURSE SCHEDULE

○ Meeting Dates

- First Friday of the semester 1-3
- TBA Live Text Orientation (see handout for dates and YOU schedule a session)
- Mid-term Grade - All requirements must be completed and BANNER page and supporting documentation submitted one week before midterm.
- Final Grade - All requirements must be completed and BANNER page and supporting documentation submitted by the last day of classes for the term.

INSTRUCTOR:

Dr. T. LaJuan Stout.
Department of Middle, Secondary, Reading, and Deaf Education
Email: tlstout@valdosta.edu
Phone 333-5611

Request for a New Course
Valdosta State University

RECEIVED

NOV 24 2008

VALDOSTA STATE UNIVERSITY
GRADUATE SCHOOL

Date of Submission: 11/20/2008(mm/dd/yyyy)

Department Initiating Request: Middle, Secondary, Reading, & Deaf Education

Faculty Member Requesting: Dr. Nanci Scheetz

Proposed New Course Prefix & Number: DEAF 6000

(See Course Description Abbreviations in the Catalog for approved prefixes.)

Proposed New Course Title: Integration and Management of Instruction in the Classroom

Proposed New Course Title Abbreviation: Integration & Management Instr

(For student transcript, limit to 30 characters and spaces)

Semester/Term/Year to be Effective: Fall 2009

Estimated Frequency of Course Offering: once a year

Indicate if Course will be: Requirement for Major or Elective Course

*****If this new course is to be included in the curriculum, be sure to initiate a Curriculum Change Form.*****

Total Contact Hours: 3

Lecture Hours: 3

Lab Hours: 2

Credit Hours: 4

Proposed Course Description: (box expands indefinitely)

Identification and implementation of management and instructional strategies that have demonstrated effectiveness. Through applied projects focused on K-12 student learning, students will demonstrate the ability to evaluate intervention efficacy.

Justification: *Select one or more of the following to indicate why the requested new course will be beneficial and give justification. Please include or append relevant supporting data.*
(box expands indefinitely)

Improving student learning outcomes:

Adopting current best practice(s) in field:

Meeting mandates of state/federal/outside accrediting agencies:

Other: The change is necessary because the Special Education courses will only be offered through GOML. Graduate courses with SPEC prefixes will be deactivated. Requested course change for the Deaf Education program have been adapted for the educational needs of educators for the Deaf with new prefixes requested using the SPEC 6000 syllabus as a basis with the agreement of previous instructor. This MAT program is available 100% at a distance through video conferencing and Web CT. One additional credit hour is requested to reflect the 20 or more hours of candidate applied practice in classroom instruction that is required beyond class contact hours.

Plans for assessing proposed course: (box expands indefinitely)

Candidates will develop professional portfolios with key assessments required in each course which will be maintained in Live Text. These portfolios include the following areas that are assessed: 1) Content & Curriculum: Teachers demonstrate a strong content knowledge of content area(s) appropriate for their certification levels, 2) Knowledge of Students & Their Learning: Teachers support the intellectual, social, physical, and personal development of all students, 3) Learning Environments: Teachers create learning environments that encourage positive social interaction, active engagement in learning, and self-motivation, 4) Assessment: Teachers understand and use a range of formal and informal assessment strategies to evaluate and ensure the continuous development of all learners, 5) Planning & Instruction: Teachers design and create instructional experiences based on their knowledge of content and curriculum, students, learning environments, and assessment, and 6) Professionalism: Teachers recognize, participate in, and contribute to teaching as a profession. Candidate evaluation for successful completion will be determined by course requirements and completion of the portfolio during the capstone course. Matrices exist and additional ones will be developed aligned with NCATE/PSC standards. Students will submit online work for evaluation with rubrics in the portfolio in areas of Knowledge of Content and Curriculum, Students and Their Learning, Learning Environments, Assessment, Planning and Instruction, and Professionalism. Portfolio artifacts will be evaluated as part of each course's requirements. In addition, this

degree program will provide evidence of teachers' impact on student learning through the results of completed capstone research project. Examination of data from candidates' work will provide information for program and course evaluation. These data are also required for program approval and accreditation requirements by Georgia Professional Standards Commission, the Board of Regents, and the National Council for Accreditation of Teacher Education. End of course and faculty evaluations will be used each semester in accordance with VSU policies.

*** ATTACH A COURSE SYLLABUS WITH COURSE OUTCOMES/ASSESSMENTS AND GENERAL EDUCATION OUTCOMES/ASSESSMENTS.

Approvals: (Print out for signatures & dates)

Dept. Head(s)	<u>Barbara K. Stanley</u>	Date	<u>11/20/08</u>
Dean(s)/Director(s)	<u>B. Col</u>	Date	<u>11/21/08</u>
College Exec. Comm.	<u>B. Col</u>	Date	<u>11/21/08</u>
Graduate Exec. Comm.	<u>Karla M. Hull</u>	Date	<u>12-1-08</u>
Academic Comm.	_____	Date	_____

Indicate How Course will be Taught: Online

If course is online:

Does proposed new course alter the percentage of the degree program available online? No

As a result of this new course, how much of the program will now be available online? 50% or more *if more than 25%, notify SACS Liaison and Asst. Director for Distance Learning.

DEAF 6000
Integration and Management of Instruction in the Classroom
4 Semester Hours

College of Education
Valdosta State University
Department of Middle, Secondary, Reading & Deaf Education
Conceptual Framework: Guiding Principles
(adapted from the Georgia Systemic Teacher Education Program Accomplished
Teacher Framework)

Dispositions Principle: Productive dispositions positively affect learners, professional growth, and the learning environment.

Equity Principle: All learners deserve high expectations and support.

Process Principle: Learning is a lifelong process of development and growth.

Ownership Principle: Professionals are committed to, and assume responsibility for, the future of their disciplines.

Support Principle: Successful engagement in the process of learning requires collaboration among multiple partners.

Impact Principle: Effective practice yields evidence of learning.

Technology Principle: Technology facilitates teaching, learning, community-building, and resource acquisition

Standards Principle: Evidence-based standards systematically guide professional preparation and development.

Positively Impacting Learning Through Evidence-Based Practices

Course Information

No text required.

Course Description

Identification and implementation of management and instructional strategies that have demonstrated effectiveness. Through applied projects focused on K-12 student learning, students will demonstrate the ability to evaluate intervention efficacy.

COE Conceptual Framework Standards (CFS)

Standards Addressed in this Course

I. CONTENT AND CURRICULUM: Teachers demonstrate a strong content knowledge of content area(s) that are appropriate for their certification levels.

II. KNOWLEDGE OF STUDENTS AND THEIR LEARNING: Teachers support the intellectual, social, physical, and personal development of all students.

III. LEARNING ENVIRONMENTS: Teachers create learning environments that encourage positive social interaction, active engagement in learning, and self-motivation.

IV. ASSESSMENT: Teachers understand and use a range of formal and informal assessment strategies to evaluate and ensure the continuous development of all learners.

V. PLANNING AND INSTRUCTION: Teachers design and create instructional experiences based on their knowledge of content and curriculum, students, learning environments, and assessment.

Course Objectives (CO):

Objectives

The student will:

Components of Differentiated Instruction

DOMAIN I: PLANNING FOR DIFFERENTIATED INSTRUCTION & ASSESSMENT

The teacher candidate uses knowledge of curriculum, learner differences, and ongoing assessment data to plan for student access to same essential content. (CFS I, II, IV, V)

- Uses information about student interests to provide motivation for learning tasks.
- Considers students' preferred learning styles or intelligences.
- Utilizes ongoing assessment data to plan differentiated learning experiences.

DOMAIN II: PROVIDING DIFFERENTIATED INSTRUCTION & ASSESSMENT

The teacher candidate utilizes a variety of strategies to differentiate instruction and assessment. (CFS I, II, III, IV, V)

- Assists students in making connections between the essential content and their lives and interests.
- Provides scaffolded assistance in response to the learner's level of performance.
- Offers interactive and collaborative learning experiences.
- Provides for flexible grouping.
- Uses and integrates technology to differentiate instruction.
- Presents meaningful tasks that are respectful of student differences, challenging, and engaging for all students.
- Varies and adjusts complexity of tasks.
- Offers student choices about topics to study and ways to work.
- Provides differentiated assessment options to demonstrate student learning.
- Offers various modes of expression for student assessment.
- Provides rubric assessments linked to outcomes.
- Offers flexible, "real world" assessment options.

DOMAIN III: IMPACTING STUDENT LEARNING

The teacher candidate uses systematic formal/informal assessment as an ongoing diagnostic activity to measure student growth and to guide, differentiate, and adjust instruction. (CFS II, III, IV, V)

- Collects formative and summative assessment data about student learning.
- Organizes data into meaningful structures.
- Interprets the data.

- Reflects on status of learner in light of data.
- Plans and adjusts learning tasks based on assessment data.
- Gives constructive, positive feedback that is specific and timely to promote student improvement, growth, and independence.

Components of Classroom Management

The teacher candidate uses a variety of management strategies to positively affect student learning. (CFS II, III, V)

- Organizes the environment to facilitate learning
- Schedules activities to enhance differentiated instruction
- Plans and adjusts strategies to transition to and from activities and environments
- Uses different teaching formats effectively to facilitate different types and rates of learning
- Collects and interprets data on the impact of management strategies on children's learning
- Plans for effective behavior management, including use of specific praise, contingent reinforcement, and consistency
- Recognizes and plans for differences in diversity in management

Course Activities/Assignments/Requirements

Course Activities/Assignments/Requirements

Requirement: Differentiated Instruction (DI)

Complete **five weekly DI plans and progress reports** that include target instructional objectives, assessment data of targeted students, instructional strategies that address Tomlinson's four domains of DI: content, process, product, and learning environment, pretest and post-test data on student performance on the targeted objectives, your reflection of student performances, and revisions you suggest for the upcoming week. You can target different skills each week or focus on the same set of skills throughout the semester. All students in your classroom do not have to be apart of this process, selected students will be fine. You will submit your weekly report via VISTA by the Monday morning following the week you taught the lessons. You are expected to submit a minimum of 5 weekly DI reports over five weeks from September through the end of November. **Do not teach the lessons before the scheduled week. If you try to finish early, you will not have received feedback and may not continue to improve your lessons and your students' performance.** (30 points each) (CFS I, II, III, IV, V)

A **final DI report** will be submitted at least one week prior to the final class day of the semester. The final report will summarize the DI interventions and be evaluated using the DI Performance Rubric. (100 points) (CFS I, II, III, IV, V)

One Differentiated Instruction module will be submitted and made available to the class. Select modules to reflect Tomlinson's domains of content, process, product, or learning environment, with each module focusing on a different domain. Sample modules are provided. (50 points) (CFS II, III, IV, V)

One videotape of a DI lesson will be completed and a self-evaluation of your performance attached to the videotape when mailed. The self evaluation and lesson plan will also be attached in Livetext. You will be evaluated on the lesson plan, video, and evaluation on the College of Education Student Teaching Observation Form as an evaluation at the beginning of your program. (30 points) (CFS I, II, III, IV, V)

Two Classroom Inventories, one at the beginning of the semester and one at the end of the semester will be completed and submitted in Vista. Videotapes of the classroom activities used for the inventories will be submitted. (50 points each) (CFS II, III, V)

One Video Presentation of Classroom Management and Differentiated Instruction Environments (40 points) (CFS II, III, V)

Discussion Boards: (10 points each) (CFS II, III, V)

Introductions

Selection of Classroom Management articles and discussion of articles, throughout the semester (10 points each)

Course Evaluation

Course Evaluation and Grading Scale

Again, all requirements must be satisfactory and completed in a timely manner.

Grading Scale:

A = 500 - 450, B = 449 - 400, C = 399 - 350, D = 349 - 300

SPECIAL NEEDS STATEMENT (ADA ADDRESSED)

Students requiring accommodations or modifications because of a documented disability should discuss this need with the professor at the beginning of the quarter. Students not registered with the Special Services Program should contact the Special Services office in Nevins Hall, Room 1115. The phone number is 245-2498.

DIVERSITY STATEMENT

The Department of Middle, Secondary, Reading, & Deaf Education maintains a strong and sustained commitment to value the diverse and unique nature of the learner and to include all students in the high expectation for success.

APA STYLE

The Department of Middle, Secondary, Reading, & Deaf Education has officially endorsed the style of the American Psychological Association (APA) for the completion of all written assignments unless otherwise stated. Procedures for APA style are found in:

American Psychology Association. (2001). *Publication Manual of the American Psychological Association* (5th ed.). Washington, DC: Author.

DEPARTMENTAL PLAGIARISM POLICY

The Department of Middle, Secondary, Reading & Deaf Education has a policy statement on plagiarism and a document identifying the characteristics of plagiarized work and the penalties for such actions. The penalty for plagiarism in undergraduate course work is a zero (0) on the assignment for the first offense, for the second offense the consequence is a letter grade of "F" for the course, for the third offense a letter grade of "F" for the course as well as further appropriate action involving referral of the matter to the appropriate university officials within the administrative structure. For graduate work, a letter grade of "F" for the course will be given for the first offense and a letter grade of "F" for the course as well as further appropriate action involving referral of the matter to the appropriate university officials within the administrative structure will occur for the second offense. The entire Departmental Policy, which includes examples and non-examples of plagiarism, is available on the Departmental Home Page.

POLICY STATEMENT ON PLAGIARISM

Below is information directly quoted from the Academic Honesty Policies and Procedures:

Academic integrity is the responsibility of all VSU faculty and students. Faculty members should promote academic integrity by including clear instruction on the components of academic integrity and clearly defining the penalties for cheating and plagiarism in their course syllabi. Students are responsible for knowing and abiding by the Academic Integrity Policy as set forth in the Student Code of Conduct and the faculty members' syllabi. All students are expected to do their own work and to uphold a high standard of academic ethics.

The full text of Academic Honesty Policies and Procedures is available in the on the Academic Affairs website

(<http://www.valdosta.edu/academic/AcademicHonestyatVSU.shtml>).

The consequences for acts of academic dishonesty in the Dewar College of Education are:

FIRST OFFENSE:

1. The faculty member will administer an academic response (e.g. resubmit / retake assignment, failure of the assignment, failure of the course).
2. The faculty member will complete a Level Two Dewar College of Education Concern form (<http://www.valdosta.edu/coe/studentsinfo.shtml>).
3. The faculty member will complete a Valdosta State University Report of Academic Dishonesty (<http://www.valdosta.edu/academic/AcademicHonestyatVSU.shtml>).

SECOND OFFENSE:

1. The faculty member will administer an academic response (e.g. resubmit / retake assignment, failure of the assignment, failure of the course).
2. The faculty member will complete a Level Two Dewar College of Education Concern form (<http://www.valdosta.edu/coe/studentsinfo.shtml>). According to the Dewar College of Education Concern Form Policy, "a second level two concern form will result in the student being dismissed from his/her program of study. This dismissal will result in an automatic review by the COE Undergraduate Policies Committee."
3. The faculty member will complete a Valdosta State University Report of Academic Dishonesty (<http://www.valdosta.edu/academic/AcademicHonestyatVSU.shtml>). According to the Academic Honesty Policies and Procedures document, "after a second (or subsequent) Report of Academic Dishonesty has been submitted to the Student Conduct Office in the Dean of Students Office, official charges will be drawn up and the disciplinary matter will be referred to the Valdosta State University Judicial Committee."

Attendance Requirements and Late Assignments

All students need a computer with Internet access on a regular basis. Please keep in mind that this course is an online class and instead of meeting on a regular basis at an on-campus or off-campus site, you “meet” the class online. You are expected to check in on a regular basis to get updates and communicate with your colleagues. By regular basis, you should be accessing VISTA and the class at a minimum of three times per week. Oftentimes, when you access, you’ll just need to check emails, announcements, and discussion boards for a brief time. Failure to check Vista at least once a week will be considered an absence. The University Attendance Policy applies to this online class. A student who misses more than 20% of the scheduled classes of a course will be subject to receiving a failing grade for the course.

Late assignments will not be accepted without documentation of medical or emergency needs. Students are encouraged to back up/copy work and to complete assignments in a timely manner to avoid last minute problems with their computers, servers, etc. Failure to post assignments to Vista or Livetext by the due date will be considered late, including assignments in Livetext which are sent to the instructor as shared, rather than as a reviewer.

Instructor Information:

Request for a New Course
Valdosta State University

RECEIVED

NOV 24 2008

VALDOSTA STATE UNIVERSITY
GRADUATE SCHOOL

Date of Submission: 11/20/2008(mm/dd/yyyy)

Department Initiating Request: Middle, Secondary, Reading, & Deaf Education

Faculty Member Requesting: Dr. Nanci Scheetz

Proposed New Course Prefix & Number: DEAF 6010

(See Course Description Abbreviations in the Catalog for approved prefixes.)

Proposed New Course Title: Integrated Instruction: Individualized Education Program

Proposed New Course Title Abbreviation: Individualized Ed Program

(For student transcript, limit to 30 characters and spaces)

Semester/Term/Year to be Effective: Fall 2009

Estimated Frequency of Course Offering: once a year

Indicate if Course will be: Requirement for Major or Elective Course

*****If this new course is to be included in the curriculum, be sure to initiate a Curriculum Change Form.*****

Total Contact Hours: 3

Lecture Hours: 3

Lab Hours:

Credit Hours: 3

Proposed Course Description: (box expands indefinitely)

The theoretical and practical basis of curriculum design for individuals with disabilities throughout the life cycle are addressed in this course. Individualized Education Program (IEP) development and planning that incorporate student access to the general educational curriculum are components of this course.

Justification: *Select one or more of the following to indicate why the requested new course will be beneficial and give justification. Please include or append relevant supporting data.*

(box expands indefinitely)

Improving student learning outcomes:

Adopting current best practice(s) in field:

Meeting mandates of state/federal/outside accrediting agencies:

Other: The change is necessary because the Special Education courses will only be offered through GOML. Graduate courses with SPEC prefixes will be deactivated. Requested course change for the Deaf Education program have been adapted for the educational needs of educators for the Deaf with new prefixes requested using the SPEC 6010 syllabus as a basis with the agreement of previous instructor. This MAT program is available 100% at a distance through video conferencing and Web CT.

Plans for assessing proposed course: (box expands indefinitely)

Candidates will develop professional portfolios with key assessments required in each course which will be maintained in Live Text. These portfolios include the following areas that are assessed: 1) Content & Curriculum: Teachers demonstrate a strong content knowledge of content area(s) appropriate for their certification levels, 2) Knowledge of Students & Their Learning: Teachers support the intellectual, social, physical, and personal development of all students, 3) Learning Environments: Teachers create learning environments that encourage positive social interaction, active engagement in learning, and self-motivation, 4) Assessment: Teachers understand and use a range of formal and informal assessment strategies to evaluate and ensure the continuous development of all learners, 5) Planning & Instruction: Teachers design and create instructional experiences based on their knowledge of content and curriculum, students, learning environments, and assessment, and 6) Professionalism: Teachers recognize, participate in, and contribute to teaching as a profession. Candidate evaluation for successful completion will be determined by course requirements and completion of the portfolio during the capstone course. Matrices exist and additional ones will be developed aligned with NCATE/PSC standards. Students will submit online work for evaluation with rubrics in the portfolio in areas of Knowledge of Content and Curriculum, Students and Their Learning, Learning Environments, Assessment, Planning and Instruction, and Professionalism. Portfolio artifacts will be evaluated as part of each course's requirements. In addition, this degree program will provide evidence of teachers' impact on student learning through the results of completed capstone research project. Examination of data from candidates' work will

provide information for program and course evaluation. These data are also required for program approval and accreditation requirements by Georgia Professional Standards Commission, the Board of Regents, and the National Council for Accreditation of Teacher Education. End of course and faculty evaluations will be used each semester in accordance with VSU policies.

*** ATTACH A COURSE SYLLABUS WITH COURSE OUTCOMES/ASSESSMENTS AND GENERAL EDUCATION OUTCOMES/ASSESSMENTS.

Approvals: (Print out for signatures & dates)

Dept. Head(s)	<u>Barbara K. Stealy</u>	Date	<u>11/20/08</u>
Dean(s)/Director(s)	<u>[Signature]</u>	Date	<u>11/21/08</u>
College Exec. Comm.	<u>[Signature]</u>	Date	<u>11/21/08</u>
Graduate Exec. Comm.	<u>Karla M. Huller</u>	Date	<u>12-1-08</u>
Academic Comm.	_____	Date	_____

Indicate How Course will be Taught: Online

If course is online:

Does proposed new course alter the percentage of the degree program available online? No

As a result of this new course, how much of the program will now be available online? 50% or more *If more than 25%, notify SACS Liaison and Asst. Director for Distance Learning.

DEAF 6010

Integrated Instruction: Individualized Education Program

3 Semester Hours

College of Education

Valdosta State University

Department of Middle, Secondary, Reading & Deaf Education

Conceptual Framework: Guiding Principles

(adapted from the Georgia Systemic Teacher Education Program Accomplished Teacher Framework)

Required Textbook

Bateman, B. D. & Linden, M. A. (2006). Better IEPs: How to develop legally correct and educationally useful programs. Verona, WI: Attainment Company.

Bateman, B. D. & Herr, C. M. (2006). Writing measurable IEP goals and objectives. Verona, WI: Attainment Company.

Course Description

The theoretical and practical basis of curriculum design for individuals with disabilities throughout the life cycle are addressed in this course. Individualized Education Program (IEP) development and planning that incorporate student access to the general educational curriculum are components of this course.

College of Education Conceptual Framework Principles

Principle 1. The teacher understands the central concepts, tools of inquiry, and structures of the field (s) of knowledge her or she teaches and can create learning experiences that make these aspects of subject matter meaningful for students.

Principle 3. The teacher understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners.

Principle 7. The teacher plans instruction based upon knowledge of subject matter, students, the community, and curriculum goals.

Principle 8. The teacher understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social and physical development of the learner.

Principle 9. The teacher is a reflective practitioner who continually evaluates, using qualitative and quantitative resources, the effects of his/her choices and actions on others (students, families, and other professionals in the learning community) and who actively seeks out opportunities to grow professionally.

Principle 10. The teacher fosters relationships with school colleagues, families, businesses, and agencies in the larger community to support students' learning and well-being.

Course Objectives

The student will:

1. write IEPs as a curricular planning tool, (Principles 1, 3, 7, 8) (GE 1, 4)
2. document student assessments to write an appropriate individualized curriculum, (Principles 1, 3) (GE 5)
3. write legally correct present levels of performance (PLAAFP) statements for students with disabilities bases on assessment data. (Principle 8) (GE 4, 7)
4. write measurable annual goals for students with disabilities based on assessment data and PLAAFP. (Principle 7) (GE 4,7)
5. write measurable short-term objectives or benchmarks for students with disabilities based on assessment data and goals. (Principle 7) (GE 4,7)
6. write instructional arrangements in the IEP (including modifications and accommodations) needed for the delivery of an appropriate individualized educational program, (Principles 1, 3, 7) (GE 4, 5, 8)
7. document access to the state standards through IEP development, (Principles 1, 3, 7, 10) (GE 4, 7)
8. identify and document appropriate data collection tools as formative assessment of IEP goals/objectives performance, (Principles 1, 3, 7, 10) (GE 5)

Requirements and Grading

Assignments will be completed individually and will not be accepted late.

Weekly Unit Assignments 8 @ 5 = 40

Completed IEP 40

Learning Module Discussions 20

- Learning Module Discussions -Introduction 2 points, Six Unit Reading Reflections 3 points each

Additional Information on requirements.

Weekly Unit Assignments are short assignments to check your understanding of the required reading. Citations are not necessary. In Units 6, 7, and 8, you will be writing parts of an IEP. You will have a rubric for evaluation of these assignments. Assignments will be due on Sunday nights at 11:30 pm.

Learning Module Discussions start with the Introduction which is worth 2 points.. Most units have a Reading Reflection which is the discussion for the unit and these are worth 3 points each.. Look at the rubric on grading discussions. To receive a 3 on reading reflections, you should make a post and respond to a post. Also, if you reference outside material, a cite in the discussion would be appropriate. Try to also complete the discussions for each week on Sunday night.

Course Evaluation

Final grades will be earned using the following criteria:

A= 90-100

B= 80-89

C=70-79

D=60-69

F= Below 60

General Requirements

1. Each member is responsible for all readings in the texts, assigned readings, videos, class discussion postings, and assignments.
2. Each student is responsible for all information presented on the course syllabus.
3. Each student is responsible for all information on the course schedule.
4. Assignments are not accepted late.

Attendance Policy

Students are required to participate in all course activities—computer or internet failure does not excuse a student from participation in any class activities or assignment due dates. Students are required to have a back-up in the event of any such problems or failures.

Departmental Plagiarism Policy

Below is information directly quoted from the Academic Honesty Policies and Procedures:

Academic integrity is the responsibility of all VSU faculty and students. Faculty members should promote academic integrity by including clear instruction on the components of academic integrity and clearly defining the penalties for cheating and plagiarism in their course syllabi. Students are responsible for knowing and abiding by the Academic Integrity Policy as set forth in the Student Code of Conduct and the faculty members' syllabi. All students are expected to do their own work and to uphold a high standard of academic ethics.

The full text of Academic Honesty Policies and Procedures is available in the on the Academic Affairs website (<http://www.valdosta.edu/academic/AcademicHonestyatVSU.shtml>).

The consequences for acts of academic dishonesty in the Dewar College of Education are:

FIRST OFFENSE:

1. The faculty member will administer an academic response (e.g. resubmit / retake assignment, failure of the assignment, failure of the course).
2. The faculty member will complete a Level Two Dewar College of Education Concern form (<http://www.valdosta.edu/coe/studentsinfo.shtml>).
3. The faculty member will complete a Valdosta State University Report of Academic Dishonesty (<http://www.valdosta.edu/academic/AcademicHonestyatVSU.shtml>).

SECOND OFFENSE:

1. The faculty member will administer an academic response (e.g. resubmit / retake assignment, failure of the assignment, failure of the course).
2. The faculty member will complete a Level Two Dewar College of Education Concern form (<http://www.valdosta.edu/coe/studentsinfo.shtml>). According to the Dewar College of Education Concern Form Policy, "a second level two concern form will result in the student being dismissed from his/her program of study. This dismissal will result in an automatic review by the COE Undergraduate Policies Committee."
3. The faculty member will complete a Valdosta State University Report of Academic Dishonesty (<http://www.valdosta.edu/academic/AcademicHonestyatVSU.shtml>). According to the Academic Honesty Policies and Procedures document, "after a second (or subsequent) Report of Academic Dishonesty has been submitted to the Student Conduct Office in the Dean of Students Office, official charges will be drawn up and the disciplinary matter will be referred to the Valdosta State University Judicial Committee."

Special Needs Statement

Valdosta State University is an equal opportunity educational institution. It is not the intent of the institution to discriminate against any applicant for admission or any student or employee of the institution based on the sex, race, religion, color, national origin or handicap of the individual. It is the intent of the institution to comply with the Title VI of the Civil Rights Act of 1964 and subsequent executive orders as well as Title XI in Section 504 of the Rehabilitation Act of 1973.

Students requesting classroom accommodations or modifications because of a documented disability must contact the Access Office for Students with Disabilities located in Room 1115 Nevins Hall. The phone numbers are (229) 245-2498 (voice) and (229) 219-1348 (tty).

Diversity Statement

The Department of Middle, Secondary, Reading, & Deaf Education maintains a strong and sustained commitment to value the diverse and unique nature of the learner and to include all students in the high expectations for success.

APA Style

The Department of Middle, Secondary, Reading, & Deaf Education has officially endorsed the style of the American Psychological Association (APA) for the completion of all written assignments unless otherwise stated. Procedures for APA style are found in:

American Psychological Association. (2001). *Publication manual of the American Psychological Association* (5th ed.). Washington, DC: Author.

DEAF 6010 – Integrated Instruction: Individualized Education Program

Date /Week	Unit	Content / Assignments	Due Dates
August 18	Welcome Unit	Introduction	8-23-2008 11:30 pm
August 25	Introduction to IDEA	Assignment and Discussion	8-30-2008 11:30 pm
September 1 September 8 Two Weeks	Evaluation	Assignment and Discussion	9-13-2006 11:30 pm
September 15	The IEP Meeting	Assignment and Discussion	9-20-2008 11:30 pm
September 22	Parts of the IEP	Assignment and Discussion	9-27-2008
September 29 October 6 Two Weeks	Writing the IEP I Present Levels	Assignments and Discussion	10-11-2008 11:30 pm
October 13 October 20 Two Weeks	Writing the IEP II Measurable Goals and Objectives	Assignment	10-25-2008 11:30 pm
October 27 November 3	Writing the IEP Accommodations/modifications Supports Services ESY	Assignments	11-8-2008 11:30 pm
November 10	Case Studies Available		
End of Course December 10	Completed IEP from Case Study due		

Request for a New Course
Valdosta State University

RECEIVED
NOV 24 2008
VALDOSTA STATE UNIVERSITY
GRADUATE SCHOOL

Date of Submission: 11/20/2008(mm/dd/yyyy)

Department Initiating Request: Middle, Secondary, Reading, & Deaf Education

Faculty Member Requesting: Dr. Nanci Scheetz

Proposed New Course Prefix & Number: DEAF 6110

(See Course Description Abbreviations in the Catalog for approved prefixes.)

Proposed New Course Title: Professional Capstone Course

Proposed New Course Title Abbreviation: Prof Capstone

(For student transcript, limit to 30 characters and spaces)

Semester/Term/Year to be Effective: Fall 2009

Estimated Frequency of Course Offering: once a year

Indicate if Course will be: Requirement for Major or Elective Course

*****If this new course is to be included in the curriculum, be sure to initiate a Curriculum**

Change Form.***

Total Contact Hours: 3

Lecture Hours: 3

Lab Hours:

Credit Hours: 3

Proposed Course Description: (box expands indefinitely)

Culminating course. Students will implement a project that demonstrates their ability to apply evidence-based research to impact programs or practices that affect k-12 students.

Justification: *Select one or more of the following to indicate why the requested new course will be beneficial and give justification. Please include or append relevant supporting data.*

(box expands indefinitely)

Improving student learning outcomes:

Adopting current best practice(s) in field:

Meeting mandates of state/federal/outside accrediting agencies:

Other: The change is necessary because the Special Education courses will only be offered through GOML. Graduate courses with SPEC prefixes will be deactivated. Requested course change for the Deaf Education program have been adapted for the educational needs of educators for the Deaf with new prefixes requested using the SPEC 6110 syllabus as the basis with the agreement of previous instructor. This MAT program is available 100% at a distance through video conferencing and Web CT.

Plans for assessing proposed course: (box expands indefinitely)

Candidates will develop professional portfolios with key assessments required in each course which will be maintained in Live Text. These portfolios include the following areas that are assessed: 1) Content & Curriculum: Teachers demonstrate a strong content knowledge of content area(s) appropriate for their certification levels, 2) Knowledge of Students & Their Learning: Teachers support the intellectual, social, physical, and personal development of all students, 3) Learning Environments: Teachers create learning environments that encourage positive social interaction, active engagement in learning, and self-motivation, 4) Assessment: Teachers understand and use a range of formal and informal assessment strategies to evaluate and ensure the continuous development of all learners, 5) Planning & Instruction: Teachers design and create instructional experiences based on their knowledge of content and curriculum, students, learning environments, and assessment, and 6) Professionalism: Teachers recognize, participate in, and contribute to teaching as a profession. Candidate evaluation for successful completion will be determined by course requirements and completion of the portfolio during the capstone course. Matrices exist and additional ones will be developed aligned with NCATE/PSC standards. Students will submit online work for evaluation with rubrics in the portfolio in areas of Knowledge of Content and Curriculum, Students and Their Learning, Learning Environments, Assessment, Planning and Instruction, and Professionalism. Portfolio artifacts will be evaluated as part of each course's requirements. In addition, this degree program will provide evidence of teachers' impact on student learning through the results of completed capstone research project. Examination of data from candidates' work will

provide information for program and course evaluation. These data are also required for program approval and accreditation requirements by Georgia Professional Standards Commission, the Board of Regents, and the National Council for Accreditation of Teacher Education. End of course and faculty evaluations will be used each semester in accordance with VSU policies.

*** ATTACH A COURSE SYLLABUS WITH COURSE OUTCOMES/ASSESSMENTS AND GENERAL EDUCATION OUTCOMES/ASSESSMENTS.

Approvals: (Print out for signatures & dates)

Dept. Head(s)	<u>Barbara K. Steady</u>	Date	<u>11/20/08</u>
Dean(s)/Director(s)	<u>[Signature]</u>	Date	<u>11/21/08</u>
College Exec. Comm.	<u>[Signature]</u>	Date	<u>11/21/08</u>
Graduate Exec. Comm.	<u>Karla M. Hull</u>	Date	<u>12-1-08</u>
Academic Comm.	_____	Date	_____

Indicate How Course will be Taught: Online

If course is online:

Does proposed new course alter the percentage of the degree program available online? No

As a result of this new course, how much of the program will now be available online? 50% or more *if more than 25%, notify SACS Liaison and Asst. Director for Distance Learning.

Course Syllabus

PROFESSIONAL CAPSTONE EXPERIENCE
DEAF 6110
3 SEMESTER HOURS

College of Education
Valdosta State University
Department of Middle, Secondary, Reading, & Deaf Education
Conceptual Framework: Guiding Principles
(adapted from the Georgia Systemic Teacher Education Program Accomplished Teacher Framework)

Dispositions Principle: Productive dispositions positively affect learners, professional growth, and the learning environment.

Equity Principle: All learners deserve high expectations and support.

Process Principle: Learning is a life-long process of development and growth.

Ownership Principle: Professionals are committed to, and assume responsibility for, the future of their disciplines.

Support Principle: Successful engagement in the process of learning requires collaboration among multiple partners.

Impact Principle: Effective practice yields evidence of learning.

Technology Principle: Technology facilitates teaching, learning, community building, and resource acquisition.

Standards Principle: Evidence-based standards systematically guide professional preparation and development.

REQUIRED TEXTBOOKS

American Psychological Association. (2002). *Publication Manual of the American Psychological Association* (5th ed.). Washington, DC: Author.

Additional readings for this course as assigned by the instructor.

COURSE DESCRIPTION

Culminating course. Students will implement a project that demonstrates their ability to apply evidence-based research to impact programs or practices that affect k-12 students.

COLLEGE OF EDUCATION CONCEPTUAL FRAMEWORK : STANDARDS

I. CONTENT AND CURRICULUM: Teachers demonstrate a strong content knowledge of content area(s) that are appropriate for their certification levels.

II. KNOWLEDGE OF STUDENTS AND THEIR LEARNING: Teachers support the intellectual, social, physical, and personal development of all students.

III. LEARNING ENVIRONMENTS: Teachers create learning environments that encourage positive social interaction, active engagement in learning, and self-motivation.

IV. ASSESSMENT: Teachers understand and use a range of formal and informal assessment strategies to evaluate and ensure the continuous development of all learners.

V. PLANNING AND INSTRUCTION: Teachers design and create instructional experiences based on their knowledge of content and curriculum, students, learning environments, and assessment.

VI. PROFESSIONALISM: Teachers recognize, participate in, and contribute to teaching as a profession.

COURSE OBJECTIVES

Students will:

1. Use a variety of reflective practices and self-evaluation techniques. (CF IV, VI)
2. Demonstrate effective written and oral communication skills (CF VI)
3. Implement an action research project that demonstrates their ability to impact student learning (CF I, II, III, IV, V)
4. Complete a professional presentation of the project results (CF VI)

COURSE ACTIVITIES/ASSIGNMENTS/ REQUIREMENTS

1. Implement Capstone Research Plan (CRP). Students will create a detailed timeline with target dates for data collection, intervention, analysis, written paper and presentation.

COURSE EVALUATION

If 0 points are accumulated in any of the categories, the advanced candidate will be ineligible to receive a grade of A.

A = 90%+

B = 80-89%

C = 70-79%

D = 60-69%

F = below 60%

ATTENDANCE POLICY

This is an online class. It is expected that you participate online each week

DEPARTMENTAL PLAGIARISM POLICY

The full text of this policy is available in the College of Education Dean's Office, EC room 227. The following penalties will be enforced, as stated in the Policy:

FIRST OFFENSE: The student will earn a "0" on the assignment, test, project, etc.

SECOND OFFENSE: The student will earn the letter grade "F" for the course.

THIRD OFFENSE: The student will earn the letter grade "F" for the course, and further action involving referral of the matter (with documentation) to the appropriate college (university) officials within the administrative structure will be taken. (Please also see page 39 of the VSU Student Handbook.)

SPECIAL NEEDS STATEMENT:

Valdosta State University is an equal opportunity educational institution. It is not the intent of the institution to discriminate against any applicant for admission or any student or employee of the institution based on the sex, race, religion, color, national origin, handicap, veteran status, or sexual orientation of the individual. It is the intent of the institution to comply with the Title VI of the Civil Rights Act of 1964 and subsequent executive orders as well as Title IX and Section 504 of the Rehabilitation Act of 1973.

Students requesting classroom accommodations or modifications because of a documented disability must contact the Access Office for Students with Disabilities located in Room 1115 Nevins Hall. The phone numbers are (229) 245-2498 (voice) and (229) 219-1348 (tty).

APA STYLE

The Department of Middle, Secondary, Reading, & Deaf Education has officially endorsed the style of the American Psychological Association (APA) for the completion of all written assignments unless otherwise stated. Procedures for APA style are found in:

American Psychology Association. (2001). Publication Manual of the American Psychological Association (5th ed.). Washington, DC: Author.

INSTRUCTOR INFORMATION

Request for a Revised Course

Valdosta State University

Date of Submission: 10/21/2008 (mm/dd/yyyy)

Department Initiating Request: Physics, Astronomy, and Geosciences

Faculty Member Requesting Revision: Edward Chatelain

Current Course Prefix and Number: ASTR 3220

Current Credit Hours: 3

Current Course Title: Cosmology

Mark all that apply:

- Revised Title Revised Course Number Revised Credit Hours
 Revised Course Description X Other: Removal of Course Cross Listing

Semester/Term/Year to be Effective: Fall 09

Estimated Frequency of Course Offering: once every two years

Indicate if Revised Course will be Requirement for Major, or X Elective Course

*****For the following items, complete only those items being revised.**

Revised Course Prefix and Number:

(See Course Designation Abbreviations in the Catalog for approved prefixes.)

Revised Course Title:

Revised Course Title Abbreviation (for student transcript; 30 character limit):

Revised Total Contact Hours:

Revised Lecture Hours:

Revised Lab Hours:

Revised Credit Hours:

Revised Course Description: (box expands indefinitely)

Old Course Description:

ASTR 3220 Cosmology

3-0-3

Also offered as PHIL 3220. Prerequisite: ASTR 1020K and PHIL 2010 or PHIL 2010H or consent of the instructor. A scientific or philosophical study of our perception of the universe, including the world views of Ptolemy, Copernicus, and Einstein.

New Course Description:

ASTR 3220 Cosmology

3-0-3

Prerequisite: ASTR 1020K and PHIL 2010 or PHIL 2010H or consent of the instructor. A scientific or philosophical study of our perception of the universe, including the world views of Ptolemy, Copernicus, and Einstein.

Justification: *Select one or more of the following to indicate why the revised course will be beneficial and give justification. Please include or append relevant supporting data.*
(box expands indefinitely)

Improving student learning outcomes:

Adopting current best practice(s) in field:

Meeting mandates of state/federal/outside accrediting agencies:

Other: Removal of course cross listing to retain course prerequisites

Assessment Plan: (box expands indefinitely)

Students will be evaluated by the following learning outcomes:

By the end of the semester,

1. The student will be able to understand the distinctions among the various theories on the creation of the universe, relate these theories to their metaphysics, religious beliefs, and social contexts.
2. The student will be able to recognize how philosophical inquiry applies to "real-world" circumstances and to individual reflection on humankind's place in the universe.
3. The student will become conversant with the theme of the creation of the universe within the history of philosophy, the history of human thought, and various religious perspectives.
4. The student will be able to recognize and define different world views, and by adopting a reasonable viable one, be able to justify it in a philosophically informed way that emphasizes critical reasoning and argument.
5. The student will be able to demonstrate an ability to discuss, in both oral and written discourse, the philosophical issues explored in the course.

Approvals: (Print out for signatures & dates)

Dept. Head(s) <i>Edward E. Chatelein</i>	Date	<i>10/21/08</i>
Dean(s)/Director(s) <i>Louise Richards</i>	Date	<i>10/30/08</i>
College Exec. Comm. <i>Louise Richards</i>	Date	<i>10/30/08</i>
Graduate Exec. Comm.	Date
Academic Comm.	Date

Indicate How Course will be Taught: Traditional classroom format

If course is online:

Does proposed new course alter the percentage of the degree program available online?

As a result of this new course, how much of the program will now be available online? ***If more than 25%, notify SACS Liaison and Asst. Director for Distance Learning.**

Request for Curriculum Change Valdosta State University

Choose area of change:

(Please click grey area below for drop box)

Senior Curriculum Other Curriculum (Specify):

Current Catalog page number: 140

Proposed effective date for Curriculum Change: August/2009 (Month/Year)

Degree & Program name (e.g., BFA, Art): BS, Computer Science

Present Requirements:

Senior College Curriculum...60 hours
Courses Required for the Major... 39 hours
CS3101, CS3300, CS3410...9 hours
CS3520, CS 4345...6 hours
CS4121, CS 4321, CS4721, CS4500, CS4900...15 hours
Additional 3000 or 4000-level credits of Computer Science ... 3 hours
Additional 4000-level credits of Computer Science ... 6 hours
Supporting Courses ... 11 hours
D.II.a Laboratory Science ... 2 hours ("spillover" from Area F)
Math 2150 and Math 3600, and Math 4651 or Math 4901 ... 9 hours
Electives ... 10 hours

Proposed Requirements (Show changes in **BOLD**):

Senior College Curriculum...60 hours

Courses Required for the Major... 39 hours

CS3101, CS3300, CS3335, CS3410...12 hours

CS3520, CS 4345...6 hours

CS4121, CS 4321, CS4721, CS4500, CS4900...15 hours

Additional 3000 or 4000-level credits of Computer Science ... 3 hours

Additional 4000-level credits of Computer Science ... 3 hours

Supporting Courses ... 11 hours

D.II.a Laboratory Science ... 2 hours ("spillover" from Area F)

Math 2150 and Math 3600, and Math 4651 or Math 4901 ... 9 hours

Electives ... 10 hours

Justification:

Select one or more of the following to indicate why the requested change will be beneficial, giving your justification. Please include and/or append relevant supporting data.

(text boxes are expandable)

Improving student learning outcomes:

Adopting current best practice(s) in field:

Meeting mandates of state/federal/outside accrediting agencies: ABET CS accreditation requires all CS majors be proficient in at least two programming languages.

Other:

Plan for Assessing Proposed Change:

The change will be assessed as successful if the CS Degree at VSU is eligible for ABET Accreditation.

Approvals:

Department Head: Mufan Redfern Date: 10/29/08

Dean(s)/Director(s): Conce Richards Date: 10/11/08

College Exec. Committee: _____ Date: _____

Grad. Exec. Committee: _____ Date: _____

Academic Committee: _____ Date: _____

Program offered: At VSU

If the program is to be offered off campus:

Where will the course be offered?

Does VSU already offer courses at this site? Yes

For VSU's SACS Liaison (Office of Strategic Research and Analysis)

	Yes	No
Does proposed change require notification of a substantive change to SACS? (if no, stop here)	<input type="checkbox"/>	<input type="checkbox"/>
If yes; Has the department proposing the change submitted the required information to you?	<input type="checkbox"/>	<input type="checkbox"/>
Does proposed effective date meet SACS notification requirements?	<input type="checkbox"/>	<input type="checkbox"/>
Has the VPAA been notified?	<input type="checkbox"/>	<input type="checkbox"/>

SACS Liaison: _____ Date: _____

Request for a Revised Course
Valdosta State University

RECEIVED

NOV 12 2008

VALDOSTA STATE UNIVERSITY
GRADUATE SCHOOL

Date of Submission: 9/11/2008 (mm/dd/yyyy)

Department Initiating Request: Political Science

Faculty Member Requesting Revision: Nolan J. Argyle

Current Course Prefix and Number: PADM 9999

Current Credit Hours: 6

Current Course Title: Final Project/Organizational Analysis

Mark all that apply:

- Revised Title Revised Course Number Revised Credit Hours
 Revised Course Description Other

Semester/Term/Year to be Effective: Fall 2009

Estimated Frequency of Course Offering: once annually

Indicate if Revised Course will be Requirement for Major, or Elective Course

*****For the following items, complete only those items being revised.**

Revised Course Prefix and Number:

(See Course Designation Abbreviations in the Catalog for approved prefixes.)

Revised Course Title:

Revised Course Title Abbreviation (for student transcript; 30 character limit):

Revised Total Contact Hours: 3 ~~to~~ 6
or

Revised Lecture Hours: 3 ~~to~~ 6
or

Revised Lab Hours: 0

Revised Credit Hours: 3 ~~to~~ 6
or



Revised Course Description: (box expands indefinitely)

64

Old Course Description

Prerequisites: Completion of major courses and permission of advisor or final project chair. Graded "Satisfactory" or "Unsatisfactory." Development and defense of the final project or organizational analysis. Under the supervision of a faculty committee, students will conduct either an applied research project or a descriptive and prescriptive evaluation of the management policies of an agency. Course may be repeated for credit.

New Course Description

Prerequisites: Completion of major courses and permission of advisor or final project chair. Graded "Satisfactory" or "Unsatisfactory." Development and defense of the final project or organizational analysis. Under the supervision of a faculty committee, students will conduct either an applied research project or a descriptive and prescriptive evaluation of the management policies of an agency. Course may be repeated for credit. Students must take a minimum of 6 credit hours over a period of at least 2 semesters.

Justification: *Select one or more of the following to indicate why the revised course will be beneficial and give justification. Please include or append relevant supporting data.*
(box expands indefinitely)

- Improving student learning outcomes:** The finished product from this course is to be a dissertation-quality project. Students will require a minimum of 1 academic year to complete the project and should not be required to register for 6 hours each semester.

- Adopting current best practice(s) in field:**

- Meeting mandates of state/federal/outside accrediting agencies:**

- Other:**

Assessment Plan: (box expands indefinitely)

Student will work with her/his faculty committee who will be responsible for assessing adequate progress. The student must present a formal defense of his/her project to the committee. The final project will also be reviewed by the Graduate School. (No change from original proposal)

Approvals: (Print out for signatures & dates)

Dept. Head(s)	<u>James K. Peterson</u>	Date	<u>9/16/08</u>
Dean(s)/Director(s)	<u>Connie Richards</u>	Date	<u>10/30/08</u>
College Exec. Comm.	<u>Connie Richards</u>	Date	<u>10/30/08</u>
Graduate Exec. Comm.	<u>Karla M. Hull</u>	Date	<u>12-1-08</u>
Academic Comm.	_____	Date	_____

Indicate How Course will be Taught: Online

If course is online:

Does proposed new course alter the percentage of the degree program available online? No

As a result of this new course, how much of the program will now be available online? 50% or more *If more than 25%, notify SACS Liaison and Asst. Director for Distance Learning.

Request for a Revised Course
Valdosta State University

Date of Submission: 9/3/2008 (mm/dd/yyyy)

Department Initiating Request: Philosophy and Religious Studies

Faculty Member Requesting Revision: Fred Downing

Current Course Prefix and Number: PHIL 3220

Current Credit Hours: 3

Current Course Title: Cosmology

Mark all that apply:

- Revised Title Revised Course Number Revised Credit Hours
 Revised Course Description Other: Removal of Prerequisites

Semester/Term/Year to be Effective: Fall 09

Estimated Frequency of Course Offering: once every two years

Indicate if Revised Course will be Requirement for Major, or Elective Course

*****For the following items, complete only those items being revised.**

Revised Course Prefix and Number:

(See Course Designation Abbreviations in the Catalog for approved prefixes.)

Revised Course Title:

Revised Course Title Abbreviation (for student transcript; 30 character limit):

Revised Total Contact Hours:

Revised Lecture Hours:

Revised Lab Hours:

Revised Credit Hours:

Revised Course Description: (box expands indefinitely)

Old Course Description:	
PHIL 3220 Cosmology	3-0-3
Also offered as ASTR 3220. Prerequisite: ASTR 1020K and PHIL 2010 or PHIL 2010H or consent of the instructor. A scientific and philosophical study of our perception of the universe, including the world views of Ptolemy, Copernicus, and Einstein.	
New Course Description:	
PHIL 3220 Cosmology	3-0-3
A scientific and philosophical study of our perception of the universe, including the world views of Ptolemy, Copernicus, and Einstein.	

Justification: *Select one or more of the following to indicate why the revised course will be beneficial and give justification. Please include or append relevant supporting data.*
(box expands indefinitely)

<input type="checkbox"/> Improving student learning outcomes:
<input type="checkbox"/> Adopting current best practice(s) in field:
<input type="checkbox"/> Meeting mandates of state/federal/outside accrediting agencies:
<input checked="" type="checkbox"/> Other: Removal of prerequisites to facilitate and enhance student enrollment
In the past this course has been cross-listed with ASTR 3220 and taught from the perspective of Astronomy which required the Area D requirement of ASTR 1020K as a prerequisite. The Philosophy faculty would now like to teach the course as an upper level Philosophy elective and the faculty members think that the removal of prerequisites would facilitate the enrollment in the class.

Assessment Plan: (box expands indefinitely)

Students will be evaluated by the following learning outcomes:

By the end of the semester,

1. The student will be able to understand the distinctions among the various theories on the creation of the universe, relate these theories to their metaphysics, religious beliefs, and social contexts.
2. The student will be able to recognize how philosophical inquiry applies to "real-world" circumstances and to individual reflection on humankind's place in the universe.
3. The student will become conversant with the theme of the creation of the universe within the history of philosophy, the history of human thought, and various religious perspectives.
4. The student will be able to recognize and define different world views, and by adopting a reasonable viable one, be able to justify it in a philosophically informed way that emphasizes critical reasoning and argument.
5. The student will be able to demonstrate an ability to discuss, in both oral and written discourse, the philosophical issues explored in the course.

Approvals: (Print out for signatures & dates)

Dept. Head(s) Fred Downing Date 10/21/08

Dean(s)/Director(s) Conni Richards Date 10/30/08

College Exec. Comm. Conni Richards Date 10/30/08

Graduate Exec. Comm. _____ Date _____

Academic Comm. _____ Date _____

Indicate How Course will be Taught: Traditional classroom format

If course is online:

Does proposed new course alter the percentage of the degree program available online?

As a result of this new course, how much of the program will now be available online? ***If more than**

25%, notify SACS Liaison and Asst. Director for Distance Learning.

Request for a New Course Valdosta State University

Date of Submission: 09/04/2008 (mm/dd/yyyy)

Department Initiating Request: Biology

Faculty Member Requesting: Mark Blackmore

Proposed New Course Prefix & Number: BIOL 1200
(See Course Description Abbreviations in the Catalog for approved prefixes.)

Proposed New Course Title: History of the Life Sciences

Proposed New Course Title Abbreviation: History Life Sciences
(For student transcript, limit to 30 characters and spaces)

Semester/Term/Year to be Effective: Fall/2009

Estimated Frequency of Course Offering: F/Sp Semester every year

Indicate if Course will be: Requirement for Major or Elective Course

*****If this new course is to be included in the curriculum, be sure to initiate a Curriculum Change Form.*****

Total Contact Hours: 3

Lecture Hours: 3

Lab Hours: 0

Credit Hours: 3

Proposed Course Description: (box expands indefinitely)

An introduction to the history and philosophy of biology and related sciences. The development and evolution of major theories and techniques, and interactions between science and culture will be emphasized.

Justification: Select one or more of the following to indicate why the requested new course will be beneficial and give justification. Please include or append relevant supporting data.

(box expands indefinitely)

Improving student learning outcomes: A required course in Area F of the Bachelor of Arts in Biology curriculum will address VSU General Education Outcomes 2, 4, and 5 and Biology Department Educational Outcome 1. In addition to required text, students will study seminal literature in the life sciences and examine how advances in the field have influenced and been influenced by societal events and mores. Analytical writing assignments and classroom discussion will enhance student understanding of how interactions and conflicts among disciplines within the life sciences contributed to biology today. By the end of the semester students should have acquired a basic understanding of the development and role of biology in ancient civilizations; the history of science as a means of inquiry in Western civilizations; the contributions of Cell Theory, Microbiology, Anatomy and Physiology, Natural History, Genetics and Evolutionary Theory, to developing a unified field of Biology, and how prevailing social attitudes influenced developments in Biology.

Adopting current best practice(s) in field:

Meeting mandates of state/federal/outside accrediting agencies:

Other:

Plans for assessing proposed course: (box expands indefinitely)

Exams (2 exams, 100 points each)
Short writing assignments (50 points)
Oral presentations (50 points)
Final Examination (100 points)
Total: 400 points

Grade Scale: A 90-100%

B 80-89%

C 70-79%

D 60-69%

F < 60%

Exams will include some combination of short answer, fill in the blank, matching, or multiple choice questions. Short writing assignments will require discussion of literature associated with topics covered in class. In addition, students will research topics, prepare a PowerPoint presentation and then work with other students to merge the products into a single presentation to be given to the entire class.

*** ATTACH A COURSE SYLLABUS WITH COURSE OUTCOMES/ASSESSMENTS AND GENERAL EDUCATION OUTCOMES/ASSESSMENTS.

Approvals: (Print out for signatures & dates)

Dept. Head(s)	<u>Robert Bennett</u>	Date	<u>10-2-08</u>
Dean(s)/Director(s)	<u>Connie Richards</u>	Date	<u>10/30/08</u>
College Exec. Comm.	<u>Connie Richards</u>	Date	<u>10/30/08</u>
Graduate Exec. Comm.	_____	Date	_____
Academic Comm.	_____	Date	_____

Indicate How Course will be Taught: Face to Face

If course is online:

Does proposed new course alter the percentage of the degree program available online? No

As a result of this new course, how much of the program will now be available online?

less than 25% ***If more than 25%, notify SACS Liaison and Asst. Director for Distance Learning.**

**BIOL 1200 HISTORY OF THE LIFE SCIENCES FALL 2009
SYLLABUS & COURSE POLICIES**

Lecture: Biology/Chemistry Bldg. (BSC) Room and time TBA
Instructor: Dr. Mark Blackmore
Office: BSC 2028
Office Hours: TBA; or by appointment
Research Lab: BSC 2060

Contact information
Telephone: (229) 259-5114
email: mblackmo@valdosta.edu
Lab telephone: (229) 245-6422

Course scope and objectives: An introduction to the history and philosophy of biology and related sciences. The development and evolution of major theories and techniques, and interactions between science and culture will be emphasized. By the end of the course students are expected to be able to describe the development of the life sciences as a form of inquiry in both Western and non-Western civilizations including major paradigm shifts and their consequences. Students will also explain how technological developments have affected human understanding of the living world and recognize the impact advances in biological knowledge have had on society and human culture. This corresponds to Educational Outcome 1 (Develop and test hypotheses, collect and analyze data, and present the results and conclusions in both written and oral formats used in peer-reviewed journals and at scientific meetings.) for the Department of Biology as listed in the 2008-2009 VSU catalogue. **3 credit hours. Prerequisite: None.**

Text: *A History of the Life Sciences, Third Edition, Revised and Expanded* by Lois N. Magner 2002.

Alignment of Course Objectives with VSU General Education Outcomes: The course objectives and expectations described above align with VSU General Education Outcomes 2, 3, and 4.

(2.) Students will demonstrate cross-cultural perspectives and knowledge of other societies. They will possess sufficient knowledge of various aspects of another culture, including the language, social and religious customs, aesthetic expression, geography, and intellectual and political history, to enable them to interact with individuals within that society from an informed perspective. They will possess an international viewpoint that will allow them to examine critically the culture of their own nation and to participate in global society.

(3.) Students will use computer and information technology when appropriate. They will demonstrate knowledge of computer concepts and terminology. They will possess basic working knowledge of a computer operating system. They will be able to use at least two software tools, such as word processors, spreadsheets, database management systems, or statistical packages. They will be able to find information using computer searching tools.

(4.) Students will express themselves clearly, logically, and precisely in writing and in speaking, and they will demonstrate competence in reading and listening. They will display the ability to write coherently in standard English; to speak well; to read, to understand, and to interpret the content of written materials in various disciplines; and to listen effectively and to understand different modes of communication.

Student proficiency in meeting these outcomes will be assessed by exams, writing assignments and oral presentations as described below.

Course requirements & grading policy: Students are expected to attend all scheduled lectures. Attendance at lectures will not be recorded after the Drop/Add period but students are responsible for all material presented in class and must attend when tests are given and when assigned work is due. The instructor is not obligated to provide lecture notes or other material to absentee students or to offer make-up examinations. Students with valid, documented excuses (eg. a death in the immediate family) may receive special consideration but must contact the instructor immediately. Assessment will consist of:

Exams (2 exams, 100 points each)
Short writing assignments (50 points)
Oral presentations (50 points)
Final Examination (100 points)
Total: 400 points
Grade Scale: A 90-100%
 B 80-89%
 C 70-79%
 D 60-69%
 F < 60%

Exams will include some combination of short answer, fill in the blank, matching, or multiple choice questions. Short writing assignments will require discussion of literature associated with topics covered in class. In addition, students will research topics, prepare a PowerPoint presentation and then work with other students to merge the products into a single presentation to be given to the entire class. **The comprehensive final exam will be given TBA, December TBA at TBA in BSC TBA.**

Tentative Schedule – Fall Semester 2009

<u>Week</u>	<u>Dates</u>	<u>Topics</u>	<u>Assigned Reading (Magner):</u>
1	Aug 17-21	Origins and definitions; Biology & Ancient Civilizations	<i>Chapters</i> 1
2	Aug 24-28	Greek Natural Philosophers and Scientists	2
3	Aug 31-Sept 4	The Greek Legacy	2
4	Sept 8-11	The Renaissance and the Scientific Revolution	3
5	Sept 14-18*	The Foundation of a Modern Scientific Tradition	4
6	Sept 21-25	Science and Change: Scientific Societies	
7	Sept 28-Oct 2	Microscopes and the Small New World	
8	Oct 5-9	Problems in Generation: Organisms, Embryos and Cells	5
9	Oct 12-16	Fall Break – Work on Research Assignments	
10	Oct 19-23 **	Physiology	6
11	Oct 26-30	Microbiology, Virology, and Immunology	7
12	Nov 2-6	Evolution	8
13	Nov 9-13	Darwinism and Society	
14	Nov 16-20	Genetics	9
15	Nov 23-24	Molecular Biology	10
16	Nov 30-Dec 4	Environmentalism	
17	Dec XX	Final Exam Given (TBA in BSC TBA)	

Lecture Test Dates: *Exam 1- Sept 18 **Exam 2- Oct 23

Academic Integrity & Conduct: Student conduct should follow guidelines specified in the VSU Student Handbook. It is expected that students will maintain the highest ethical standards, honesty and courtesy at all times. Evidence of dishonesty in the completion of assignments or during tests will result in the forfeiture of the points allocated for that task. Any student caught cheating may be reported to the University administration. A second offense will be grounds for dismissal with a failing grade. To avoid disruptions, all cellular telephones and pagers should be turned off for the duration of class. Students failing to abide by this policy may face disciplinary action.

Special needs: Students requesting classroom accommodations or modifications due to a documented disability must contact the Access Office for Students with Disabilities located in room 1115 Nevins Hall. The phone numbers are 245-2498 (V/VP) and 219-1348 (TTY). Please discuss any such needs with me at the beginning of the semester.

The Student Success Center (SSC) at Valdosta State University is located in Langdale Residence Hall above the Tech Shop and is available to all students. The SSC provides free peer tutoring in core curriculum courses, including biology, chemistry, math, writing, and foreign languages. The SSC also provides free professional academic advising and on-campus job information in one location. Call 333-7570 to make an appointment, or visit the website: www.valdosta.edu/ssc.

Request for a Revised Course

Valdosta State University

Date of Submission: 9/3/2008 (mm/dd/yyyy)

Department Initiating Request: Biology

Faculty Member Requesting Revision: Michael E. Smith

Current Course Prefix and Number: BIOL 2651

Current Credit

Hours: 4

Current Course Title: Human Anatomy and Physiology I

Mark all that apply:

Revised Title Revised Course Number Revised Credit Hours
 Revised Course Description Other

Semester/Term/Year to be Effective: Spring/2009

Estimated Frequency of Course Offering: Fall/Spring/Summer

Indicate if Revised Course will be Requirement for Major, or Elective

Course

*****For the following items, complete only those items being revised.**

Revised Course Prefix and Number:

(See Course Designation Abbreviations in the Catalog for approved prefixes.)

Revised Course Title:

Revised Course Title Abbreviation (for student transcript; 30 character limit):

Revised Total Contact Hours:

Revised Lecture Hours:

Revised Lab Hours:

Revised Credit Hours:

Revised Course Description: (box expands indefinitely)

OLD: Introduction to human anatomy and general physiological principles with emphasis on the following: cell and tissue organization, plus skeletal, muscular, nervous, and endocrine systems.

NEW: Introduction to human anatomy and general physiological principles with emphasis on the following: basic chemical principles, cell and tissue organization, plus skeletal, muscular, and nervous systems.

Justification: *Select one or more of the following to indicate why the revised course will be beneficial and give justification. Please include or append relevant supporting data.*

(box expands indefinitely)

- Improving student learning outcomes:
- Adopting current best practice(s) in field:
- Meeting mandates of state/federal/outside accrediting agencies:
- Other: The new course description now accurately describes what topics are covered in the course.

Assessment Plan: (box expands indefinitely)

Four lecture exams, and four laboratory exams are given during the semester that assess students' understanding of the following Department of Biology Educational Outcomes described in the 2008-2009 Undergraduate Catalog: Numbers 3 and 4.

Approvals: (Print out for signatures & dates)

Dept. Head(s) *Robert Cannon* Date *9-30-08*

Dean(s)/Director(s) *Angus Richards* Date *10/30/08*

College Exec. Comm. *Annun Richards* Date *10/30/08*

Graduate Exec. Comm. _____ Date _____

Academic Comm. _____ Date _____

Indicate How Course will be Taught: Face to Face

If course is online:

Does proposed new course alter the percentage of the degree program available online? No

As a result of this new course, how much of the program will now be available online?
less than 25% ***If more than 25%, notify SACS Liaison and Asst. Director for Distance Learning.**

Request for a Revised Course

Valdosta State University

Date of Submission: 9/3/2008 (mm/dd/yyyy)

Department Initiating Request: Biology

Faculty Member Requesting Revision: Michael E. Smith

Current Course Prefix and Number: BIOL 2652

Current Credit

Hours: 4

Current Course Title: Human Anatomy and Physiology II

Mark all that apply:

- Revised Title Revised Course Number Revised Credit Hours
 Revised Course Description Other

Semester/Term/Year to be Effective: Spring/2009

Estimated Frequency of Course Offering: Fall/Spring/Summer

Indicate if Revised Course will be Requirement for Major, or Elective

Course

*****For the following items, complete only those items being revised.**

Revised Course Prefix and Number:

(See Course Designation Abbreviations in the Catalog for approved prefixes.)

Revised Course Title:

Revised Course Title Abbreviation (for student transcript; 30 character limit):

Revised Total Contact Hours:

Revised Lecture Hours:

Revised Lab Hours:

Revised Credit Hours:

Revised Course Description: (box expands indefinitely)

OLD: Prerequisite: BIOL 2651. A continuation of human anatomy and general physiological principles with emphasis on the following: cardiovascular, lymphatic, respiratory, digestive, excretory, and reproductive systems, plus development.

NEW: Prerequisite: BIOL 2651. A continuation of human anatomy and general physiological principles with emphasis on the following: endocrine, cardiovascular, lymphatic, respiratory, digestive, excretory, and reproductive systems, plus development.

Justification: *Select one or more of the following to indicate why the revised course will be beneficial and give justification. Please include or append relevant supporting data.*

(box expands indefinitely)

Improving student learning outcomes:

Adopting current best practice(s) in field:

Meeting mandates of state/federal/outside accrediting agencies:

Other: The new course description now accurately describes what topics are covered in the course.

Assessment Plan: (box expands indefinitely)

Four or five lecture exams, two laboratory exams, and laboratory assignments are given during the semester that assess students' understanding of the following Department of Biology Educational Outcomes described in the 2008-2009 Undergraduate Catalog: Numbers 1 and 4.

Approvals: (Print out for signatures & dates)

Dept. Head(s) Al J. Gannon Date 9-30-08

Dean(s)/Director(s) Cornie Richards Date 10/30/08

College Exec. Comm. Cornie Richards Date 10/30/08

Graduate Exec. Comm. _____ Date _____

Academic Comm. _____ Date _____

Indicate How Course will be Taught: Face to Face

If course is online:

Does proposed new course alter the percentage of the degree program available online? No

As a result of this new course, how much of the program will now be available online?
less than 25% ***If more than 25%, notify SACS Liaison and Asst. Director for Distance Learning.**

Request for a New Course
Valdosta State University

Date of Submission: 09/12/2008(mm/dd/yyyy)

Department Initiating Request: Biology

Faculty Member Requesting: Dr. J. Mitchell Lockhart

Proposed New Course Prefix & Number: BIOL 3960

(See Course Description Abbreviations in the Catalog for approved prefixes.)

Proposed New Course Title: Wildlife Biology

Proposed New Course Title Abbreviation: Wildlife Biology

(For student transcript, limit to 30 characters and spaces)

Semester/Term/Year to be Effective: Spring, 2009

Estimated Frequency of Course Offering: Alternating years

Indicate if Course will be: Requirement for Major or Elective Course

*****If this new course is to be included in the curriculum, be sure to initiate a Curriculum Change Form.*****

Total Contact Hours: 6

Lecture Hours: 3

Lab Hours: 3

Credit Hours: 4

Proposed Course Description: (box expands indefinitely)

Prerequisites: BIOL 2230, BIOL 2270 or consent of instructor. General principles and techniques in wildlife conservation, ecology, and management with an emphasis on life histories and taxonomy of game species of the southeastern United States.

Justification: *Select one or more of the following to indicate why the requested new course will be beneficial and give justification. Please include or append relevant supporting data.*
(box expands indefinitely)

Improving student learning outcomes:

Adopting current best practice(s) in field:

Meeting mandates of state/federal/outside accrediting agencies:

Other: There currently are no courses at Valdosta State University available to students who wish to study wildlife biology. The instructor anticipates this course will be the first of two in the area of wildlife biology with the companion course to be entitled Wildlife Diseases. This course aims to provide students with an introduction to wildlife biology and is for students who intend to pursue employment in wildlife related fields and who may wish to pursue postgraduate education or research in wildlife biology.

Plans for assessing proposed course: (box expands indefinitely)

Assessment: For the lecture grade, three exams (tentative) plus a comprehensive final will be given. Each exam will be worth 100 points. Questions will be based on material covered in lecture, in my notes, and from assigned readings. Exam questions will be in a variety of formats including (but not limited to) essay, short answer, multiple choice, fill in the blank, drawings, etc...Any questions concerning grading should be brought to the attention of the professor NO LATER than one week following return of the exam. NO make-up exams will be given.

For the laboratory grade, 2 lab practicals (tentative) will be given. The Lab practicals cannot be made up. If a lab practical is missed, you will receive a zero for that lab grade.

The final grade will be a combination of your final lecture exam scores and laboratory exam scores. Lecture exams will comprise 30% and lab exams will comprise 25% of your final score. The Habitat Management Plan will be 20% and the wildlife sign collection will be 10% of the final grade. The lecture final will be comprehensive and worth 15% of the final grade.

Grade Scale: 90-100 = A, 80-89 = B, 70-79 = C, 60-69 = D, <60 = F

Course Outcomes/Assessments

1. Know the history of wildlife biology in the United States.
2. Know the natural history of the principal game species of the southeastern United States.
3. Know how to assess habitat for particular game species and how to prepare a habitat

management plan with budget.

4. Recognize and identify wildlife sign in the environment.
5. Know how to assess populations and recognize their health status.
6. Know how various factors, such as harvest, disease, and predators may affect wildlife populations.
7. Be familiar with special wildlife biology topics, such as exotics, urban wildlife, and endangered species.

Assessments for this course will include reading of scientific literature, preparation of a written wildlife habitat management plan, a collection of wildlife sign, written exams, and laboratory practical exams.

General Education Outcomes/Assessments

This course will help students achieve four of the general education outcomes for Valdosta State University:

3. Students will use computer and information technology when appropriate. They will demonstrate knowledge of computer concepts and terminology. They will possess basic working knowledge of a computer operating system. They will be able to use at least two software tools, such as word processors, spreadsheets, database management systems, or statistical packages. They will be able to find information using computer searching tools.
4. Students will express themselves clearly, logically, and precisely in writing and in speaking, and they will demonstrate competence in reading and listening. They will display the ability to write coherently in standard English; to speak well; to read, to understand, and to interpret the content of written materials in various disciplines; and to listen effectively and to understand different modes of communication.
5. Students will demonstrate knowledge of scientific and mathematical principles and proficiency in laboratory practices. They will understand the basic concepts and principles underlying scientific methodology and be able to collect, analyze, and interpret data. They will learn a body of scientific knowledge and be able to judge the merits of arguments about scientific issues. They will be able to perform basic algebraic manipulations and to use fundamental algebraic concepts to solve word problems and equations. They will be able to use basic knowledge of statistics to interpret and to analyze data. They will be able to evaluate arguments based on quantitative data.
7. Students will demonstrate the ability to analyze, to evaluate, and to make inferences from oral, written and visual materials. They will be skilled in inquiry, logical reasoning, and critical analysis. They will be able to acquire and evaluate relevant information, analyze arguments, synthesize facts and information, and offer logical arguments leading to creative solutions to problems.

*** ATTACH A COURSE SYLLABUS WITH COURSE OUTCOMES/ASSESSMENTS AND GENERAL EDUCATION OUTCOMES/ASSESSMENTS.

Approvals: (Print out for signatures & dates)

Dept. Head(s)	<u><i>Robert Bennett</i></u>	Date	<u>9-30-08</u>
Dean(s)/Director(s)	<u><i>Conrad Richards</i></u>	Date	<u>10/30/08</u>
College Exec. Comm.	<u><i>Conrad Richards</i></u>	Date	<u>10/30/08</u>
Graduate Exec. Comm.	_____	Date	_____
Academic Comm.	_____	Date	_____

Indicate How Course will be Taught: Face to Face

If course is online:

Does proposed new course alter the percentage of the degree program available online? No

As a result of this new course, how much of the program will now be available online? less than 25%

***If more than 25%, notify SACS Liaison and Asst. Director for Distance Learning.**

Biology 3960 - Wildlife Biology

Spring Semester, 2008

Instructor - Dr. J. Mitchell Lockhart

Office - Biology/Chemistry Building, Room 2029

Phone: 333-5767 / 333-5759

Email: jmlockha@valdosta.edu

Office Hours: As posted or by appointment

Course hours: Lecture - To be determined/preference for Tuesday-Thursday

Lab - To be determined/preference for Tuesday-Thursday

Textbook - *Wildlife of Southern Forests - Habitat and Management*, edited by James G. Dickson (**required**), *A Sand County Almanac* by Aldo Leopold (**required**), *Research and Management Techniques for Wildlife and Habitats* by Theodore Bookout (*suggested*).

Course Description: General principals and techniques in wildlife conservation, ecology, and management with an emphasis on life histories and taxonomy of game species of the southeastern United States.

Attendance: MANDATORY! I do keep track of who is and isn't attending lecture and laboratory. Any student disrupting the classroom and affecting the learning experience of others will be asked to leave. Along these lines, **NO** cell-phones, beepers, and/or associated earpieces are allowed either in the lecture room or laboratory. My policy is not to give a warning, rather, if a cell-phone or beeper activates during lecture/laboratory, I pursue **permanent** removal of the individual from my class. Viewing a cell-phone or pager that activates on "silent" mode during a quiz or exam will be treated as an instance of **CHEATING** and handled accordingly. Those wishing to utilize laptop computers as part of the class are required to sit in the first 3 rows of the classroom.

Students With Documented Disabilities: Students requiring accommodations or modifications because of documented disabilities should discuss this need with Dr. Lockhart at the beginning of the semester. Students not registered with the Special Services Program must contact the Access Office for Students with Disabilities in Nevins Hall, Room 1115. Their phone number is 245-2498.

Grades: For the lecture grade, three exams (tentative) plus a comprehensive final will be given. Each exam will be worth 100 points. Questions will be based on material covered in lecture, in my notes, and from assigned readings. Exam questions will be in a variety of formats including (but not limited to) essay, short answer, multiple choice, fill in the blank, drawings, etc...Any questions concerning grading should be brought to the attention of the professor **NO LATER** than one week following return of the exam. **NO make-up exams will be given.**

For the laboratory grade, 2 lab practicals (tentative) will be given. **The Lab practicals cannot be made up. If a lab practical is missed, you will receive a zero for that lab grade.**

The final grade will be a combination of your final lecture exam scores and laboratory exam scores. Lecture exams will comprise 30% and lab exams will comprise 25% of your final score. The Habitat Management Plan will be 20% and the wildlife sign collection will be 10% of the final grade. The lecture final will be comprehensive and worth 15% of the final grade.

Grade Scale: 90-100 = A, 80-89 = B, 70-79 = C, 60-69 = D, <60 = F

Specific requirement differences for graduate students: Graduate students in Wildlife Biology will be required to do their own habitat management plan (as opposed to working in groups of four for undergraduates), will be required to turn in a wildlife sign collection of 20 items (as opposed to 16 for undergraduates), and may be required to lead an in-class discussion on a wildlife biology topic as assigned by the instructor.

Privacy Act: Because of the Buckley Amendment or Privacy Act, grades will not be discussed over the phone, via email, given to friends, or given to relatives. Final grades will be posted, only at your request, under an anonymous 6 digit number which you choose later in the semester.

Cheating: Refer to the Student Code of Ethics in the Valdosta State University Student Handbook. A student caught cheating will be penalized ranging from receiving a zero for that assignment or test to failing the class.

Important Dates: Midterm - To be determined, Final Exam - To be determined

- The Professor reserves the right to modify the above contents with proper notification.

Tentative Lecture Schedule for BIOL3960 – Wildlife Biology

- Unit 1 – Introduction and History of Wildlife Biology
- Unit 2 – Sampling Wildlife
- Unit 3 – Wildlife Habitat Management
- Unit 4 – Population Attributes

Exam 1

- Unit 5 – Wildlife Physiology and Nutrition
- Unit 6 – Wildlife Harvest
- Unit 7 – Wildlife Diseases
- Unit 8 – Wildlife Mortality
- Unit 9 – Predators

Exam 2

- Unit 10 – Wildlife Damage Management
- Unit 11 – Non-Consumptive Use of Wildlife
- Unit 12 – Exotics
- Unit 13 – Urban Wildlife
- Unit 14 – Endangered Species

Exam 3

Tentative Laboratory Schedule

Week 1 – Orientation to Plowden Field Station and selection of plots for Habitat Management Plan.

Week 2 – Sign collection introduction

Week 3-5 – Aging white-tailed deer and bobwhite-quail. Identification of wildlife skulls.

Week 6 – Lab practical 1

Week 7 – Field trip to Moody Air Force Base for demonstration of RFID and telemetry tracking techniques.

Week 8-9 – Identification of waterfowl.

Week 10 – Lab Practical 2

Week 11 – United States Department of Agriculture – Georgia Wildlife Services demonstration on trapping and handling wildlife.

Week 12 – Completion of Habitat Management Plans and turn in Wildlife Sign Collection

MANAGEMENT PLAN OUTLINE FOR WILDLIFE BIOLOGY

Title:

Authors:

INTRODUCTION

This section states the purpose of your report, and lists the goals which you hope to accomplish. You should clearly state which specie or species you are managing for, and why you are managing for this specie(s). You should justify management for the species you select on biological, economic, and political grounds. That is, is it economically and politically feasible to manage for the species in question? Will some special interest group become upset? How will you convince this special interest group of the biological value of your species? Do you have enough money in your budget to carry out your management plan?

LITERATURE REVIEW OF SPECIES LIFE HISTORY

In this section you will present pertinent information regarding the life history of your species (behavior, ecological relationships, nutritional requirements, etc), using references at the library or from other sources. Concentrate your discussion on the factors (decimating and/or welfare) that tend to limit population size for your species, so that you can justify actions recommended in your "Schedule of Management Activities" section (described below).

Throughout the body of your paper (but especially in the Literature Review section) you will be citing references to other scientific articles and books. You must cite a minimum of **15 references from the scientific literature** (the online database of articles from the Journal of Wildlife Management is an excellent source of information for this, plus other online databases), There should be as many links as possible to relevant web sites).

LITERATURE REVIEW OF MANAGEMENT TECHNIQUES

In addition to the above review of life history, a separate section in your management plan will review management techniques for your target species. Do not discuss historical issues, just the types of management techniques that have been used for your target species. In addition to library references, you can use information from lecture, textbooks, and the Internet for the literature review sections of your report.

DESCRIPTION OF THE MANAGEMENT AREA

The fourth section of your management plan should have this heading. It will include one or more maps along with a written description of the study site (including the surrounding land) as it now exists. **It is strongly recommended that you take color photographs of your area.** You should indicate the size of the site in hectares (use the metric system throughout the paper) . This map and other maps in the report should be labeled "Figure 1", "Figure 2", etc. so that you can refer to them in the body of the text. Look at a current volume of the Journal of Wildlife Management to see the proper method for labeling tables and figures. Make sure you include a fairly detailed description of existing vegetation, soil types, and topography (more than one map will probably be required). Soil types can be found in government soil survey books which are available for every county in the U.S.

STEPS OF THE MANAGEMENT PLAN

The preceding section indicated what the current situation is at Plowden Field Station. The purpose of this section is to describe and **JUSTIFY** the specific activities which you will use to modify the management area. You can use a monthly or yearly schedule depending upon the species of interest. **Outline the steps** that you will take to modify the habitat, and provide a **justification** for each step in your outline that refers back to the Literature Review of Management Techniques. Your written narrative should refer the reader to a series of maps (figures) showing the appearance of the area after each major phase of your habitat manipulation process. See the sample management plans for examples.

BUDGET

For each activity in your schedule, give the estimated cost of this activity. These estimates do not have to be extremely accurate, but I want you to have some idea what your management plan will cost not only in dollars but also in the number of person-hours of labor. Estimate the size of the work crew necessary to carry out each aspect of the plan, and the equipment they will need. If you plan to do any burning, remember that you will need an experienced work crew and safety equipment. At the end of this section, estimate the total cost of your management plan per unit time. For example, how much would it cost if it continued for 5 years? Ten years? (Remember, these estimates do not have to be very accurate. However, many well intentioned management plans have foundered for lack of money. DNR budgets are usually not large!) How often will your proscribed plan have to be repeated in the future? Any time that you set back plant succession, the plants will grow again, and this must be taken into consideration when formulating future plans.

SUMMARY AND CONCLUSION

This section should tie the rest of the paper together by discussing the potential impact of your management plan on your target species. **In addition, make some rough predictions concerning population sizes in the years to come as a result of your activity.**

LITERATURE CITED

This section will list references cited in your report alphabetically by the author's last name. For example:

Owen, M. 1975. Cutting and fertilizing grassland for winter goose management. *Journal of Wildlife Management* 39:163-167.

(Note that the year of publication is followed by the title, journal name, volume number and pages.)

The format is slightly different for books and monographs. See a recent issue of the *Journal of Wildlife Management* for examples. NOTE: Do not use the condensed format found in your reference lists - it is somewhat incomplete.

Course Outcomes/Assessments

1. Know the history of wildlife biology in the United States.
2. Know the natural history of the principal game species of the southeastern United States.
3. Know how to assess habitat for particular game species and how to prepare a habitat management plan with budget.
4. Recognize and identify wildlife sign in the environment.
5. Know how to assess populations and recognize their health status.
6. Know how various factors, such as harvest, disease, and predators may affect wildlife populations.
7. Be familiar with special wildlife biology topics, such as exotics, urban wildlife, and endangered species.

Assessments for this course will include reading of scientific literature, preparation of a written wildlife habitat management plan, a collection of wildlife sign, written exams, and laboratory practical exams.

General Education Outcomes/Assessments

This course will help students achieve four of the general education outcomes for Valdosta State University:

3. Students will use computer and information technology when appropriate. They will demonstrate knowledge of computer concepts and terminology. They will possess basic working knowledge of a computer operating system. They will be able to use at least two software tools, such as word processors, spreadsheets, database management systems, or statistical packages. They will be able to find information using computer searching tools.
4. Students will express themselves clearly, logically, and precisely in writing and in speaking, and they will demonstrate competence in reading and listening. They will display the ability to write coherently in standard English; to speak well; to read, to understand, and to interpret the content of written materials in various disciplines; and to listen effectively and to understand different modes of communication.
5. Students will demonstrate knowledge of scientific and mathematical principles and proficiency in laboratory practices. They will understand the basic concepts and principles underlying scientific methodology and be able to collect, analyze, and interpret data. They will learn a body of scientific knowledge and be able to judge the merits of arguments about scientific issues. They will be able to perform basic algebraic manipulations and to use fundamental algebraic concepts to solve word problems and equations. They will be able to use basic knowledge of statistics to interpret and to analyze data. They will be able to evaluate arguments based on quantitative data.
7. Students will demonstrate the ability to analyze, to evaluate, and to make inferences from oral, written and visual materials. They will be skilled in inquiry, logical reasoning, and critical analysis. They will be able to acquire and evaluate relevant information, analyze arguments, synthesize facts and information, and offer logical arguments leading to creative solutions to problems.

Request for a New Course
Valdosta State University

RECEIVED

NOV 12 2008

VALDOSTA STATE UNIVERSITY
GRADUATE SCHOOL

Date of Submission: 09/12/2008(mm/dd/yyyy)

Department Initiating Request: Biology

Faculty Member Requesting: Dr. J. Mitchell Lockhart

Proposed New Course Prefix & Number: BIOL 5960

(See Course Description Abbreviations in the Catalog for approved prefixes.)

Proposed New Course Title: Wildlife Biology

Proposed New Course Title Abbreviation: Wildlife Biology

(For student transcript, limit to 30 characters and spaces)

Semester/Term/Year to be Effective: Spring, 2009

Estimated Frequency of Course Offering: Alternating Years

Indicate if Course will be: Requirement for Major or Elective Course

*****If this new course is to be included in the curriculum, be sure to initiate a Curriculum Change Form.*****

Total Contact Hours: 6

Lecture Hours: 3

Lab Hours: 3

Credit Hours: 4

Proposed Course Description: (box expands indefinitely)

Prerequisites: Admission into the graduate program or permission of the instructor. General principles and techniques in wildlife conservation, ecology, and management with an emphasis on life histories and taxonomy of game species of the southeastern United States.



Justification: *Select one or more of the following to indicate why the requested new course will be beneficial and give justification. Please include or append relevant supporting data.*

(box expands indefinitely)

Improving student learning outcomes:

Adopting current best practice(s) in field:

Meeting mandates of state/federal/outside accrediting agencies:

Other: There currently are no courses at Valdosta State University available to students who wish to study wildlife biology. The instructor anticipates this course will be the first of two in the area of wildlife biology with the companion course to be entitled Wildlife Diseases. This course aims to provide students with an introduction to wildlife biology and is for students who intend to pursue employment in wildlife related fields and who may wish to pursue postgraduate education or research in wildlife biology.

Plans for assessing proposed course: (box expands indefinitely)

Assessment: For the lecture grade, three exams (tentative) plus a comprehensive final will be given. Each exam will be worth 100 points. Questions will be based on material covered in lecture, in my notes, and from assigned readings. Exam questions will be in a variety of formats including (but not limited to) essay, short answer, multiple choice, fill in the blank, drawings, etc...Any questions concerning grading should be brought to the attention of the professor NO LATER than one week following return of the exam. NO make-up exams will be given.

For the laboratory grade, 2 lab practicals (tentative) will be given. The Lab practicals cannot be made up. If a lab practical is missed, you will receive a zero for that lab grade.

The final grade will be a combination of your final lecture exam scores and laboratory exam scores. Lecture exams will comprise 30% and lab exams will comprise 25% of your final score. The Habitat Management Plan will be 20% and the wildlife sign collection will be 10% of the final grade. The lecture final will be comprehensive and worth 15% of the final grade.

Grade Scale: 90-100 = A, 80-89 = B, 70-79 = C, 60-69 = D, <60 = F

Course Outcomes/Assessments

1. Know the history of wildlife biology in the United States.
2. Know the natural history of the principal game species of the southeastern United States.
3. Know how to assess habitat for particular game species and how to prepare a habitat

management plan with budget.

4. Recognize and identify wildlife sign in the environment.
5. Know how to assess populations and recognize their health status.
6. Know how various factors, such as harvest, disease, and predators may affect wildlife populations.
7. Be familiar with special wildlife biology topics, such as exotics, urban wildlife, and endangered species.

Specific Assessments for Graduate Students:

- A. Graduate students will be required to give an in-class presentation on a wildlife associated topic as designated by the instructor.
- B. Graduate students will be required to complete the habitat management plan assignment individually.
- C. Graduate students will be required to provide an additional 25% more wildlife sign items than undergraduate students.

Assessments for this course will include reading of scientific literature, preparation of a written wildlife habitat management plan, a collection of wildlife sign, written exams, and laboratory practical exams.

*** ATTACH A COURSE SYLLABUS WITH COURSE OUTCOMES/ASSESSMENTS AND GENERAL EDUCATION OUTCOMES/ASSESSMENTS.

Approvals: (Print out for signatures & dates)

Dept. Head(s)	<u><i>Jack G. Gannon</i></u>	Date	<u>10-21-08</u>
Dean(s)/Director(s)	<u><i>Connie Richards</i></u>	Date	<u>10/30/08</u>
College Exec. Comm.	<u><i>Connie Richards</i></u>	Date	<u>10/30/08</u>
Graduate Exec. Comm.	<u><i>Karla M. Hull</i></u>	Date	<u>12-1-08</u>
Academic Comm.	_____	Date	_____

Indicate How Course will be Taught: Face to Face

If course is online:

Does proposed new course alter the percentage of the degree program available online? No

As a result of this new course, how much of the program will now be available online? less than 25%

***If more than 25%, notify SACS Liaison and Asst. Director for Distance Learning.**

Biology 5960 - Wildlife Biology

Spring Semester, 2008

Instructor - Dr. J. Mitchell Lockhart

Office – Biology/Chemistry Building, Room 2029

Phone: 333-5767 / 333-5759

Email: jmlockha@valdosta.edu

Office Hours: As posted or by appointment

Course hours: Lecture – To be determined/preference for Tuesday-Thursday

Lab – To be determined/preference for Tuesday-Thursday

Textbook – *Wildlife of Southern Forests – Habitat and Management*, edited by James G. Dickson (required), *A Sand County Almanac* by Aldo Leopold (required), *Research and Management Techniques for Wildlife and Habitats* by Theodore Bookout (suggested).

Course Description: General principals and techniques in wildlife conservation, ecology, and management with an emphasis on life histories and taxonomy of game species of the southeastern United States.

Attendance: MANDATORY! I do keep track of who is and isn't attending lecture and laboratory. Any student disrupting the classroom and affecting the learning experience of others will be asked to leave. Along these lines, **NO** cell-phones, beepers, and/or associated earpieces are allowed either in the lecture room or laboratory. My policy is not to give a warning, rather, if a cell-phone or beeper activates during lecture/laboratory, I pursue **permanent** removal of the individual from my class. Viewing a cell-phone or pager that activates on "silent" mode during a quiz or exam will be treated as an instance of **CHEATING** and handled accordingly. Those wishing to utilize laptop computers as part of the class are required to sit in the first 3 rows of the classroom.

Students With Documented Disabilities: Students requiring accommodations or modifications because of documented disabilities should discuss this need with Dr. Lockhart at the beginning of the semester. Students not registered with the Special Services Program must contact the Access Office for Students with Disabilities in Nevins Hall, Room 1115. Their phone number is 245-2498.

Grades: For the lecture grade, three exams (tentative) plus a comprehensive final will be given. Each exam will be worth 100 points. Questions will be based on material covered in lecture, in my notes, and from assigned readings. Exam questions will be in a variety of formats including (but not limited to) essay, short answer, multiple choice, fill in the blank, drawings, etc...Any questions concerning grading should be brought to the attention of the professor **NO LATER** than one week following return of the exam. **NO make-up exams will be given.**

For the laboratory grade, 2 lab practicals (tentative) will be given. **The Lab practicals cannot be made up. If a lab practical is missed, you will receive a zero for that lab grade.**

The final grade will be a combination of your final lecture exam scores and laboratory exam scores. Lecture exams will comprise 30% and lab exams will comprise 25% of your final score. The Habitat Management Plan will be 20% and the wildlife sign collection will be 10% of the final grade. The lecture final will be comprehensive and worth 15% of the final grade.

Grade Scale: 90-100 = A, 80-89 = B, 70-79 = C, 60-69 = D, <60 = F

Specific requirement differences for graduate students: Graduate students in Wildlife Biology will be required to do their own habitat management plan (as opposed to working in groups of four for undergraduates), will be required to turn in a wildlife sign collection of 20 items (as opposed to 16 for undergraduates), and may be required to lead an in-class discussion on a wildlife biology topic as assigned by the instructor.

Privacy Act: Because of the Buckley Amendment or Privacy Act, grades will not be discussed over the phone, via email, given to friends, or given to relatives. Final grades will be posted, only at your request, under an anonymous 6 digit number which you choose later in the semester.

Cheating: Refer to the Student Code of Ethics in the Valdosta State University Student Handbook. A student caught cheating will be penalized ranging from receiving a zero for that assignment or test to failing the class.

Important Dates: Midterm – To be determined, Final Exam – To be determined

- The Professor reserves the right to modify the above contents with proper notification.

Additional Assessment for Graduate Students:

- A. Graduate students will be required to give an in-class presentation on a wildlife associated topic as designated by the instructor.
- B. Graduate students will be required to complete the habitat management plan assignment individually.
- C. Graduate students will be required to provide an additional 25% more wildlife sign items than undergraduate students.

Tentative Lecture Schedule for BIOL 5960 - Wildlife Biology

- Unit 1 – Introduction and History of Wildlife Biology
- Unit 2 – Sampling Wildlife
- Unit 3 – Wildlife Habitat Management
- Unit 4 – Population Attributes

Exam 1

- Unit 5 – Wildlife Physiology and Nutrition
- Unit 6 – Wildlife Harvest
- Unit 7 – Wildlife Diseases
- Unit 8 – Wildlife Mortality
- Unit 9 – Predators

Exam 2

- Unit 10 – Wildlife Damage Management
- Unit 11 – Non-consumptive Use of Wildlife
- Unit 12 – Exotics
- Unit 13 – Urban Wildlife
- Unit 14 – Endangered Species

Exam 3

Tentative Laboratory Schedule

Week 1 – Orientation to Plowden Field Station and selection of plots for Habitat Management Plan.

Week 2 – Sign collection introduction

Week 3-5 – Aging white-tailed deer and bobwhite-quail. Identification of wildlife skulls.

Week 6 – Lab practical 1

Week 7 – Field trip to Moody Air Force Base for demonstration of RFID and telemetry tracking techniques.

Week 8-9 – Identification of waterfowl.

Week 10 – Lab Practical 2

Week 11 – United States Department of Agriculture – Georgia Wildlife Services demonstration on trapping and handling wildlife.

Week 12 – Completion of Habitat Management Plans and turn in Wildlife Sign Collection

DESCRIPTION OF THE MANAGEMENT AREA

The fourth section of your management plan should have this heading. It will include one or more maps along with a written description of the study site (including the surrounding land) as it now exists. **It is strongly recommended that you take color photographs of your area.** You should indicate the size of the site in hectares (use the metric system throughout the paper) . This map and other maps in the report should be labeled "Figure 1", "Figure 2", etc. so that you can refer to them in the body of the text. Look at a current volume of the Journal of Wildlife Management to see the proper method for labeling tables and figures. Make sure you include a fairly detailed description of existing vegetation, soil types, and topography (more than one map will probably be required). Soil types can be found in government soil survey books which are available for every county in the U.S.

STEPS OF THE MANAGEMENT PLAN

The preceding section indicated what the current situation is at Plowden Field Station. The purpose of this section is to describe and JUSTIFY the specific activities which you will use to modify the management area. You can use a monthly or yearly schedule depending upon the species of interest. **Outline the steps** that you will take to modify the habitat, and provide a **justification** for each step in your outline that refers back to the Literature Review of Management Techniques. Your written narrative should refer the reader to a series of maps (figures) showing the appearance of the area after each major phase of your habitat manipulation process. See the sample management plans for examples.

BUDGET

For each activity in your schedule, give the estimated cost of this activity. These estimates do not have to be extremely accurate, but I want you to have some idea what your management plan will cost not only in dollars but also in the number of person-hours of labor. Estimate the size of the work crew necessary to carry out each aspect of the plan, and the equipment they will need. If you plan to do any burning, remember that you will need an experienced work crew and safety equipment. At the end of this section, estimate the total cost of your management plan per unit time. For example, how much would it cost if it continued for 5 years? Ten years? (Remember, these estimates do not have to be very accurate. However, many well intentioned management plans have foundered for lack of money. DNR budgets are usually not large!) How often will your proscribed plan have to be repeated in the future? Any time that you set back plant succession, the plants will grow again, and this must be taken into consideration when formulating future plans.

SUMMARY AND CONCLUSION

This section should tie the rest of the paper together by discussing the potential impact of your management plan on your target species. **In addition, make some rough predictions concerning population sizes in the years to come as a result of your activity.**

MANAGEMENT PLAN OUTLINE FOR WILDLIFE BIOLOGY

Title:

Authors:

INTRODUCTION

This section states the purpose of your report, and lists the goals which you hope to accomplish. You should clearly state which specie or species you are managing for, and why you are managing for this specie(s). You should justify management for the species you select on biological, economic, and political grounds. That is, is it economically and politically feasible to manage for the species in question? Will some special interest group become upset? How will you convince this special interest group of the biological value of your species? Do you have enough money in your budget to carry out your management plan?

LITERATURE REVIEW OF SPECIES LIFE HISTORY

In this section you will present pertinent information regarding the life history of your species (behavior, ecological relationships, nutritional requirements, etc), using references at the library or from other sources. Concentrate your discussion on the factors (decimating and/or welfare) that tend to limit population size for your species, so that you can justify actions recommended in your "Schedule of Management Activities" section (described below).

Throughout the body of your paper (but especially in the Literature Review section) you will be citing references to other scientific articles and books. You must cite a minimum of 15 references from the scientific literature (the online database of articles from the Journal of Wildlife Management is an excellent source of information for this, plus other online databases), There should be as many links as possible to relevant web sites).

LITERATURE REVIEW OF MANAGEMENT TECHNIQUES

In addition to the above review of life history, a separate section in your management plan will review management techniques for your target species. Do not discuss historical issues, just the types of management techniques that have been used for your target species. In addition to library references, you can use information from lecture, textbooks, and the Internet for the literature review sections of your report.

LITERATURE CITED

This section will list references cited in your report alphabetically by the author's last name. For example:

Owen, M. 1975. Cutting and fertilizing grassland for winter goose management. *Journal of Wildlife Management* 39:163-167.

(Note that the year of publication is followed by the title, journal name, volume number and pages.)

The format is slightly different for books and monographs. See a recent issue of the *Journal of Wildlife Management* for examples. NOTE: Do not use the condensed format found in your reference lists - it is somewhat incomplete.

Course Outcomes/Assessments

1. Know the history of wildlife biology in the United States.
2. Know the natural history of the principal game species of the southeastern United States.
3. Know how to assess habitat for particular game species and how to prepare a habitat management plan with budget.
4. Recognize and identify wildlife sign in the environment.
5. Know how to assess populations and recognize their health status.
6. Know how various factors, such as harvest, disease, and predators may affect wildlife populations.
7. Be familiar with special wildlife biology topics, such as exotics, urban wildlife, and endangered species.

Assessments for this course will include reading of scientific literature, preparation of a written wildlife habitat management plan, a collection of wildlife sign, written exams, and laboratory practical exams.

Request for a New Course Valdosta State University

Date of Submission: 08/23/2008 (mm/dd/yyyy)

Department Initiating Request: Biology

Faculty Member Requesting: Theresa Grove

Proposed New Course Prefix & Number: BIOL 4800

(See Course Description Abbreviations in the Catalog for approved prefixes.)

Proposed New Course Title: Protein Biochemistry

Proposed New Course Title Abbreviation: Protein Biochemistry

(For student transcript, limit to 30 characters and spaces)

Semester/Term/Year to be Effective: Fall 2009

Estimated Frequency of Course Offering: every 2 years

Indicate if Course will be: Requirement for Major or Elective Course

*****If this new course is to be included in the curriculum, be sure to initiate a Curriculum Change Form.*****

Total Contact Hours: 6

Lecture Hours: 3

Lab Hours: 3

Credit Hours: 4

Proposed Course Description: (box expands indefinitely)

Prerequisites: BIOL 2230, BIOL 2270 and CHEM 1212.

The study of the structure and function of proteins with emphasis on properties of amino acids, protein folding, protein-protein and protein-ligand interactions, enzyme kinetics and enzyme regulation.

Justification: *Select one or more of the following to indicate why the requested new course will be beneficial and give justification. Please include or append relevant supporting data.*

(box expands indefinitely)

Improving student learning outcomes: A new course focused on the study of proteins will help students achieve VSU General Education Outcome #5 which states that students will demonstrate knowledge of scientific and mathematical principles and proficiency in laboratory practices, and Biology Department outcome #1 and #3, which pertain to using the scientific method and to understand the cellular basis of life, respectively. Protein Biochemistry will also help complement Molecular Genetics (Biol 4580) where students gain experience with techniques used to study DNA. This proposed course will provide students the opportunity to gain experience with many techniques that are currently being used across biological fields in which the study of protein structure and function is required. By the end of the semester students will have achieved the following course goals and objectives:

- Gained a working knowledge of techniques used in many fields of biology
- Maintained a comprehensive scientific notebook of techniques and results
- Learned troubleshooting methods
- Become familiar with basic statistical tests
- Learn techniques on how to design experiments
- Develop and test hypotheses and interpret data

Adopting current best practice(s) in field: Protein Biochemistry will also help complement Molecular Genetics (Biol 4580) where students gain experience with techniques used to study DNA. This proposed course will provide students the opportunity to gain experience with many techniques that are currently being used across biological fields in which the study of protein structure and function is required.

Meeting mandates of state/federal/outside accrediting agencies:

Other:

Plans for assessing proposed course: (box expands indefinitely)

Below are the assessments planned for the course:

ASSESSMENTS: Exams (3 exams; 100 points each)	300 points
Lab Writeup	50 points
Journal Article Presentations	50 points
Notebook	50 points
Lab exams (2 exams; 100 points each)	200 points

Total: 650 points

Grade Scale: A 90-100%
B 80-89
C 70-79
D 60-69
F <60

EXAMS: Three exams (including the final) will be given throughout the semester. Each exam will be 100 points and will consist of a variety of types of questions that will include (but aren't limited to) matching, multiple, choice, labeling, fill in the blank and essay. It is the instructor's prerogative to accept (or not accept) an excuse for a missed exam; therefore, **DO NOT MISS EXAMS!** If an absence is approved, the instructor reserves the right to change the format of the exam (i.e. an oral exam).

LAB EXAMS: Two lab exams (100 points each) will be given throughout the semester. These exams will test you over the practical side of protein biochemistry. You will be able to use your lab notebook, notes, textbook and any handouts I have given you.

LAB WRITEUP: Students will be required to submit one 5-page lab report written in the format of a scientific journal.

PRESENTATIONS: Students will be required to read current scientific literature. Students will present topics and lead a discussion during class. Prior to your lecture you must receive approval from me on a primary research paper and a review article that will provide background information. Approved papers will be handed out to the class the week preceding the lecture. Every student will be expected to read these papers before to coming to the class and must be able to discuss the topic for that lecture period. The student responsible for presenting must prepare an informal lecture which can consist of overheads or powerpoint slides.

NOTEBOOK: A research notebook is required. At the end of each week notebooks will be collected and returned on the following Monday. The notebooks must have a table of contents at the beginning. Dates must be included for each day you do work in the lab. In addition, the following must be included: Purpose of each experiment, protocol actually followed, results and analysis of results. Notebooks do not have to be perfectly neat, but they must be legible and complete.

*** ATTACH A COURSE SYLLABUS WITH COURSE OUTCOMES/ASSESSMENTS AND GENERAL EDUCATION OUTCOMES/ASSESSMENTS.

Approvals: (Print out for signatures & dates)

Dept. Head(s) Date 11-6-08

Dean(s)/Director(s) Date 11/11/08

College Exec. Comm. _____ Date _____

Graduate Exec. Comm. _____ Date _____

Academic Comm. _____ Date _____

Indicate How Course will be Taught: Face to Face

If course is online:

Does proposed new course alter the percentage of the degree program available online? Yes

As a result of this new course, how much of the program will now be available online? less than 25%

***If more than 25%, notify SACS Liaison and Asst. Director for Distance Learning.**

BIOL 4800: Protein Biochemistry (4 credits)

COURSE DESCRIPTION: The study of the structure and function of proteins with emphasis on properties of amino acids, protein folding, protein-protein and protein-ligand interactions, enzyme kinetics and enzyme regulation.

COURSE GOALS AND OBJECTIVES: This class is designed to teach students about the relationship between the structure and function of proteins. The laboratory component will introduce students to many techniques that are not only used by researchers who study the structure and function of proteins, but by many other scientists in diverse fields of biology such as physiology, molecular and cell biology, population genetics and microbiology. By the end of the semester you will have:

- Gained knowledge of protein structure and function
- Maintained a comprehensive scientific notebook of techniques and results
- Become familiar with basic statistical tests
- Learned experimental techniques used to study protein structure and function
- Strengthened your ability to critically read and understand scientific literature

This course will help students achieve VSU General Education Outcome #5 and Biology Department outcomes #1 and #3.

PREREQUISITES: BIOL 2230, BIOL 2270 and CHEM 1212

INSTRUCTOR: Dr. Theresa Grove
Office: BC 1099 Lab: BC 2072
Office hours: by appointment
Email: tjgrove@valdosta.edu

TEXT BOOK: Protein Structure and Function. 2004 G.A Petsko and D. Ringe, Sinauer Associates (ISBN 0878936637)

LECTURE: Monday-Friday 8:00 - 10:50a.m.

LAB: Monday-Wednesday 12:00p.m. – 4:50 p.m. You must bring a notebook, calculator and flash drive.

ATTENDANCE POLICY: Attendance is required for both lecture and lab, and attendance will be taken each day. Do not arrive late to lecture or lab. If you arrive late to lecture you will have less time to complete the lecture quiz; if you miss a quiz you will not be able to make it up. If you have 2 unexcused absences from lecture your grade will drop one letter grade. Labs cannot be made up; if you miss a lab your final grade will be reduced by 10%.

ASSESSMENT:	Exams (3 exams; 100 points each)	300 points
	Journal Article Presentations	50 points
	Notebook	50 points
	Lab Write-Up	50 points
	Lab exams (2 exams; 100 points each)	200 points
		Total Points = 650 points

GRADE SCALE: For all students, grades will be based on the above assessments. The grading scale I will use is:

A	90-100%
B	80-89
C	70-79
D	60-69
F	<60

EXAMS: Three exams (including the final) will be given throughout the semester. Each exam will be 100 points and will consist of a variety of types of questions that will include (but aren't limited to) matching, multiple, choice, labeling, fill in the blank and essay. It is the instructor's prerogative to accept (or not accept) an excuse for a missed exam; therefore, **DO NOT MISS EXAMS!** If an absence is approved, the instructor reserves the right to change the format of the exam (i.e. an oral exam).

LAB WRITEUP: Students will be required to submit one 5-page lab report written in the format of a scientific journal. More information will be handed out in lab.

NOTEBOOK: A research notebook is required. At the end of each week notebooks will be collected and returned on the following Monday. The notebooks must have a table of contents at the beginning. Dates must be included for each day you do work in the lab. In addition, the following must be included: Purpose of each experiment, protocol, results and analysis of results. Notebooks do not have to be perfectly neat, but they must be legible and complete. Everyone should bring a flash drive to lab to save results. Data analysis will occur in lab, but there are no printers in lab so you must have some way to save the data for printing after class.

LAB EXAMS: Two lab exams (100 points each) will be given throughout the semester. These exams will test you over the practical side of protein biochemistry. You will be able to use your lab notebook, notes, textbook and any handouts I have given you.

PRESENTATIONS: Students will be required to read current scientific literature. Each student will present one paper during the three week course. These will be informal presentations. We will sit in a circle to discuss the paper. The presenter can use overheads or slides when to lead the discussion. The presentation must include in the presentation: 1) the general purpose of the paper which includes why this research was done and a brief introduction which will probably require some background reading; 2) the specific hypotheses tested; 3) materials and methods explanation (i.e. how they tested their hypothesis); 4) the results, which you must walk the class through the data/graphs/charts etc and explain them; 5) the discussion; were the author's results supportive of the hypotheses? During the presentation you will be evaluated on your apparent understanding of the paper, your explanation, critical thinking and your ability to answer questions. No, I do not expect the presenter to be able to answer every single question about the topic at hand, but they must have a thorough understanding of his/her paper. So everyone knows what I am expecting in a presentation, I will do the first one.

CHEATING AND PLAGIARISM: Please refer to the Student Code of Ethics in the Valdosta State University Student Handbook. Any student caught cheating will be penalized, ranging from receiving a zero for that assignment or test, to failure and expulsion from the course. Please refer to the Valdosta State University, Department of Biology Plagiarism Policy.

PRIVACY ACT: Due to the Buckley Amendment, or Privacy Act, an individual's personal information cannot be released to anyone but that individual. As such, grades will not be discussed over the phone, by email, or released to a friend or relative.

TENTATIVE LECTURE AND LAB TOPICS:

Week 1 **Lecture:** Introduction to class and techniques that will be covered in lab.

		Transcription and translation (handouts; p. 6-7) Amino acid structure (p 4-5) Protein structure (p. 3; 8-47)
	Lab:	Laboratory safety and general lab introduction Pipetting the correct way Solutions and Buffers
Week 2	Lecture:	Protein structure (cont'd) Principles of electrophoresis (handouts) Structural basis of protein structure (p. 50-51)
	Lab:	Tissue homogenization How to use a spectrophotometer
Week 3	Lecture:	What are ligand binding sites and how do they work? (p. 52-61) Principles of Western blot
	Lab:	Pour acrylamide gel and run samples from May 12 Transfer for Western blot to check for myoglobin Protein Assays and Standard Curves
Week 4	Lecture:	Principles of protein purification
	Lab:	Pour and equilibrate anion exchange column Set up cultures for bacterial expression of troponin C Prepare sample for anion exchange column (freeze at -80°C)
Week 5	Lecture:	Proteins and catalysis (p. 62- 83)
	Lab:	Finish Western blot (Mb 1° and 2° Ab and color development) Induce TnC expression at 5°C and 37°C
Week 6		<u>EXAM 1: Will cover through Week 5</u>
	Lecture:	Control of function: location, pH, effector ligands, switches. (p. 86-107)
	Lab:	Run acrylamide gel with bacterial lysates from TnC expression Run anion exchange column collect fractions
Week 7		Lecture: Control of function: location, pH, effector ligands, switches. (cont'd)
	Lab:	Isolate total RNA and run agarose gel
Week 8	Lecture:	Control of function: degradation and modifications (p. 108-127)
	Lab:	<u>Lab Exam #1</u>
Week 9	Lecture:	Control of function: degradation and modifications (cont'd)
	Lab:	Spec fractions from anion exchange column BCA protein assay to check protein concentrations
Week 10	Lecture:	Structural and functional genomics (p. 130-151)
	Lab:	Run acrylamide gel with fractions and transfer for blotting
Week 11		<u>Exam 2: Will cover through Week 10</u>
	Lecture:	Structural and functional genomics (p. 152- 165)
	Lab:	Finish Western blot for Mb expression
Week 12		Lecture: Structural and functional genomics (cont'd)
	Lab:	cDNA sequence analysis lecture and protein modeling
Week 13	Lecture:	How are protein structures determined? (p 168-173)
	Lab:	More sequence analysis and molecular modeling
Week 14	Lecture:	How are protein structures determined? (cont'd)
	Lab:	Trip to FSU
Week 15	Lecture:	Miscellaneous methods of studying proteins and catchup
	Lab:	<u>Lab Exam #2</u>
Final Exam		<u>Exam 3: The Remainder of the Material</u>

Request for a New Course
Valdosta State University

RECEIVED

NOV 13 2008

VALDOSTA STATE UNIVERSITY
GRADUATE SCHOOL

Date of Submission: 08/23/2008 (mm/dd/yyyy)

Department Initiating Request: Biology

Faculty Member Requesting: Theresa Grove

Proposed New Course Prefix & Number: BIOL 6800

(See Course Description Abbreviations in the Catalog for approved prefixes.)

Proposed New Course Title: Protein Biochemistry

Proposed New Course Title Abbreviation: Protein Biochemistry

(For student transcript, limit to 30 characters and spaces)

Semester/Term/Year to be Effective: Fall 2009

Estimated Frequency of Course Offering: every 2 years

Indicate if Course will be: Requirement for Major or Elective Course

*****If this new course is to be included in the curriculum, be sure to initiate a Curriculum Change Form.*****

Total Contact Hours: 6

Lecture Hours: 3

Lab Hours: 3

Credit Hours: 4

Proposed Course Description: (box expands indefinitely)

Prerequisites: Admission into the graduate program or permission of the instructor.

~~The study of the~~ structure and function of proteins with emphasis on properties of amino acids, protein folding, protein-protein and protein-ligand interactions, enzyme kinetics and enzyme regulation.



Justification: *Select one or more of the following to indicate why the requested new course will be beneficial and give justification. Please include or append relevant supporting data.*

(box expands indefinitely)

Improving student learning outcomes: A new course focused on the study of proteins will help students achieve Biology Department outcome #1 and #2, which pertain to understanding and interpretation of major biological concepts and using the scientific method to identify, test and analyze data obtained using experimental protocols. Protein Biochemistry will also help complement Molecular Genetics (Biol 6580) where students gain experience with techniques used to study DNA. This proposed course will provide students the opportunity to gain experience with many techniques that are currently being used across biological fields in which the study of protein structure and function is required. By the end of the semester students will have achieved the following course goals and objectives:

- Gained a working knowledge of techniques used in many fields of biology
- Maintained a comprehensive scientific notebook of techniques and results
- Learned troubleshooting methods
- Become familiar with basic statistical tests
- Learn techniques on how to design experiments
- Develop and test hypotheses and interpret data

Adopting current best practice(s) in field: This proposed course will provide students the opportunity to gain experience with many techniques that are currently being used across biological fields in which the study of protein structure and function is required.

Meeting mandates of state/federal/outside accrediting agencies:

Other:

Plans for assessing proposed course: (box expands indefinitely)

Below are the assessments planned for the course:

ASSESSMENTS: Exams (3 exams; 100 points each)	300 points
Lab Writeups (2; 50 points each)	100 points
Journal Article Presentations	50 points
Notebook	50 points
Paper and Critique	100 points
Lab Exams (2; 100 points each)	200 points
	Total: 800 points

Grade Scale: A 90-100%

- B 80-89
- C 70-79
- D 60-69
- F <60

EXAMS: Three exams (including the final) will be given throughout the semester. Each exam will be 100 points and will consist of a variety of types of questions that will include (but aren't limited to) matching, multiple, choice, labeling, fill in the blank and essay. It is the instructor's prerogative to accept (or not accept) an excuse for a missed exam; therefore, **DO NOT MISS EXAMS!** If an absence is approved, the instructor reserves the right to change the format of the exam (i.e. an oral exam).

LAB EXAMS: Two lab exams (100 points each) will be given throughout the semester. These exams will test you over the practical side of protein biochemistry. You will be able to use your lab notebook, notes, textbook and any handouts I have given you.

LAB WRITEUP: Graduate students will be required to submit two 5-page lab reports written in the format of a scientific journal. More information will be handed out in lab.

PRESENTATIONS: Students will be required to read current scientific literature. Students will present topics and lead a discussion during class. Prior to your lecture you must receive approval from me on a primary research paper and a review article that will provide background information. Approved papers will be handed out to the class the week preceding the lecture. Every student will be expected to read these papers before to coming to the class and must be able to discuss the topic for that lecture period. The student responsible for presenting must prepare an informal lecture which can consist of overheads or powerpoint slides.

NOTEBOOK: A research notebook is required. At the end of each week notebooks will be collected and returned on the following Monday. The notebooks must have a table of contents at the beginning. Dates must be included for each day you do work in the lab. In addition, the following must be included: Purpose of each experiment, protocol actually followed, results and analysis of results. Notebooks do not have to be perfectly neat, but they must be legible and complete.

PAPER AND CRITIQUE: In addition to presentations, each student must submit a paper (2,000-3,000 words) on their presentation topic in the style of a review article. Papers are due 2 weeks after the presentation. After papers are submitted they will be handed out to the other students in the class. Each student will then submit a critique of each review paper submitted. The critiques should discuss the strengths and weaknesses of each paper and how the author (the student who submitted it) can improve. Each reviewer must then assign a grade to the paper, with a maximum of 100 points. Authors will receive the critiques of their paper, but the comments will be anonymous.

*** ATTACH A COURSE SYLLABUS WITH COURSE OUTCOMES/ASSESSMENTS AND GENERAL EDUCATION OUTCOMES/ASSESSMENTS.

Approvals: (Print out for signatures & dates)

Dept. Head(s)	<u><i>[Signature]</i></u>	Date	<u>11-6-08</u>
Dean(s)/Director(s)	<u><i>[Signature]</i></u>	Date	<u>11/11/08</u>
College Exec. Comm.	<u><i>Karla M Hull</i></u>	Date	<u>12-1-08</u>
Graduate Exec. Comm.	_____	Date	_____
Academic Comm.	_____	Date	_____

Indicate How Course will be Taught: Face to Face

If course is online:

Does proposed new course alter the percentage of the degree program available online? Yes

As a result of this new course, how much of the program will now be available online? less than 25%

***If more than 25%, notify SACS Liaison and Asst. Director for Distance Learning.**

BIOL 6800: Protein Biochemistry (4 credits)

COURSE DESCRIPTION: The study of the structure and function of proteins with emphasis on properties of amino acids, protein folding, protein-protein and protein-ligand interactions, enzyme kinetics and enzyme regulation.

COURSE GOALS AND OBJECTIVES: This class is designed to teach students about the relationship between the structure and function of proteins. The laboratory component will introduce students to many techniques that are not only used by researchers who study the structure and function of proteins, but by many other scientists in diverse fields of biology such as physiology, molecular and cell biology, population genetics and microbiology. By the end of the semester you will have:

- Gained knowledge of protein structure and function
- Maintained a comprehensive scientific notebook of techniques and results
- Become familiar with basic statistical tests
- Learned experimental techniques used to study protein structure and function
- Strengthened your ability to critically read and understand scientific literature

This course will help students achieve Biology Department outcomes #1 and #2.

PREREQUISITES: Admission into the graduate program or permission of the instructor

INSTRUCTOR: Dr. Theresa Grove
Office: BC 1099 Lab: BC 2072
Office hours: by appointment
Email: tjgrove@valdosta.edu

TEXT BOOK: Protein Structure and Function. 2004 G.A Petsko and D. Ringe, Sinauer Associates (ISBN 0878936637)

LECTURE: Monday-Friday 8:00 - 10:50a.m.

LAB: Monday-Wednesday 12:00p.m. – 4:50 p.m. You must bring a notebook, calculator and flash drive.

ATTENDANCE POLICY: Attendance is required for both lecture and lab, and attendance will be taken each day. Do not arrive late to lecture or lab. If you arrive late to lecture you will have less time to complete the lecture quiz; if you miss a quiz you will not be able to make it up. If you have 2 unexcused absences from lecture your grade will drop one letter grade. Labs cannot be made up; if you miss a lab your final grade will be reduced by 10%.

ASSESSMENTS:	Exams (3 exams; 100 points each)	300 points
	Lab Writeups (2; 50 points each)	100 points
	Journal Article Presentations	50 points
	Notebook	50 points
	Paper and Critique	100 points
	Lab Exams (2; 100 points each)	200 points
		Total: 800 points

Grade Scale: A	90-100%
B	80-89
C	70-79
D	60-69
F	<60

EXAMS: Three exams (including the final) will be given throughout the semester. Each exam will be 100 points and will consist of a variety of types of questions that will include (but aren't limited to) matching, multiple, choice, labeling, fill in the blank and essay. It is the instructor's prerogative to accept (or not accept) an excuse for a missed exam; therefore, **DO NOT MISS EXAMS!** If an absence is approved, the instructor reserves the right to change the format of the exam (i.e. an oral exam).

LAB EXAMS: Two lab exams (100 points each) will be given throughout the semester. These exams will test you over the practical side of protein biochemistry. You will be able to use your lab notebook, notes, textbook and any handouts I have given you.

LAB WRITEUP: Graduate students will be required to submit two 5-page lab reports written in the format of a scientific journal. More information will be handed out in lab.

PRESENTATIONS: Students will be required to read current scientific literature. Students will present topics and lead a discussion during class. Prior to your lecture you must receive approval from me on a primary research paper and a review article that will provide background information. Approved papers will be handed out to the class the week preceding the lecture. Every student will be expected to read these papers before coming to the class and must be able to discuss the topic for that lecture period. The student responsible for presenting must prepare an informal lecture which can consist of overheads or powerpoint slides.

NOTEBOOK: A research notebook is required. At the end of each week notebooks will be collected and returned on the following Monday. The notebooks must have a table of contents at the beginning. Dates must be included for each day you do work in the lab. In addition, the following must be included: Purpose of each experiment, protocol actually followed, results and analysis of results. Notebooks do not have to be perfectly neat, but they must be legible and complete.

PAPER AND CRITIQUE: In addition to presentations, each student must submit a paper (2,000-3,000 words) on their presentation topic in the style of a review article. Papers are due 2 weeks after the presentation. After papers are submitted they will be handed out to the other students in the class. Each student will then submit a critique of each review paper submitted. The critiques should discuss the strengths and weaknesses of each paper and how the author (the student who submitted it) can improve. Each reviewer must then assign a grade to the paper, with a maximum of 100 points. Authors will receive the critiques of their paper, but the comments will be anonymous.

ACCESS OFFICE FOR STUDENTS WITH DISABILITIES: If you are registered with the Access office and are eligible for special testing or some other learning process, please be sure to let me know. If you are a student with disabilities and have not registered with the Access office, please do so and notify me if you intend to use their services. The Access office is located in 1115 Nevins Hall. The phone numbers are 245-2498 (voice) and 219-1348 (tty).

CHEATING AND PLAGIARISM: Please refer to the Student Code of Ethics in the Valdosta State University Student Handbook. Any student caught cheating will be penalized, ranging from receiving a zero for that assignment or test, to failure and expulsion from the course. Please refer to the Valdosta State University, Department of Biology Plagiarism Policy.

PRIVACY ACT: Due to the Buckley Amendment, or Privacy Act, an individual's personal information cannot be released to anyone but that individual. As such, grades will not be discussed over the phone, by email, or released to a friend or relative.

TENTATIVE LECTURE AND LAB TOPICS:

Week 1	Lecture: Introduction to class and techniques that will be covered in lab. Transcription and translation (handouts; p. 6-7) Amino acid structure (p 4-5) Protein structure (p. 3; 8-47)
	Lab: Laboratory safety and general lab introduction Pipetting the correct way Solutions and Buffers
Week 2	Lecture: Protein structure (cont'd) Principles of electrophoresis (handouts) Structural basis of protein structure (p. 50-51)
	Lab: Tissue homogenization How to use a spectrophotometer
Week 3	Lecture: What are ligand binding sites and how do they work? (p. 52-61) Principles of Western blot
	Lab: Pour acrylamide gel and run samples from May 12 Transfer for Western blot to check for myoglobin Protein Assays and Standard Curves
Week 4	Lecture: Principles of protein purification
	Lab: Pour and equilibrate anion exchange column Set up cultures for bacterial expression of troponin C Prepare sample for anion exchange column (freeze at -80°C)
Week 5	Lecture: Proteins and catalysis (p. 62- 83)
	Lab: Finish Western blot (Mb 1° and 2° Ab and color development) Induce TnC expression at 5°C and 37°C
Week 6	<u>EXAM 1: Will cover through Week 5</u>
	Lecture: Control of function: location, pH, effector ligands, switches. (p. 86-107)
	Lab: Run acrylamide gel with bacterial lysates from TnC expression Run anion exchange column collect fractions
Week 7	Lecture: Control of function: location, pH, effector ligands, switches. (cont'd)
	Lab: Isolate total RNA and run agarose gel
Week 8	Lecture: Control of function: degradation and modifications (p. 108-127)
	Lab: <u>Lab Exam #1</u>
Week 9	Lecture: Control of function: degradation and modifications (cont'd)
	Lab: Spec fractions from anion exchange column BCA protein assay to check protein concentrations
Week 10	Lecture: Structural and functional genomics (p. 130-151)
	Lab: Run acrylamide gel with fractions and transfer for blotting
Week 11	<u>Exam 2: Will cover through Week 10</u>
	Lecture: Structural and functional genomics (p. 152- 165)
	Lab: Finish Western blot for Mb expression
Week 12	Lecture: Structural and functional genomics (cont'd)
	Lab: cDNA sequence analysis lecture and protein modeling
Week 13	Lecture: How are protein structures determined? (p 168-173)
	Lab: More sequence analysis and molecular modeling
Week 14	Lecture: How are protein structures determined? (cont'd)
	Lab: Trip to FSU
Week 15	Lecture: Miscellaneous methods of studying proteins and catchup
	Lab: <u>Lab Exam #2</u>
Final Exam	<u>Exam 3: The Remainder of the Material</u>

For Informational Purposes Only

Valdosta State University
Request for Curriculum Change

Indicate are of change (by typing an 'X'):

Core Curriculum (Area A, B, C, D, E, F)

Senior Curriculum

Graduate Program

Other: _____ Current Catalog page number

Effective Date for Curriculum Change Fall 2009
Month Year

Degree & Program Name (e.g., BFA, Art) B.A. Biology

Present Requirements

Proposed Requirements

None

Core Curriculum
Core Areas A-E42 hrs
Area A
MATH 11133 hrs

Area C
Foreign Language.....3 hrs

Area D.2.a.
MATH 2261..... 3/4 hrs
or MATH 2620
Science 7-8 hrs
BIOL 1107
CHEM 1211, CHEM 1211L

Area F
Foreign Language6 hrs
Science.....12-13 hrs*
BIOL 1107 ,BIOL 1108
BIOL 1200
CHEM 1211L, CHEM 1212,
CHEM 1212L

* 1 hr transfer to senior curriculum
Grade of "C" required in all BIOL
CHEM, and MATH courses

For Informational Purposes Only

Present Requirements

Proposed Requirements

Senior Curriculum	60 hrs
Required Biology Courses	8 hrs
BIOL 3200	3 hrs
BIOL 3250	4 hrs
BIOL 4900	1 hr
Biology Electives	16 hrs
3000 level and above, (but not BIOL 4830, 4840, 4850) BIOL 4950 limited to 3 hrs Three courses with labs required	
Upper-level Math or Science Sequence (not-Biology)	6 hrs
Foreign Language	3 hrs
General Electives	26 hrs
(9 hrs of upper-level required)	
Carryover from core	1 hr
Grade of "C" required in all Science and Math courses	
Twelve hrs of a single foreign language required	
BIOL 1100, BIOL 1107, BIOL 1108, BIOL 3200, BIOL 3250 are prerequisites to all other upper- division biology courses	

Justification

The BA Biology degree is being updated to meet the needs of a much larger population of biology students who have a diverse set of career goals. The new degree has a 16 hr biology core that is a prerequisite to all upper division biology courses. The core includes a two-semester freshman biology sequence that is more in-line with other schools in the USG. In addition, the biology core has a freshman seminar that is a co-requisite to the first biology course. The freshman seminar will be used, in part, to assess the students for baseline knowledge of biology as they enter the degree program. The remaining core courses focus on genetics, evolution and ecology and will have genetic components in each course. There is also a new required History of Science course. After students complete the core, they will be advised as to which biology electives they should take in order to complete their degree (36 hrs total of biology courses). Finally, the senior seminar will be used to evaluate the students as they finish the degree allowing for both benchmark and value-added assessments to be determined for each student who completed the freshman seminar.

The new degree also requires pre-calculus and second math course that can be either calculus or the statistics course. This will provide a better foundation in mathematics for our students. Also, this revision requires a "C" or better in all math and science courses that are required by the major.

The language requirement is now 12 hours and there is a required 6 hr sequence in an upper-level math or science course as required by the College of Arts and Sciences.

This new degree has 26 hrs of general electives that can be used to satisfy requirements for a minor.

This new degree places a **heavy emphasis on advising** by the faculty. This will allow students to choose the curriculum that best fits their interests and career plans. The reduction in the number of required courses will also make it easier for students to complete their degree in a timely manner.

— Not for Catalog at this Stage —

Approvals:

Department Head _____

Date _____

Dean (s)/Director(s) _____

Date _____

College Executive Committee _____

Date _____

Graduate Executive Committee _____

Date _____

Academic Committee _____

Date _____

University System of Georgia
New Program Proposal

Valdosta State University

Date _____

College of Arts and Sciences

Department of Biology

Proposal for the Bachelor of Arts in Biology

CIP Code: 26.0101

Starting Date: Fall 2009

1. Program Description and Objectives

The proposed Bachelor of Arts in Biology consists of a set of core biology courses totaling 16 credit hours along with required courses in math, chemistry, and foreign language. There are 28 required credits not counting the USG core curriculum, and the remaining hours are chosen as guided or free electives in science and other studies. This degree gives students considerable freedom to tailor their coursework toward specific objectives and career goals. With the exception of the senior capstones seminar course, the remaining specific requirements for the degree can be completed by the end of the sophomore year and this will prevent students from having to graduate a semester or two late because they are waiting for a required course to become available during their senior year. In addition, students who are pursuing the B.S. Biology degree but are unable to complete the degree due to problems in course availability will have the option to switch to the B.A. Biology degree which is more flexible. Therefore, this degree will increase graduation rates for biology majors at Valdosta State University which is one of the primary objectives of this degree as well as part of the strategic plan of VSU.

The second primary objective of this degree is that it will accommodate students interested in careers in allied health and education and this relates to one of the core areas of VSU's mission of a "commitment to excellence and responsiveness within a scope of influence defined by the needs of a specific region of the state". The need to increase health professionals in Georgia, and our region in particular, is a major component of the strategic plan at VSU. The current Bachelor of Science in Biology degree that students choose at Valdosta State University contains required courses in calculus, chemistry and physics that are not necessary for matriculation into allied health programs, and may actually discourage students from pursuing that option. Therefore, the B.A. Biology degree will be the degree of choice for these students. In addition, the large number of free electives in the proposed B.A. Biology degree also allows students the opportunity to take education courses that they can use toward teacher certification within their four-year course of study.

The courses that comprise the BA Biology degree are currently taught to fulfill the BS Biology degree with the exception of one 3-credit course. Therefore, only a few sections of new courses will be required to offer this degree, so no new faculty hires are required above what would normally be made to accommodate increased enrollments. The number of entering freshman biology majors at VSU has been increasing by more than 10 % for the last several years and numbered 340 freshmen in fall 2008. This rate of growth is expected to

continue in the future and with proper advising somewhere around half of the students will opt for the B.A. Biology degree rather than the B.S. Biology degree. Laboratory fees already in place are sufficient to pay the costs of laboratory courses related to the degree. Finally, approximately forty percent of biology majors at VSU are identified as ethnic minorities, so the expected success of this degree will also increase the overall minority student population at VSU.

The degree inscription on the diploma will read: Bachelor of Arts
Major: Biology

2. Justification and Need for the Program

2.1 Societal need for graduates with the B.A. Biology

The B.A. Biology degree will help meet the educational and medical professional needs for the State of Georgia. The degree will satisfy requirements for matriculation into post-baccalaureate allied health programs as well as allow for the completion of teacher-preparation courses during a four-year course of study. Allied health careers targeted by this degree include physician assistants, occupational therapists, physical therapists, and anesthesiology assistants. According to the long-term occupational projections (2004-2014) released by the Georgia Department of Labor, there is an expected annual growth rate of approximately 4 % in allied health job fields. In addition, there is always a substantial shortage of qualified biology teachers in middle schools and high schools throughout the state.

2.2 Student demand for the B.A. Biology degree

The biology degree program at VSU has demonstrated rapid and consistent growth in the last eight years. From 2000-2004 the average growth rate in biology majors was 7.5 %. That rate has increased to double digit growth over the last few years and as a result the number of biology majors in fall 2008 is over 900 students (although not all are enrolled each term). The growth rate is expected to continue for the foreseeable future due to the expected increase in college age students for the State of Georgia through 2020. At VSU, the university enrollment is expected to reach 16,000 students within five years, and if the approximately 10 % of new freshmen continue to choose biology for a major as they have recently, then there will be about 1400 biology majors by 2013.

2.3 -2.4 Not applicable

2.5 Public and Private Institutions offering the B.A. Biology

Public

Columbus State University
University of West Georgia
Georgia Southern University

Private

Agnes Scott College
Brewton-Parker College
Emory University
LaGrange College
Mercer University
Oxford College

3. Procedures Used to Develop the Program

The B.A. Biology degree was developed by faculty in the Department of Biology at VSU. The faculty debated the content of the degree for four months before deciding on a curriculum to submit for approval to the committees listed in section 4.5 below.

4. Curriculum

Course of Study:

USG Core requirements and the following specific courses:

MATH 1113 Precalculus
MATH 2261 Analytical Geometry and Calculus I
or MATH 2620 Statistical Methods
Foreign Language (12 credits)
BIOL 1100 Freshman Seminar
BIOL 1107 Principles of Biology I
BIOL 1108 Principles of Biology II
BIOL 1200 History of the Life Sciences
BIOL 3200 Genetics
BIOL 3250 Ecology and Evolution
BIOL 4900 Senior Seminar
BIOL 3XXX-4XXX Electives (16 hrs)
Upper-level Math or Science Sequence (not Biology) 6 credits
General Electives 26 hrs

Grade of "C" required in all science and math courses.

Sample 4-year Schedule for the B.A. Biology

FRESHMAN YEAR

Semester 1 (14 hrs):

- ENGL 1101 Composition I (3 hrs)
- MATH 1113 Pre-calculus (3 hrs)
- BIOL 1100 Freshman Seminar (1 hrs)
- BIOL 1107 Principles of Biology I (4 hrs)
- Foreign Language (3 hrs)

Semester 2 (15-16 hrs):

- ENGL 1102 Composition II (3 hrs)
- BIOL 1108 Principles of Biology II (4 hrs)
- Foreign Language (3 hrs)
- MATH 2261 Calculus I or MATH 2620 Statistics (4 hrs/3 hrs)
- PERS 2XXX Perspectives (Area B) (2 hrs)

SOPHOMORE YEAR

Semester 3 (16 hrs)

- BIOL 3200 Genetics (3 hrs)
- CHEM 1211 & CHEM 1211L Principles of Chemistry I & Lab (4 hrs)
- Foreign Language (3 hrs)
- HIST 2111 or 2112 US History (3 hrs)
- ENGL 2110, 2120, 2130 OR 2140 World Literature (3 hrs)

Semester 4 (14 hrs):

- BIOL 3250 Ecology and Evolution (4 hrs)
- CHEM 1212 & CHEM 1212L Principles of Chemistry II & Lab (4 hrs)
- Foreign Language (3 hrs)
- POLS 1101 American Government (3 hrs)

JUNIOR YEAR

Semester 5 (15 hrs):

- BIOL Elective (4 hrs)
- BIOL 1200 History of the Life Sciences (3 hrs)
- Area E elective (3 hrs)
- Upper-level math/science elective (not biology) (3 hrs)
- PERS 2XXX Perspectives (Area B) (2 hrs)

Semester 6 (15-16 hrs):

- BIOL Elective (4 hrs)
- Upper-level math/science elective (not biology) (3 hrs)
- Area E elective (3 hrs)
- Upper-level free elective (3 hrs)
- Free elective (3 hrs)

SENIOR YEAR

Semester 7 (16 hrs)

- BIOL Elective (4 hrs)
- Upper-level free elective (3 hrs)
- Free electives (9 hrs)

Semester 8 (13 hrs):

- BIOL Elective (4 hrs)
- BIOL 4900 Biology Seminar (1 hr)
- Upper-level free elective (3 hrs)
- Free electives (5 hrs)

4.1-4.3 New and Existing Courses

New courses

BIOL 1100 Biology Freshman Seminar – Introduction to the Biological Sciences (1 credit)

An introduction to college-level science and specifically the field of the biological sciences. Topics covered will include strategies for success, basic descriptive statistics and data analysis, exposure to possible careers within the field, professional ethics, and resource and library use. Some evening sessions will be required during the semester.

BIOL 1107 Principles of Biology I (4 credits)

Co-requisite for biology majors: BIOL 1100. An introduction to the principles of biology for science majors with an emphasis on the cellular nature of life. Concepts covered include the origin and early evolution of cellular life; cell structure, function, metabolism, and reproduction; cell signaling; and gene regulation in bacteria and eukaryotes.

BIOL 1108 Principles of Biology II (4 credits)

Prerequisite: BIOL 1007 or permission of the instructor. Introduction to physiological processes in plants and animals. Structure, nutrition, transport, coordination, reproduction and development will be addressed.

BIOL 1200 History of the Life Sciences (3 credits)

An introduction to the history and philosophy of biology and related sciences with emphasis on the development and evolution of major theories and techniques and interactions between science and culture.

BIOL 3200 Genetics (3 credits)

Prerequisites: MATH 1113, BIOL 1107, BIOL 1108., or permission of the instructor. A survey of modern genetics including Mendelian modes of heredity; extensions and variations on Mendelian genetics; chromosomal inheritance and variation; molecular properties of genes; plus basic quantification of genetic diversity at the population level.

BIOL 3250 Ecology and Evolution (4 credits)

Prerequisites: BIOL 1107, BIOL 1108, BIOL 3200, or permission of the instructor.

An introduction to major topics in ecology and evolution, including population, community, and ecosystem ecology; Darwinian theory of evolution through natural selection; microevolution and macroevolution. Computer and field labs will provide exposure to both evolutionary theory and field ecology.

Existing Courses. Those with 4 credits have a laboratory component.

The biology core (BIOL 1100, BIOL 1107, BIOL 1108, BIOL 3200, BIOL 3250) is a pre-requisite for each of the following courses:

BIOL 2230 General Botany (To be renumbered BIOL 3230) (4 credits)

Survey of plants, emphasizing evolution, homologous variation, and reproductive cycles of the major groups and development, structure, and function as represented by the seed plants.

BIOL 2270 General Zoology (To be renumbered BIOL 3270) (4 credits)

Survey of the animal kingdom

BIOL 3000 Biostatistics

Prerequisite: MATH 1113. An introduction to univariate and multivariate analysis of data. Laboratory work will allow students to collect data typical of the diverse disciplines in biology and subject those data to appropriate biometrical analyses, using a calculator or computer. Students will be required to keep a detailed lab notebook of the statistical methods studied and also complete a term project and a scientific report. Two 2-hour laboratory periods per week.

BIOL 3100 Microbiology

Prerequisites: CHEM 1212/1212L. Recommended: CHEM 3402. Survey of microbiology covering eubacteria, archaeobacteria, protozoa, fungi, algae, and viruses. Includes fundamental techniques, microbial physiology and genetics, biotechnology, medical applications, and applied microbiology. Two 1.5 hour laboratory periods per week.

BIOL 3300 Ecology

Prerequisite: CHEM 1212/1212L. with a grade of "C" or better. Corequisite: BIOL 3200 or consent of instructor. Basic ecological principles including behavior of individuals, populations, and communities in the context of their physical and biotic environments. Reviews population genetics and basic evolution; emphasizes scientific method, including the role of theory, hypothesis testing, statistical analysis and scientific writing. Observation and data collection mostly in the field within a variety of local ecosystems. One weekend field trip required.

BIOL 3400 Plant Physiology

Prerequisites: CHEM 1211/1211L. An introduction to basic principles of plant function including physical processes occurring in plants, water relations in whole plants and plant tissues, cell physiology and biochemistry, and growth and development.

BIOL 3450 Animal Physiology

Prerequisites: CHEM 1212, or permission of instructor. A study of animal physiology with an emphasis on mammalian organ systems. The molecular and cellular aspects of physiology as they relate to these systems are considered.

BIOL 3500 Mycology

Prerequisites: Recommended: BIOL 3100. Biology of fungi with emphasis on morphology, taxonomy, physiology, and ecology, includes the roles of fungi as both beneficial organisms and as causal agents in plant and animal diseases.

BIOL 3550 Phycology

An introduction to the study of the algae, including taxonomy, phylogeny, physiology, and ecology. Laboratories will focus on the examination of live material, and will include methods for the isolation and culture of algae.

BIOL 3600 Local Flora

A field-oriented study emphasizing identification, distribution, and ecology of locally occurring seed-bearing plants. Two or three weekend field trips are routinely scheduled.

BIOL 3650 Plant Systematics

A survey of the principles of plant systematics that includes identification, nomenclature, evolution, and classification within the plant kingdom, and a systematic survey of plant families, with emphasis on local representatives.

BIOL 3700 Neuroscience

Prerequisites: Biology core, or consent of the instructor. An exploration of the human nervous system based upon current experimental models. The course will be divided into four areas: neural signaling, sensory input, motor input, and modifications of neuronal circuits. The neurobiology of disease will be emphasized.

BIOL 3800 Invertebrate Zoology

A study of the morphology, phylogeny, and ecology of invertebrates.

BIOL 3810 Introduction to Biogeography

Also offered as GEOG 3810. **Prerequisites:** Three of the following courses: GEOG 1112, GEOG 1113, BIOL 1107 BIOL 1108 An overview of factors controlling the distribution of plants and animals on the Earth. Topics discussed include ecological and evolutionary processes, geophysical and climatic phenomena, and historical and anthropogenic events that have influenced current distributions.

BIOL 3840 Entomology

Introduction to the study of insect biology including ecology, behavior, and taxonomy. Laboratory includes field observation, sampling and identification of local fauna.

BIOL 3870 Parasitology

A study of the morphology, life cycles, and host-parasite relationships of representative protozoan and metazoan parasites. Human parasites are emphasized.

BIOL 3900 Ichthyology

A study of the taxonomy, distribution, ecology, behavior and evolution of freshwater and marine fishes. One or two overnight field trips on weekends will be scheduled, with emphasis placed on the collection and preservation of specimens and the identification of habitats occupied by various species. Other field trips scheduled during normal laboratory periods.

BIOL 3920 Herpetology

Introduction to the study of amphibians and reptiles, including anatomy, physiology, ecology, behavior, and classification coordinated with field study of local species.

BIOL 3950 Ornithology

Lectures on morphology, evolution, ecology, behavior, and distribution of birds of the world. Lab emphasizes gross anatomy and identification of local species by sight and sound; mostly in the field. Five-day field trip to south Florida required; other Saturday trips offered.

BIOL 3980 Mammalogy

Lectures emphasize morphology, evolution, ecology, zoogeography and classification of mammals of the world. Lab emphasizes gross anatomy and identification of mammal specimens, especially those found in North America. Four-day field trip to Blue Ridge Mountains (NC) required; Manatee dive (FL) offered.

BIOL 4000 Topics in Biology I

Selected topics in the biological sciences. May be repeated if the topic is different. This course does not include a laboratory

BIOL 4010 Topics in Biology II

Selected topics in the biological sciences. May be repeated if the topic is different. This course includes a laboratory.

BIOL 4100 Morphology of Land Plants

Study of vegetative organization and reproductive cycles of bryophytes, pteridophytes and seed plants, which incorporates phylogenetic and ecological relationships.

BIOL 4200 Plant Anatomy

Origin and development of tissues and organs of vascular plants. The laboratory stresses microtechnique including preparation of plant tissues in paraffin and plastic resins, sectioning, staining for specific components of plant tissues, and use of different optical methods.

BIOL 4300 Comparative Vertebrate Anatomy

Prerequisites: Biology core or approval of instructor. Anatomical and phylogenetic survey of representative vertebrate animals.

BIOL 4350 Developmental Biology

A study of development from fertilization through embryological stages, with an emphasis placed on experimental embryology and molecular genetic mechanisms in selected model organisms.

BIOL 4400 Vertebrate Histology

Prerequisites: Biology Core and 8 semester hours of senior college biology courses. Study of vertebrate histology with emphasis on the four primary tissues (epithelium, connective, muscle, and nerve). Laboratory work consists primarily of detailed microscopic study and drawings of tissues from prepared slides. Two 2-hour laboratory periods per week.

BIOL 4500 Cell Biology

Prerequisites: CHEM 3601. The organization and function of cellular structures in animal, plant, and microbial systems. Emphasis on the molecular basis of metabolism, transport, mobility, nerve conduction, and the cell cycle.

BIOL 4510 Virology

Prerequisites: BIOL 3100 or consent of instructor. An introduction to viruses and other non-cellular infectious agents. Topics include the structure and composition of these agents, their replication, effects on their host, and host responses. Methods for studying these agents, their origins and evolution, and their uses in biotechnology will also be discussed.

BIOL 4550 Immunology

Prerequisites: BIOL 3100. Basic concepts of immunology, including antigen and antibody structure, the generation of diversity, the nature of T cell and B cell receptors, cellular cooperation, and the down regulation of immune responses.

BIOL 4580 Molecular Genetics

Prerequisite: BIOL 3200. The study of the molecular nature of eukaryotic genomes, with emphasis on biotechnology. The lecture will focus on using modern molecular genetic techniques as a means to understanding complex eukaryotic genomes. Emphasis will be placed on reading current, relevant scientific literature. The laboratory will involve hands-on experience in which the student will learn the latest technology of molecular genetic analysis and manipulation.

BIOL 4600 Evolution

Prerequisites: BIOL 3200. Study of the theoretical aspects and the patterns and processes of micro- and macro-evolutionary change.

BIOL 4650 Animal Behavior

Introduction to the major concepts of causation, development, evolution, and ecology of animal behavior, emphasizing the behavior of social animals.

BIOL 4700 Limnology

Prerequisites: BIOL 3300. A study of the physical, chemical, and biological aspects of fresh waters.

BIOL 4750 Population Biology

Prerequisite: MATH 1112, MATH 1113, OR MATH 1113H. **Prerequisite or corequisite:** BIOL 3300. A review of the theory and applications of population biology, including single-species population growth models (exponential, geometric, logistic, life tables, state and age-structured matrix models, metapopulation models), population genetics models, and multi-species interaction models (competition, predator-prey, succession, and parasite-host). Integrated computer exercises will allow students to manipulate model parameters and understand model predictions and dynamics.

BIOL 4830 Laboratory Practicum I 1 hour credit

Prerequisite: 12 hours of upper division biology and a GPA of 3.0. Graded "Satisfactory" or "Unsatisfactory." Individualized instruction and practice in assisting with the operation of biology laboratory exercises in classes that have one laboratory period per week. The student is assigned to one class section for one semester and is expected to assist with all class laboratories. The practicum is directed by the instructor of the class to which the student is assigned. Credits may not be used as biology electives.

BIOL 4840 Laboratory Practicum II 2 hours credit

Prerequisite: 12 hours of upper division biology and a GPA of 3.0. Graded "Satisfactory" or "Unsatisfactory." Individualized instruction and practice in assisting with the operation of biology laboratory exercises in classes that have two or more laboratory periods per week. The student is assigned to one class section for one semester and is expected to assist with all class laboratories. The practicum is directed by the instructor of the class to which the student is assigned. Credits may not be used as biology electives.

BIOL 4850 Biology Internship 3 hours credit

Graded "Satisfactory" or "Unsatisfactory." Open to students who qualify for internship programs in the biological sciences. Credit hours and internship hours granted are agreed on cooperatively by the Biology Department and the internship supervisor and are dependent on the nature of the program and academic work experience. Approval forms must be completed before registration. Grade (Satisfactory/Unsatisfactory) is assigned after submission of written report detailing the work done along with conclusion and evaluation. Only hours of internship credit may be applied toward graduation requirements. Credits may not be used as biology electives.

BIOL 4860 Pathologist's Assistant Internship 4 hours credit

Prerequisites: Completion of 60 hours of credit to include CHEM 1211/1211L; MATH 1112, MATH 1113 or MATH 1113H, MATH 2261 or MATH 2261H, or MATH 2620; and acceptance into the Pathologist's Assistant Program with Doctors Laboratory, Inc. Graded "Satisfactory" or "Unsatisfactory." Admission to this course and credit hours granted are agreed on cooperatively by the Biology Department and Internship Supervisor, dependent on the nature of the program and academic work experience. Approval forms must be completed before registration. Grade is assigned after submission of a written reporting detailing the work done, along with conclusion and evaluation. Internship credit maybe used only as general elective credit and may not be used as biology electives in the major. In order to qualify for certification, students must be enrolled in this course during each full semester of the junior and senior years. Course may be taken four times.

BIOL 4900 Senior Seminar

Pre- or Corequisite: Completion of all required courses in the senior curriculum for the biology major. Graded "Satisfactory" or "Unsatisfactory." The capstone course in biology. Students are required to attend outside lectures chosen by the instructor. This course assesses students' ability to research independently topics in biology, assimilate the information, and disseminate the information in an organized and understandable fashion in both written and oral forms. Besides demonstrating comprehension of their topic and competence in communication skills, students take the ETS Major Field test in biology and complete the departmental Senior Exit Questionnaire for successful course completion.

BIOL 4950 Directed Study 1 to 4 hours credit

Prerequisite: completion of at least 11 hours of upper-division biology courses with the consent of the instructor and the Department Head. Supervised investigation of a specific problem and preparation of a final report agreed upon by student and instructor. A maximum of three hours of credit may be applied toward the upper-division biology electives requirements; additional credits may count as free electives.

4.4 Not applicable

4.5. Institutional approval of courses in the proposed curriculum

Each of the six new courses (BIOL 1107, BIOL 1108, BIOL 1200, BIOL 3200, BIOL 3250) in this curriculum have been approved in order by the Department of Biology, the College of Arts and Sciences, the VSU Academic Committee and the VSU Faculty Senate, the final approving body. The minutes from the faculty senate stating approval of these courses is amended below:

4.6 – 4.7 Not applicable

4.8 Consistencies between proposed BA Biology and national standards

The National Research Council prepared a report in 2003 entitled: "BIO 2010: Transforming Undergraduate Education for Future Research Biologists." This report serves as a guide for the best standards to adopt when devising an undergraduate curriculum in biology. Although the report is written with the aim of training future scientists, which is different from the career professions of the students targeted by the proposed BA Biology, the proposed curriculum from both programs is nevertheless remarkably similar.

BIO 2010

Intro Biology I & II
Faculty Research Seminar
Genetics
Ecology/Evolution
Biology Electives (15 hrs)
Science Elective (6 hrs)
General Chemistry I
Math I & II
Senior Yr Faculty Seminar

VSU BA Biology

Intro Biology I & II
Freshman Seminar
Genetics
Ecology/Evolution
Biology Electives (16 hrs)
Science Electives (6 hrs)
General Chemistry I & II
Math I & II
Senior Seminar

4.9 Student outcomes associated with the B.A. Biology

The outcomes that we will measure with the implementation of this new degree are graduation rates, retention rates, acceptance into non-MD professional programs, and preparation of biology teachers for our local schools.

5.1 – 5.4 Inventory of Faculty Directly Involved

Name: David L. Bechler
Rank and Academic Discipline: Professor, Biology/Behavioral Ecology
Degrees Earned and Institution: Ph.D.—Saint Louis University, (1981) M.S.— University of Louisiana-Monroe (1974) B.S.— Indiana University-Bloomington (1970)
Semester Work Load: 12 classroom contact hours plus service and professional duties.
Courses Taught: BIOL 1050 Human Biology BIOL 2010 Principle of Biology (Laboratory only) BIOL 2270 Zoology BIOL 2651 Human Anatomy and Physiology I BIOL 2652 Human Anatomy and Physiology II BIOL 3810/5810 Biogeography (Also listed as GEOL 3810) BIOL 3900/5900 Ichthyology BIOL 3920/5920 Herpetology BIOL 4900/7900 Senior & Graduate Seminars BIOL 4950 Directed Study BIOL 7010 Special Topics in Ecology and Evolution (Species and Speciation)
Workload will not change with new program.
Scholarship and Publication Record (past five years only): Publications: 1. Mackiewicz, M., A. Tatarenkov, A. Perry, J.R. Martin, J.F. Elder, Jr., D.L. Bechler , and John C. Avise. 2006. Microsatellite documentation of outcrossing between inbred laboratory strains of the self-fertilizing mangrove killifish (<i>Kryptolebias marmoratus</i>). <i>J. Hered.</i> 97: 508-513. 2. Chaney, J.C. and D.L. Bechler . 2006. The Occurrence and distribution of <i>Heterandria formosa</i> (Teleostei, Poeciliidae) in Lowndes County, Georgia. <i>Georgia Journal of Science.</i> 64 (2): 67-75. 3. Barnett, J., D.L. Bechler , C. Denizman, J. Grable, J. Nienow, J. Turco, W. Tietjen. G.L. Wood (Authors alphabetically). 2007. Watershed Restoration Action Strategy Development in the Alapahoochee River Watershed. Nonpoint Source Management Program, Section 319 Report. Submitted to Environmental Protection Division, Department of Natural Resources, Georgia, USA. 92 pp. Grants: Bechler, DL and JF Elder. 2006. The Role of Habitat and Gender in the Determination of Genetically Diverse Populations of the Mangrove Killifish. Center for Applied Research, College of Arts and Sciences, Valdosta State University. (\$1,500). Presentations: 1. Brian Ring, John F. Elder, and David L. Bechler . 2008. <i>Kryptolebias marmoratus</i> , the mangrove rivulus, as a model organism for research. Conference on the Ecological and Evolutionary Ethology of Fishes, 29 June-3July 2008. Boston University, Boston, MA. 2. Frank Flaherty, David L. Bechler , Kelly Luke. 2008. An upgraded version of an infrared detection system for monitoring the movements of small fish in natural or artificial systems. (Poster) Conference on the Ecological and Evolutionary Ethology of Fishes, 29 June-3July 2008. Boston University, Boston, MA. 3. Kelly N. Luke (VSU Graduate Student) and David L. Bechler (Graduate Advisor). Dyadic Interactions in the mixed-mating strategies of the mangrove rivulus, <i>Kryptolebias marmoratus</i> . I. The role of hermaphrodite-male and hermaphrodite-hermaphrodite dyads. (Oral Presentation and competing for Jack Ward Award for best student oral presentation) Conference on the Ecological and Evolutionary Ethology of Fishes, 29 June-3July 2008. Boston University, Boston, MA. 4. Kelly N. Luke (VSU Graduate Student) and David L. Bechler (Graduate Advisor). Dyadic interactions in the mixed-mating strategies of the mangrove rivulus, <i>Kryptolebias marmoratus</i> . II. The role of male-male pairings. (Poster and competing for the Gerry Fitzgerald Award for best student poster presentation) Conference on the Ecological and Evolutionary Ethology of Fishes, 29 June-3July

2008. Boston University, Boston, MA.
5. Riggs, P., J. b. Pascarella, and **D.L. Bechler**. The history of the Lake Louise Field Station. Annual Meeting of Georgia Academy of Science, 14-15 March 2008, Jacksonville University, Jacksonville, Florida.
 6. **Bechler, D.L.** and L.S. Jones. 2007. An authentic turtle population study for non-majors. National Association of Biology Teachers, Atlanta, GA. 28 November-1 December 2007.
 7. Johnson, GT, JF Elder, **DL Bechler** and K Luke. 2007. The effects of hybridization on the MHC gene complex of two separate clonal lineages of the selfing hermaphroditic fish, *Kryptolebias marmoratus*. Southeastern Ecology and Evolution Conference. University of Central Florida, Orlando, FL.
 8. Johnson, GT, JF Elder, **DL Bechler** and K Luke. 2007. The effects of hybridization on the MHC gene complex of two separate clonal lineages of the selfing hermaphroditic fish, *Kryptolebias marmoratus*. Georgia Academy of Sciences.
 9. **Bechler, D.L.** and L.S. Jones. 2007. An authentic turtle population study for non-majors. National Association of Biology Teachers, Atlanta, GA.
 10. **Bechler, D.L.** 2006. Introduced species with the ability to affect the biology of the gopher tortoise, *Gopherus polyphemus*. Invited presentation. 28th Annual Gopher Tortoise Council, Valdosta State University, Valdosta, GA.
 11. Mackiewicz, M., A. Tatarenkov, A Perry, J.R. Martin, J.F. Elder, Jr., **D.L. Bechler**, and J.C. Avise. 2006. Microsatellite Documentation of outcrossing between inbred laboratory strains of the self-fertilizing mangrove killifish (*Kryptolebias marmoratus*). Conference on the Ecological and Evolutionary Ethology of Fishes, Soka University, Aliso Viejo, CA.
 12. Luke, K.N., **D.L. Bechler**, and F. Flaherty. 2006. Activity patterns of the mangrove killifish, *Kryptolebias marmoratus*, in an artificial crab burrow. Conference on the Ecological and Evolutionary Ethology of Fishes, Soka University, Aliso Viejo, CA. .
 13. Flaherty, F. **D.L. Bechler**, and K.N. Luke. 2006. An infra red detection system for monitoring the movements of small fish in artificial systems. Conference on the Ecological and Evolutionary Ethology of Fishes, Soka University, Aliso Viejo, CA.
 14. Shockley, D., M.J. Sanders, **D.L. Bechler**, J.Nienow, and D.S. Taylor. 2006. The role of a brown diatom and a bluegreen alga on the culture and emersion of the mangrove killifish, *Kryptolebias (Rivulus) marmoratus*. Conference on the Ecological and Evolutionary Ethology of Fishes, Soka University, Aliso Viejo, CA.
 15. **Bechler, DL.** 2006. A survey and analysis of fish diversity in the Alapahoochee River of South Georgia, Annual Meeting of Georgia Academy of Science, Atlanta, Georgia.
 16. **D. L. Bechler** and Leslie S. Jones. 2005. Authentic population study for biology students using box turtles. Annual Meeting of the Georgia Academy of Science. Gordon College, Barnesville, GA.
 17. Jason C. Chaney and **D. L. Bechler**. 2005. The occurrence and distribution of *Heterandria formosa* (Teleostei, Poeciliidae) in Lowndes County, Georgia. Annual Meeting of the Georgia Academy of Science. Gordon College, Barnesville, GA.

Name (Last, First, MI.) Bergstrom, Bradley J.
Rank and Academic Discipline: Professor, Ecology, Mammalogy, Ornithology
Degrees Earned and Institution: Ph.D. University of Kansas M.S. University of Illinois B.S. University of Illinois
Semester Work Load: 12 classroom contact hours plus service and professional duties.
Courses Taught: BIOL 1010 Principles of Biology (Biodiversity, Ecology, Evolution) BIOL 1020 Principles of Biology Laboratory BIOL 3300 Ecology BIOL 3950 Ornithology BIOL 3980 Mammalogy BIOL 4900 Senior Seminar
Workload will not change with new program.
Scholarship and Publication Record (past five years only):
Publications:
<ol style="list-style-type: none"> 1. Bergstrom, B.J., and T.W. Sherry. 2008. Estimating lipid and lean body mass in small passerine birds using TOBEC, morphometrics and subcutaneous fat scoring. <i>Journal of Avian Biology</i>, vol. 39. In Press. 2. Bergstrom, B.J., and R. Carter. 2008. Host tree selection by an epiphytic orchid, <i>Epidendrum magnoliae</i> Muhl., in an inland hardwood hammock in Georgia. <i>Southeastern Naturalist</i>. In Press. 3. Bergstrom, B.J. 2006. Daily and Seasonal Activity Patterns of a Mixed-species Communal Roost of Vultures at Grand Bay, Lowndes Co., Georgia, Final Report (2003-06) of DAMD-17-03-2-0048. 4. Vignieri, S.N., E.M. Hallerman, B.J. Bergstrom, D.J. Hafner, A.P. Martin, P. Devers, P. Grobler, and N. Hitt. 2006. Mistaken view of taxonomic validity undermines conservation of an evolutionarily distinct mouse: a response to Ramey et al. (2005). <i>Animal Conservation</i> 9:237-243. 5. Bergstrom, B.J., Rose, R.K. 2004. Comparative life histories of Georgia and Virginia cotton rats. <i>Journal of Mammalogy</i> 85: 1077-1086.
Grants:
<ol style="list-style-type: none"> 1. "Ecological Effects of Fire and Herbivory on the Small-Mammal Community of an East African Savanna." National Science Foundation, Research Opportunity Award supplement to DEB-0316402, 2006-08, \$25,555 2. "Behavior of a Colonial Roost of Black Vultures and Turkey Vultures at Grand Bay Wildl. Mgmt. Area" USAMRAA, Dept. of Defense, 2003-06, \$30,000 3. Price-Campbell Foundation 2005, 2006, 2007. Ornithology/Ecolgy fieldtrip student-expense scholarships. \$11,700 4. Product Match Donation Program, Eagle Optics Corp. 2005, Subsidized purchase of field optics for Ornithology class use, ca. \$2,400 5. VSU Internationalization Fund (travel for overseas field research), 2006, 2008, \$2,500. 6. VSU Faculty Research Grants (3 grants 2003-06), \$2,500
Presentations:
<ol style="list-style-type: none"> 1. Bergstrom, B.J. 2007. Effect of soil type and fertility and large herbivores on East-African savanna small mammals. 86th ann. mtg. Amer. Soc. of Mammalogists. Albuquerque, NM 2. Rose, R. K., and B. J. Bergstrom. 2003. Comparative life histories of Virginia and Georgia hispid cotton rats. 4th European Mammal Congress, Brno, Czech Republic.

Name (Last, First, MI.) Bhasin, Archana.
Rank and Academic Discipline: Assistant Professor, Microbiology
Degrees Earned and Institution: Ph.D. University of Wisconsin B.A. University of Texas
Semester Work Load: 12 classroom contact hours plus service and professional duties. Courses Taught: BIOL 2010 Unifying Principles of Biology BIOL 2900 Microbiology in Health And Disease BIOL 3100 Microbiology
Workload will not change with new program.
Scholarship and Publication Record (past five years only): Publications: 1 Gradman, R.J., Ptacin, J.L. Bhasin, A. , Reznikoff, W.S., Goryshin, I.Y. A bifunctional DNA binding region in Tn5 transposase. <i>Mol. Microbiol.</i> 67: 528-540, 2008.
Grants: 1 2006-2007: VSU Faculty Research, \$1000 2 2007-2008: VSU Faculty Research, \$1000 3 2007-2008: VSU Faculty Development, \$750 4 2007-2008: VSU Center for Applied Research, \$1000
Presentations: 1 Bhasin, A. , "The search for narrow-spectrum antimicrobial genes in the bacterial symbiont <i>Xenorhabdus</i> " ASM Conference on Cell-Cell Communication in Bacteria, 2007 2 Bhasin, A. , Chaston, J, and Goodrich-Blair, H. "Characterization of Characterization of the <i>Xenorhabdus nematophila</i> colonization protein NilB" ASM Conference on Beneficial Microbes, abstract accepted, to be presented October 2008

Name (Last, First, MI.) Bielmyer, Gretchen, K.
Rank and Academic Discipline: Assistant Professor, Environmental Toxicology
Degrees Earned and Institution: Ph.D. Clemson University M.S. Clemson University B.S. University of North Florida
Semester Work Load: 12 classroom contact hours plus service and professional duties. Courses Taught: BIOL 2010 Unifying Principles of Biology At U. N. Florida: EVR 1009 Environmental Science BSC1930 Current Applications in Biology BSC2020 Human Biology Lecture and Lab BIOL L103 General Biology Lab BIOSC H303 Vertebrate Biology Lab MBF602 Aquatic Toxicology (co-taught)
Workload will not change with new program.
Scholarship and Publication Record (past five years only): Publications: 1. Bielmyer G.K., K.V. Brix, M. Grosell. 2008. Is CI protection against silver toxicity due to speciation? <i>Aquat Toxicol</i> 87:81-87. 2. Bielmyer G.K., M. Grosell, P.R. Paquin, R. Mathews, K.B. Wu, R.C. Santore, K.V. Brix. 2007. Validation study of the acute biotic ligand model for silver. <i>Env Toxicol Chem</i> 26(10):2241-2246. 3. Bielmyer G.K., J. Tomasso, S.J. Klaine. 2006. Physiological responses of hybrid striped bass to aqueous copper in freshwater and saltwater. <i>Arch Env Contam Toxicol</i> 50:531-538. 4. Bielmyer G.K., M. Grosell, K.V. Brix. 2006. Toxicity of silver, zinc, copper, and nickel to the copepod, <i>Acartia tonsa</i> , exposed via a phytoplankton diet. <i>Env Sci Technol</i> 40:2063-2068. 5. Bielmyer G.K., K.V. Brix, T.R. Capo, M. Grosell. 2005. The effects of metals on embryo-larval and adult life stages of the sea urchin, <i>Diadema antillarum</i> . <i>Aquat Toxicol</i> 74(3):254-263. 6. Bielmyer G.K., J. Tomasso, D. Gatlin, J. Isely, S.J. Klaine. 2005. Responses of hybrid striped bass to waterborne and dietary copper in freshwater and saltwater. <i>Comp Biochem Physiol C</i> 140:131-137. 7. Bielmyer G.K., R. Arnold, J. Tomasso, S.J. Klaine. 2004. Influence of salt source on synthetic saltwater quality. <i>Chemosphere</i> 57:1707-1711.
Grants: 1. City of Jacksonville, St. Johns River Accord, \$138,258 (Investigator), 2007-2008 2. University of North Florida, Coastal Biology Flagship Summer Research Grant, \$5,000 (Co-Principal Investigator with Kelly Smith), Summer 2007
Presentations: 1. Bielmyer G.K. , P. Gillette, M. Grosell, R. Bhagooli, A.C. Baker, C. Langdon, T. Capo. 2008. Effects of copper toxicity on three species of scleractinian corals. International Coral Reef Symposium. Ft. Lauderdale, Fl. 2. Bielmyer G.K. , P. Gillette, M. Grosell, R. Bhagooli, A.C. Baker, C. Langdon, T. Capo. 2007. Effects of copper toxicity on three species of scleractinian corals. Society of Experimental Biology, Kings College, London, U.K. (Invited Speaker). 3. Bielmyer G.K. , K.V. Brix, M. Grosell. 2005. Toxicity of silver, zinc, copper, and nickel to the copepod, <i>Acartia tonsa</i> , exposed via a phytoplankton diet. Society of Environmental Toxicology and Chemistry (SETAC), Annual Meeting, Baltimore, Maryland. 4. Bielmyer G.K. , K.V. Brix, M. Grosell. 2005. Differences in gill chloride uptake: Implications for Ag toxicity. Society of Environmental Toxicology and Chemistry (SETAC), Annual Meeting, Baltimore, Maryland. 5. Bielmyer G.K. , K.V. Brix, M. Grosell. 2005. Differences in gill chloride uptake by freshwater fishes: Implications for silver toxicity. Society of Experimental Biology (SEB). Annual Meeting, Barcelona, Spain.

6. **Bielmyer G.K.**, K.V. Brix, T. Capo, M. Grosell. 2004. The effects of copper, silver, nickel, and selenium exposure on the sea urchin, *Diadema antillarum*. Society of Environmental Toxicology and Chemistry (SETAC), Annual Meeting, 2004, Portland, Oregon.
7. **Bielmyer G.K.**, K.V. Brix, M. Grosell. 2004. Trophic transfer of silver and copper in a phytoplankton-zooplankton food chain. Society of Environmental Toxicology and Chemistry (SETAC), Annual Meeting, Portland, Oregon.
8. **Bielmyer G.K.**, K.V. Brix, M. Grosell. 2004. Validation study of acute biotic ligand model for silver. Society of Environmental Toxicology and Chemistry (SETAC), Annual Meeting, Portland, Oregon.
9. **Bielmyer G.K.**, K.V. Brix, T. Capo, M. Grosell. 2004. The effects of copper, silver, nickel, and selenium exposure on the Sea Urchin, *Diadema antillarum*. Society of Environmental Toxicology and Chemistry (SETAC), Europe Meeting, Prague, Czeck.
10. **Bielmyer G.K.**, K.V. Brix, M. Grosell. 2004. Trophic transfer of silver and copper in a phytoplankton-zooplankton food chain. Society of Environmental Toxicology and Chemistry (SETAC), Europe Meeting, Prague, Czeck.
11. **Bielmyer G.K.**, J. Isely, J. Tomasso, and S.J. Klaine. 2003. Physiological responses of hybrid striped bass to aqueous and dietary copper. Society of Environmental Toxicology and Chemistry (SETAC), Europe meeting, Hamburg, Germany.
12. **Bielmyer GK**, J. Isely, J. Tomasso, and S.J. Klaine. 2003. Physiological responses of hybrid striped bass to aqueous and dietary copper. Society of Environmental Toxicology and Chemistry (SETAC), Annual meeting, Austin, TX.

Name (Last, First, MI.) Blackmore, Mark S.
Rank and Academic Discipline: Professor, Biology/Entomology/Medical Entomology
Degrees Earned and Institution: Ph.D. University of Utah M.S. Auburn University B.S. Michigan State University
Semester Work Load: 12 classroom contact hours plus service and professional duties
Courses Taught: BIOL 1010 Introduction to Biology: The Evolution and Diversity of Life BIOL 1020 Biodiversity Lab BIOL 1030 Introduction to Biology: Organismal Biology BIOL 2270 General Zoology BIOL 3840 Entomology BIOL 5840 Entomology (Graduate level) BIOL 4900 Senior Seminar BIOL 4950 Directed Study (Research Topics Vary)
Workload will not change with new program.
Scholarship and Publication Record (past five years only):
Publications: 1. Godsey, M.S., Blackmore , M.S. et al. 2005. West Nile epizootiology in the southeastern United States, 2001. <i>Vector-Borne and Zoonotic Diseases</i> 5 (1): 82-89.
Grants: 1. Faculty Development Grant for Research 2005. "Identification of sources of blood meals taken by mosquitoes in Lowndes County, GA" funded - \$1000 2. District 8-1 Health Office Grant 2003-2009. "West Nile Virus Surveillance" funded - \$322,250 3. Bonide Corporation Grant 2003. "Mosquito Area Repellent Tests" funded - \$5,000
Presentations: 1. Blackmore , M.S "Mosquito Parasites" Georgia Mosquito Control Association 30th Annual Meeting Athens, GA October 19, 2007 (Invited Speaker) 2. Blackmore , M.S "Seasonal population dynamics of EEEV vectors in southcentral Georgia" American Mosquito Control Association 72nd Annual Meeting, Detroit, MI, February 27, 2006 3. Blackmore , M.S "West Nile Experience in Georgia" Florida Interagency Arbovirus Task Force Part Meeting, Tallahassee, FL, February 15, 2005 (Invited Speaker) 4. Blackmore , M.S "Population trends in 2004 - The lowdown from Lowndes" Georgia Mosquito Control Association 27th Annual Meeting, Athens, GA October 13, 2004 (Invited Speaker) 5. Blackmore , M.S "EEE in Georgia 2003" American Mosquito Control Association 70th Annual Meeting Savannah, GA February 23, 2004 (Invited symposium speaker)

Name (Last, First, MI.) Cantonwine, Emily
Rank and Academic Discipline: Assistant Professor, Plant Pathology
Degrees Earned and Institution: Ph.D. University of Georgia M.S. Florida International University B.S. Miami University
Semester Work Load: 12 classroom contact hours plus service and professional duties. Courses Taught: BIOL 2010 Unifying Principles of Biology BIOL 3500/5500 Mycology BIOL 2230 Botany BIOL 4000/6000 Special Topics: Organic Agriculture
Workload will not change with new program.
Scholarship and Publication Record (past five years only): Publications: <ol style="list-style-type: none"> 1 Cantonwine, E.G., Culbreath, A.K., Shew, B.B., & Boudreau, M.A. 2008. Efficacy of organically acceptable fungicides for management of early and late leaf spot diseases on partially resistant peanut cultivars. Online. Plant Health Progress doi:10.1094/PHP-2008-0317-03-RS. 2 Cantonwine, E.G., Culbreath, A.K., Holbrook, C.C. & Gorbet, D.W. 2008. Disease progress of early leaf spot and components of resistance to <i>Cercospora arachidicola</i> and <i>Cercosporidium personatum</i> in runner-type peanut genotypes. Peanut Science 35:1-10. 3 Cantonwine, E.G. & Culbreath, A.K. 2007. Effects of cover crop residue and pre-plant herbicide on early leaf spot of peanut. Plant Disease 91:822-827. 4 Cantonwine, E.G., Culbreath, A.K., & Stevenson, K.L. 2007. Characterization of early leaf spot suppression by strip-tillage in peanut. Phytopathology 97:187-194. 5 Cantonwine, E.G., Culbreath, A.K., Brennen, T.B., Kemerait, R.C., Stevenson, K.L. & Smith, N.B. 2006. Integrated disease management of leaf spot and spotted wilt of peanut. Plant Disease 90:493-500. 6 Cantonwine, E.G. 2005. The use of genetics and cultural practices to suppress foliar diseases of peanut and reduce fungicide requirements. Ph.D. Thesis, University of Georgia, Athens, GA. 7 Cantonwine, E.G., Culbreath, A.K., Holbrook, C.C., Branch, W.D. & Gorbet, D.W., 2003. Field response of runner-type genotypes to multiple diseases under conventional and strip-tillage, 2002. Biological and Cultural Tests, Report No. 18:P009. Grants: <ol style="list-style-type: none"> 1. USDA Sustainable Agriculture Research and Education R&E Grant, 2008 2. Georgia's Innovative Capital Partnership Program (ICAPP), 2007 3. USDA Sustainable Agriculture Research and Education R&E Grant, 2006 4. National Peanut Board Research Grant, University of Georgia, 2004 5. National Peanut Board Research Grant, University of Georgia, 2003 Presentations: <ol style="list-style-type: none"> 1 Greg Kean, Dr. Thomas Manning, Dr. John Barbas, Dr. Emily Cantonwine, Megan Ogden, William Wilbanks, Giso Abadi, Dennis Phillips. The Florida Yew Tree and Taxol. Southeast regional Meeting of the American Chemical Society. Greenville, SC, 2007. 2 Mark A. Boudreau, Relinda Walker, W. Carroll Johnson, III, Ray Hicks, Nathan Smith, and Emily Cantonwine. Preliminary report: On-farm validation of an integrated weed management system in certified organic peanut production in Georgia. Georgia Fruit and Vegetable Growers Assoc. 2007. 3 E. Cantonwine, A. K. Culbreath, & M. B. Boudreau. Evaluation of Organically Acceptable Fungicides for Management of Leaf Spots in Georgia. American Peanut Research and Education Society, Annual Meeting, Birmingham, AL. 2007 4 E. Cantonwine, S. Maddie, B. Buchanan, C.C. Holbrook, and C. K. Kvien. Evaluation of

epidermal conductance as a potential drought tolerant trait of peanut. Aflatoxin/Fumonisin Elimination and Fungal Genomics Workshop, Fort Worth, TX. 2006

- 5 E. **Cantonwine**, C. C. Holbrook, D. M. Wilson, P. Songsri, S. Pimratch, and B. Z. Guo. Genetic response to seed colonization by *Aspergillus flavus* in peanut. Aflatoxin/Fumonisin Elimination and Fungal Genomics Workshop, Fort Worth, TX. 2006
- 6 E.G. **Cantonwine**. Opportunities and challenges of organic peanut production in Georgia. Georgia Association of Plant Pathologists, Annual Meeting, Lake Lanier, GA. 2006
- 7 E. G. **Cantonwine**. Niche Market Peanuts. Hot Topics Seminar, Georgia Peanut Tour. Statesboro, GA. 2006
- 8 E.G. **Cantonwine** & L. D. Culbreath. State of organic agriculture in Georgia: a consumer perspective. Georgia for the Georgia Conservancy, Southwest Georgia Chapter, Moultrie, GA. 2006
- 9 E.G. **Cantonwine**. Georganic Opportunities. Organic Processors & Handlers Meeting, University of Georgia, Tifton, GA. 2006
- 10 E.G. **Cantonwine**. The state of the organic industry in Georgia: a research and support perspective. Tifton Sigma Xi Series, Tifton, GA. 2005
- 11 E.**Cantonwine**, C.C. Holbrook, A.K. Culbreath, W.C. Johnson, and D. Olson. Breeding peanuts for organic production: Challenges and Opportunities. Invited seminar at the American Society of Agronomy, Annual Meeting, Seattle, WA. 2004
- 12 E.G. **Cantonwine** & A.K. Culbreath. Epidemiological analysis of leaf spot suppression of peanut by strip-tillage. American Phytopathological Society, Annual Meeting, Anaheim, CA. 2004
- 13 E.G. **Cantonwine** & A.K. Culbreath. Integrated disease management of peanut. Georgia Association of Plant Pathologists, Annual Meeting, Jekyll Island, GA. 2004
- 14 E.G. **Cantonwine** & A.K. Culbreath. Integrated disease management of early leaf spot of peanut. American Phytopathological Society, Southern Division Annual Meeting, San Antonio, TX. 2004
- 15 E.G. **Cantonwine**. Using fungal plant pathogens to manage weeds. Department of Plant Pathology Seminar Series, Athens, GA. 2004
- 16 E.G. **Cantonwine**, A. K. Culbreath, and R.C. Kemerait, Jr. Characterization and control of an undescribed leaf spot of peanut. American Peanut Research and Education Society, Annual Meeting, Tulsa, OK. 2003
- 17 E.G. **Cantonwine** & A. K. Culbreath. Effects of pre-till herbicide and cover crop residue on early leaf spot epidemics of peanut. American Phytopathological Society, Southern Division Annual Meeting, South Padre Island, TX. 2003
- 18 E.G. **Cantonwine**. Quorum sensing in bacteria. Department of Plant Pathology Seminar Series, Athens, GA. 2003

Name (Last, First, MI.) Carter, James R.
Rank and Academic Discipline: Professor, Biology/Botany/Systematics
Degrees Earned and Institution: Ph.D. Vanderbilt University M.S. Mississippi State University B.S. Mississippi State University
Semester Work Load: 9 classroom contact hours plus service, director of Herbarium, and professional duties
Courses Taught: BIOL 1010 Introduction to Biology: The Evolution and Diversity of Life BIOL 1020L Introduction to Biology & Biodiversity Lab BIOL 2230 General Botany BIOL 3600 Local Flora BIOL 3650 Plant Systematics BIOL 4100 Plant Morphology BIOL 4900 Senior Seminar BIOL 4950 Directed Study
Workload will not change with new program.
Scholarship and Publication Record (past five years only):
Publications:
<ol style="list-style-type: none"> 1. Carter, R. 2008. Floristic highlights from Camden County. Tipularia. In press. 2. Bergstrom, B.J. and R. Carter. 2008. Host tree selection by an epiphytic orchid, <i>Epidendrum magnoliae</i> Muhl., in an inland hardwood hammock in Georgia. Southeastern Naturalist. In press. 3. Rosen, D.J., S.R. Hatch and R. Carter. 2008. Taxonomy and nomenclature of three closely related species of <i>Eleocharis</i> subg. <i>Limnochloa</i> (Cyperaceae). Blumea. In press. 4. Bryson, C.T. and R. Carter. 2008. The significance of Cyperaceae as weeds. In: R.F.C. Naczi and B.A. Ford (eds.), <i>Sedges: Uses, Diversity, and Systematics of the Cyperaceae</i>. Monographs in Systematic Botany from the Missouri Botanical Garden. In press. 5. Bryson, C.T., V.L. Maddox and R. Carter. 2008. Spread of Cuban Club-rush [<i>Oxycaryum cubense</i> (Poeppig & Kunth) Palla] in the Southeastern United States. <i>Invasive Plant Science and Management</i> 1: 326-329. In Press. 6. Bryson, C.T. and R. Carter. 2008. A novel design for a durable, lightweight field press. <i>J. Bot. Res. Inst. Texas</i>. 2: 517-520. 7. González-Elizondo, M.S., D.J. Rosen, R. Carter and P.M. Peterson. 2007. <i>Eleocharis reznicekii</i> (Cyperaceae), a new species from the Mexican High Plateau. <i>Acta Botanica Mexicana</i> 81:35-43. 8. Carter, R. 2007. Nomenclatural notes on <i>Cyperus retrorsus</i> Chapm. and «<i>Cyperus retroversus</i> Chapm.» (Cyperaceae), including a lectotypification. <i>Vulpia</i> 6:1-3. 9. Whittier, D.P. and R. Carter. 2007. The gametophyte of <i>Lycopodiella prostrata</i>. <i>Amer. Fern J.</i> 97(4): 230-233. 10. Rosen, D.J., S.R. Hatch and R. Carter. 2007. Intraspecific taxonomy and nomenclature of <i>Eleocharis acutangula</i> (Cyperaceae). <i>J. Bot. Res. Inst. Texas</i> 1(2):875-889. 11. Carter, R., C.T. Bryson and S.J. Darbyshire. 2007. Preparation and use of voucher specimens for documenting research in weed science. <i>Weed Technology</i> 21:1101-1108. 12. Rosen, D.J. and R. Carter. 2007. Additional noteworthy collections of <i>Cyperus drummondii</i> (Cyperaceae) from Texas and first report from Mexico. <i>J. Bot. Res. Inst. Texas</i> 1(1):779-780. 13. Rosen, D.J., R. Carter and C.T. Bryson. 2006. The spread of <i>Cyperus entrerianus</i> (Cyperaceae) in the southeastern United States and its invasive potential in bottomland hardwood forests. <i>Southeastern Naturalist</i> 5:333-344. 14. Carter, R. 2005. An introduction to the sedges of Georgia. <i>Tipularia</i>. 20:17-45. 15. Bryson, C.T. and R. Carter. 2004. Biology of pathways for invasive weeds. <i>Weed Technology</i> 18:1216-1220.
Grants & Contracts:
<ol style="list-style-type: none"> 1. Survey of known and potential populations of pondberry (<i>Lindera melissifolia</i>) and pondspice (<i>Litsea aestivalis</i>) in Georgia; funded by Georgia Department of Natural Resources, Natural Heritage Program, \$20,000; 2008-2009. 2. Effects of Prescribed Burning on Representative Forest Communities at Moody Air Force Base

- and Grand Bay Wildlife Management Area, Lowndes and Lanier counties, Georgia; cooperative agreement (five years) with Moody Air Force Base, Department of Defense; \$157,000; 2007-2111.
3. Status Survey and Search Efforts for American Chaffseed (*Schwalbea americana*) in Georgia; funded by Georgia Department of Natural Resources, Natural Heritage Program, \$18,800; 2007-2008.
 4. Flora of Camden County, Georgia, with Emphasis on Crooked River State Park; Marie Mellinger Field Botany Research Grant funded by the Georgia Botanical Society, \$1,500; 2006.
 5. Federal Noxious Weed Survey: Orobanche minor; funded by USDA-APHIS through University of Georgia (Tifton), \$3,000; 2004.
 6. Federal Noxious Weed Survey: Orobanche minor; funded by USDA-APHIS through University of Georgia (Tifton), \$2,500; 2003.
 7. Vegetation Survey: Grand Bay Wildlife Management Area; funded by Georgia Department of Natural Resources, \$4,000; 2003.

Presentations:

1. Bryson, C.T., and R. Carter. 2008. Brown Flatsedge (*Cyperus fuscus*): A potential rice weed. Proc. South. Weed Sci. Soc. 61:39 (Abstract). CD-ROM.
2. Carter, R. 2006. *A Field Botanist's Perspective on the State of the Environment*. An address to the 2006 Freshman Honors Colloquium, 11 August 2006, Valdosta State University, Valdosta, Georgia.
3. Carter, R., R.H. Goddard, T.M. Webster, J.T. Flanders, A.S. Culpepper and T.L. Grey. 2006. Do mourning doves disperse seeds of tropical spiderwort? Proceedings of the 38th Annual Meeting of the American Peanut Research and Education Society, Savannah, Georgia. Abstract 117.
4. Carter, R. 2006. An introduction to sedges. Presented to Florida Native Plant Society, Magnolia Chapter, Tallahassee, 08 March 2006.
5. Rosen, D.J., R. Carter and C.T. Bryson. 2006. The potential for spread of *Cyperus entrieanus* (Cyperaceae) into native habitats of the southeastern United States. Proc. South. Weed Sci. Soc. 59:252 (Abstract). CD-ROM.
6. Bryson, C.T., R. Carter and D.J. Rosen. 2006. Dispersal, biology, and control of deeprooted sedge. Proc. South. Weed Sci. Soc. 59:253 (Abstract). CD-ROM.
7. Carter, R., C.T. Bryson, and D.J. Rosen. 2006. Invasive sedges: Impending problems. Proc. South. Weed Sci. Soc. 59:254 (Abstract). CD-ROM.
8. Carter, R., C.T. Bryson and D.J. Rosen. 2005. Cyperaceae: Emerging invasive weeds of natural areas. Simposio Internacional "El Conocimiento Botánico en la Gestión Ambiental y el Manejo de Ecosistemas" y 2° Simposio Botánico del Norte de México, Resúmenes, pp. 24-25, CIIDIR IPN Unidad Durango, Instituto Politécnico Nacional, Victoria de Durango, Dgo., México.
9. Rosen, D.J., Carter, R. and C.T. Bryson. 2005. The spread of *Cyperus entrieanus* (Cyperaceae) in the southeastern United States and its invasive potential in bottomland hardwood forests. Simposio Internacional "El Conocimiento Botánico en la Gestión Ambiental y el Manejo de Ecosistemas" y 2° Simposio Botánico del Norte de México, Resúmenes, pp. 53-54, CIIDIR IPN Unidad Durango, Instituto Politécnico Nacional, Victoria de Durango, Dgo., México.
10. Carter, R. 2005. *Opening Remarks about Dr Clyde Eugene Connell*. Annual Connell Lecture, 14 April 2005, Whitehead Auditorium, Valdosta State University, Valdosta, Georgia.
11. Carter, R. 2004. Tracking pathways of dispersal of invasive plants. Presented at *Conservation Education and Interpretive Services: A Natural Connection* 2004 National Conference sponsored by the U.S. Forest Service, St. George, Utah, 1-5 March 2004.
12. Carter, R. 2003. Botanizing the Coastal Plain of Georgia. Invited paper presented in research seminar series sponsored by *Sigma Xi* at the Coastal Plain Experiment Station, University of Georgia, Tifton, 18 December 2003.
13. Bryson, C.T. and R. Carter. 2003. Biology of pathways for invasive weeds. *Invasive Plants in Natural and Managed Systems: Linking Science and Management* at 7th International Conference on the Ecology and Management of Alien Plant Invasions. Abstracts:13.
14. Lynn, B.A., R. Carter and J.T. Baxter. 2003. Phytochemical investigation of *Rumex hastatulus* and *Rumex acetosella*. Georgia J. Sci. 61(1):29 (abstract).
15. Bryson, C.T. and R. Carter. 2003. Reproductive potential and control strategies for deeprooted sedge (*Cyperus entrieanus*). Proc. Weed Sci. Soc. Am. 43:13-14 (abstract).
16. Carter, R. 2003. What to do with an unknown specimen: preparation and storage of vouchers. Proceedings, Southern Weed Science Society, Volume 56 (abstract 214). Invited paper presented at Invasive Weeds Symposium co-sponsored by U.S. Fish & Wildlife Service and SWSS at the Annual Meeting of the SWSS, Houston, Texas, 28-29 January 2003.

Name (Last, First, MI) Elder, John, F., Jr.
Rank and Academic Discipline: Professor, Genetics
Degrees Earned and Institution: Ph.D. Virginia Polytechnical Inst. & State University M.S. Virginia Polytechnical Inst. & State University B.S./B.A. Virginia Polytechnical Inst. & State University
Semester Work Load: 12 classroom contact hours plus service and professional duties.
Courses Taught: BIOL 1010 Introduction to Biology: The Evolution and Diversity of Life BIOL 1020L Introduction to Biology Laboratory: Biodiversity BIOL 1030 Introductory Biology – Non-Majors BIOL 1040 Introductory Biology Laboratory BIOL 1060 Marine Biology BIOL 2010 Introductory Biology – Majors BIOL 3200/5200 Introductory Genetics BIOL 4580/6580 Molecular Genetics BIOL 4590 Directed Study in Genetics BIOL 4900 Senior Seminar BIOL 7010 Conservation Biology of Fishes BIOL 7000 Introduction to Research BIOL 7900 Graduate Seminar PERS 2103 Bioethics
Workload will not change with new program.
Scholarship and Publication Record (past five years only):
Publications: 1. Manning, T., Strickland, S., Feldman, A., Umberger, T., Lovinggood, D., Coulibay, M., Elder, J.F., Nobel, L. 2003. Infrared studies of Suwannee River humic substances: Evidence of chlorination of humics in saltwater. <i>Florida Scientist</i> , 66: 253-266. 2. Mackiewicz, M., A. Tatarenkov, A. Perry, J.R. Martin, J.F. Elder, Jr., D.L. Bechler, and John C. Avise. 2006. Microsatellite documentation of outcrossing between inbred laboratory strains of the self-fertilizing mangrove killifish (<i>Kryptolebias marmoratus</i>). <i>J. Hered.</i> 97: 508-513. 3. Laughlin T.F., J.R. Bidwell, N. Cooper and J.F. Elder. 2005. Recent Applications of Molecular Genetic Methods in Population Structure and Ecotoxicology. In: S.G. Pandalai (ed.), <i>Recent Research Developments in Ecology</i> . Transworld Research, Kerala, India.3(2005): 29-54. 4. M.R. Doeringsfeld, I.J. Schlosser, J.F. Elder, & D.P. Evenson. 2004. Phenotypic Consequences of Genetic Variation in a Gynogenetic Complex of <i>Phoxinus eos-neogaeus</i> Clonal Fish (Pisces: Cyprinidae) Inhabiting a Heterogeneous Environment. <i>Evolution</i> 58(6): 1261-1273.
Grants: 1. Conservation Genetics of Two Bass Species (Genus <i>Micropterus</i>) That Exist in Geographically Disjunct Populations VSU Center for Applied Research (CAR) 2007. \$1,000 2. VSU Faculty Research Grant. <i>Evolution of the MHC I Gene Family in the World's Only Known Selfing Hermaphroditic Vertebrate Kryptolebias marmoratus</i> . 2006. \$1,000 3. VSU Center for Applied Research. <i>The Role of Habitat and Gender in the Determination of Genetically Diverse Populations of the Mangrove Killifish</i> . 2006. \$1,500 4. Georgia Department of Natural Resources. <i>Verification of a putative hybrid between the federally endangered Georgia endemic <i>Baptisia arachnifera</i> and the native <i>Baptisia lecontei</i> at the Lake Louise Field Station, Lowndes County, GA</i> . 2006. \$1,500. 5. Louis Brown Visiting Scholar Program: Valdosta State University. Application to support Dr. Joanne Kent to teach systematics and to develop genetic assays for collapsed Georgia Blue Crab (<i>Callinectes sapidissimus</i>) fishery populations. International Programs, Valdosta State University. \$36,000.

6. National Science Foundation: Nanotechnology across the undergraduate curriculum.. Collaborative proposal submitted with: T. Manning (Directing P.I.), C. Barnbaum, L. Chamberlin, J. Nienow. June 2003 \$100,000.

Presentations:

1. Brian Ring, John F. Elder, and David L. Bechler. 2008. *Kryptolebias marmoratus*, the mangrove rivulus, as a model organism for research. Conference on the Ecological and Evolutionary Ethology of Fishes, 29 June-3 July 2008. Boston University, Boston, MA
2. Johnson, GT, JF Elder, DL Bechler and K Luke. 2007. The effects of hybridization on the MHC gene complex of two separate clonal lineages of the selfing hermaphroditic fish, *Kryptolebias marmoratus*. Southeastern Ecology and Evolution Conference. University of Central Florida.
3. Johnson, GT, JF Elder, DL Bechler and K Luke. 2007. The effects of hybridization on the MHC gene complex of two separate clonal lineages of the selfing hermaphroditic fish, *Kryptolebias marmoratus*. Georgia Academy of Sciences.
4. Mackiewicz, M., A. Tatarenkov, A Perry, J.R. Martin, J.F. Elder, Jr., D.L. Bechler, and J.C. Avise. 2006. Microsatellite Documentation of outcrossing between inbred laboratory strains of the self-fertilizing mangrove killifish (*Kryptolebias marmoratus*). Abstract and presented paper. Conference on the Ecological and Evolutionary Ethology of Fishes, Soka University, Aliso Viejo, CA. 2006.
5. Bechler, D.L., J.F. Elder, A. Perry. 2005. Authentic population study for biology students using box turtles. Abstract and Presented Paper. Annual Meeting of Georgia Academy of Science, 26-27 March 2005, Gordon College, Barnesville, Georgia.
6. Bechler, D.L. and J.F. Elder. 2004. Interclonal hybridization and white morph production in *Rivulus marmoratus*. Biennial Conference on the Ecological and Evolutionary Ethology of Fishes. Abstract and Presented Paper. Saudarkrokur, Iceland, 18 August 2004.
7. Bechler, D.L. and J.F. Elder. 2004. Innate and learned behaviors in the clonal hermaphroditic fish *Rivulus marmoratus*. Abstract and Presented Paper. Georgia Academy of Sciences. Abstract and Presented Paper. March 2004. Berry College, Rome. GA.
8. Manning, T., K. Olsen, L. Hardin, L. Chamberlin, J. Nienow, J. Elder, M. Land, C. Hardeman, and E. Rhodes. Nanotechnology in the Physical Sciences. American Chemical Society Meeting. Abstract and Poster. Mar 2004. Anaheim, CA.
9. Harris, K., L. Hardin, M. Land, J. Parker, T. J. Manning, L. Chamberlin, J. Elder, J. Nienow, Single Wall Carbon Nanotubes and DNA: Searching For A Signal. SERMACS (South East regional Meeting of the Amer. Chem. Soc.) Abstract and Poster. Nov 2003. Atlanta, GA.

Name (Last, First, MI.) Fort, Timothy	
Rank and Academic Discipline: Assistant Professor, Neurophysiology	
Degrees Earned and Institution:	
Ph.D.	University of Rhode Island
B.Sc. (Hons)	University of Central Lancashire, England
Semester Work Load: 12 classroom contact hours plus service and professional duties.	
Courses Taught:	
BIOL 2651	Human Anatomy and Physiology I
BIOL 2652	Human Anatomy and Physiology II
BIOL 3450	Animal Physiology
BIOL 5450	Vertebrate Physiology
Workload will not change with new program.	
Scholarship and Publication Record (past five years only):	
Publications:	
1	Fort TJ, Brezina V, Miller MW. Regulation of the crab heartbeat by FMRFamide-like peptides: multiple interacting effects on center and periphery. <i>J Neurophysiol.</i> 2007, 98(5):2887-902.
2	Fort TJ, García-Crescioni K, Agricola HJ, Brezina V, Miller MW. Regulation of the crab heartbeat by crustacean cardioactive peptide (CCAP): central and peripheral actions. <i>J Neurophysiol.</i> 2007, 97(5):3407-20.
3	Stern E. Fort TJ, Miller MW, Penskin CS, Brezina V. Decoding modulation of the neuromuscular transform. <i>Neurocomputing.</i> 70. 1753-1758
4	Fort, TJ, Brezina, V and Miller, MW. Modulation of an Integrated Central Pattern Generator-Effector System: Dopaminergic regulation of cardiac Activity in the Blue Crab <i>Callinectes sapidus</i> . <i>J. Neurophysiol.</i> 92. 3455-3470.
Grants:	
1	Thermal Adaptation of Killifish: The Role of Calsequestrin in Glycolytic Skeletal Muscle. NSF-RUI. \$120,250. (Co-Principal Investigator)
2	Distribution of gamma amino butyric acid (GABA) -like immunoreactivity in the nervous system of the blue crab, <i>Callinectes sapidus</i> , 2007. VSU Faculty Research Grant, \$1,000
3	GABAergic regulation of the crustacean cardiac system: Modulation of an Integrated Central Pattern Generator-Effector System, 2007. VSU Center for Applied Research, \$1000
Presentations:	
1.	Society for Neuroscience. 2008 V. Brezina, E. Stern, A.W. Lifland, K. García-Crescioni, TJ. Fort, M.W. Miller, C.S. Penskin. Decoding of simple kernel-based spike train models.
2.	Society for Neuroscience. 2006 E. Stern, T.J. Fort, M.W. Miller, C.S. Penskin and V. Brezina. Decoding neurophysiological responses to arbitrary spike trains.
3.	Society for Neuroscience. 2005 TJ Fort, W-D Krenz, V Brezina and MW Miller. Modulation of the crab cardiac system: Assessment of synaptic transmission with controlled stimulus trains.
4.	Society for Neuroscience. 2004 TJ Fort, W-D Krenz, V Brezina and MW Miller. Modulation of the Crab Cardiac System: Assessment with Controlled Stimulus Trains.
5.	Society for Neuroscience. 2003 Fort, T.J., Brezina, V., Krenz, W.D. and Miller, M.W. Modulation of the <i>Callinectes sapidus</i> cardiac system by FMRFamide-related peptides.

Name (Last, First, MI.) Goddard, Russell H.
Rank and Academic Discipline: Associate Professor, Plant Cell Biology
Degrees Earned and Institution: Ph.D., 1990, Department of Botany, University of Texas, Austin, TX M.A., 1979, Department of Biology, University of South Florida B.S., 1976, Department of Botany, University of Massachusetts
Semester Work Load: 12 classroom contact hours plus service and professional duties.
Courses Taught: BIOL 2010 Unifying Principles in Biology BIOL 2230 General Botany BIOL 3400 Plant Physiology
Workload will not change with program change.
Scholarship and Publication Record (past five years only):
Publications: 1. Goddard, R.H. , 2004. Methods and Investigations in Basic Biology, 3e. Outernet Publishing. Eden Prairie, MN 150 pgs. ISBN: 1-58175-043-9
Grants: 1. NSF-MRI, DBI-0420454. 2004. National Science Foundation Major Research Instrumentation grant. "Aquisition of a Variable Pressure Scanning Electron Microscope for Interdisciplinary Research and Teaching," \$245,505.00. 2004 – 2007
Presentations: 1. Abadi, G., T. Potter, T. J. Manning, P. Groundwater, L. Noble, D. Phillips, R. Goddard , J. Purcell, A. G. Marshall, and C. Nilson. 2007. Electron microscope studies of the marine bacteria correlated with bryostatin production. Southeastern Regional Meeting of the American Chemical Society, Greenville, North Carolina. 2. Carter, R., R.H. Goddard , T.M. Webster, J.T. Flanders, A.S. Culpepper and T.L. Grey. 2006. Do mourning doves disperse seeds of tropical spiderwort? Proceedings of the 38 th Annual Meeting of the American Peanut Research and Education Society, Savannah, Georgia. Abstract 117. 3. Konda, C., R.H. Goddard , and L. de la Garza. 2007. Controlled potential and controlled current techniques for semiconductor electrodeposition, Southeastern Regional Meeting of the American Chemical Society, Greenville, North Carolina. 4. Lockhart, P. M.; Osiro, S. B.; Goddard, R. H. ; and de la Garza, L. 2007. Cathodic electrodeposition of semiconductor Thin Films. Georgia Academy of Sciences, Georgia Journal of Science 65, 37.

Name (Last, First, MI.) Grove, Theresa, J.
Rank and Academic Discipline: Assistant Professor, Comparative Physiology of Fishes
Degrees Earned and Institution: Ph.D. University of Maine M.S. University of Maine B.A. Washington University
Semester Work Load: 12 classroom contact hours plus service and professional duties. Courses Taught: BIOL 2010 Unifying Principles of Biology BIOL 3450 Animal Physiology BIOL 3800 Invertebrate Zoology BIOL 4010 Special Topics: Protein Biochemistry BIOL 4500 Cell Biology
Workload will not change with new program.
Scholarship and Publication Record (past five years only): Publications: 1. Grove, T.J. , L.A. McFadden, P.B. Chase and T.S. Moerland. (2005) Effects of temperature, ionic strength on the function of myosin from a eurythermal fish, <i>Fundulus heteroclitus</i> . <i>Journal of Muscle Research Motility</i> . 26: 191-197. 2. Grove, T.J. , K.A. Puckett, N.M. Brunet, G. Mihajlovic, L.A. McFadden, P. Xiong, S. von Molnar, T.S. Moerland and P.B. Chase. (2005) Packaging actomyosin-based biomolecular motor-driven devices for nano-actuator applications. <i>IEEE Transactions on Advanced Packaging</i> . 28: 556-563. 3. Grove, T.J. and B.D. Sidell. (2004) Fatty acyl CoA synthetase from Antarctic notothenioid fishes may influence substrate specificity of fat oxidation. <i>Comparative Biochemistry and Physiology B</i> . 139: 53-63. 4. Grove, T.J. , J.W. Hendrickson and B.D. Sidell. (2004) Two species of Antarctic icefishes (genus <i>Champscephalus</i>) share a common genetic lesion leading to the loss of myoglobin expression. <i>Polar Biology</i> . 27: 579-585. Grants: 1. A Model System for Induced Hypothermia: Ultrastructure and Troponin Function in a Eurythermal Fish, American Heart Association, (2004), \$98,585 2. Amino Acid Sequence Determination of the Calcium-Binding Protein Calsequestrin in Cold Adapted Antarctic Fishes. VSU Faculty Research Grant, (2006), \$1,000 3. Structure-Function Relationships during Temperature Changes in the Calcium Binding protein Calsequestrin. Faculty Development Travel Grant, (2007), \$750 4. Identification of the Calcium-Binding Protein Calsequestrin in <i>Fundulus heteroclitus</i> , Faculty Research Grant, (2007), \$1,000 5. The Intertidal Fish <i>Fundulus heteroclitus</i> as a Model System for Induced Hypothermia, VSU Ctr Applied Research, (2007), \$1,000 6. RUI: Thermal Adaptation of Killifish: The Role of Calsequestrin in Glycolytic Skeletal Muscle, National Science Foundation, (2008), \$322,194 Presentations: 1. Bailey, B.E., R.C. Harris, G.G. Hoffman, T.J. Grove . 2008. Structure-function relationships during temperature changes in the calcium binding protein calsequestrin. Society of Integrative and Comparative Biology, San Antonio, TX. (Poster) 2. Grove, T.J. 2005. Environmental and Physiological Factors Affecting Myosin Activity from Glycolytic Muscle of the Intertidal Killifish <i>Fundulus heteroclitus</i> . University of Alaska, Fairbanks. (Invited lecture) 3. Grove, T.J. and T.S. Moerland. 2005. Sequencing and over-expression of troponin C, T and I from cardiac muscle of a eurythermal teleost <i>Fundulus heteroclitus</i> . Experimental Biology, San Diego, CA. (Poster) 4. Grove, T.J. , L.A. McFadden, P.B. Chase and T.S. Moerland. 2004. Characterization of myosin from <i>Fundulus heteroclitus</i> by <i>in vitro</i> motility assay. Society of Integrative and Comparative Biology, New Orleans, LA. (Poster)

5. **Grove, T.J., J.W. Hendrickson and B.D. Sidell. 2004. Pattern of cardiac myoglobin expression among all known species of Antarctic icefishes. Society of Integrative and Comparative Biology, New Orleans, LA. (Poster)**

Name (Last, First, MI.) Jones, Leslie
Rank and Academic Discipline: Associate Professor, Science Education
Degrees Earned and Institution: Ph.D. Ohio State University M.A. Ohio State University M.S. University of New Hampshire A.B. Mount Holyoke College
Semester Work Load: 12 classroom contact hours plus service and professional duties. Courses Taught: BIOL 1010 Introduction to Biology BIOL 1020 Biodiversity Lab BIOL 4900 Senior Seminar SCI 3000 Science for Early Childhood Education Teachers SCI 3103 Natural History for Middle School Teachers ISCI 2001 Life and Earth Science for Early Childhood Education Teachers Workload will not change with new program.
Scholarship and Publication Record (past five years only): Publications: <ol style="list-style-type: none"> 1. Jones, L. 2005. Science in the interest of social justice: untangling the biological realities of race and gender, In: <i>Teaching Inclusively: Diversity and Faculty Development</i>. M. Oullet, Ed. New Forums Press. 2. Jones, L.S. & Reiss, M. (Eds.) 2007. <i>Teaching about Scientific Origins: Taking Account of Creationism</i>. Book Accepted for Publication in Counterpoints: Studies in the Postmodern Theory of Education. S.R.Steinberg & J.L. Kinchloe (Series Eds.) New York: Peter Lang Publishing, Inc. 3. Jones, L.S. (2005) Untangling Biological Reality from the Social Construction of Race and Gender. In <i>Teaching Inclusively: Diversity and Faculty Development</i>. M.Oulett (Ed.) Stillwater, OK: New Forums Press. 4. Jones, L.S. and Reiss, M. J. (2007). Cultural authority and the polarized nature of the evolution/creationism controversy. In Jones, L.S. & M. J. Reiss, (Eds.) <i>Teaching about Scientific Origins: Taking Account of Creationism</i>. New York: Peter Lang. 5. Jones, L.S. (2007). Teaching for understanding rather than expectation of belief. In Jones, L.S. & M.J. Reiss, (Eds.) <i>Teaching about Scientific Origins: Taking Account of Creationism</i>. New York: Peter Lang. Grants: Presentations: <ol style="list-style-type: none"> 1. Enhancing GPS Science with Environmental Education Environmental Education Alliance of Georgia, Atlanta, Georgia - 2006 With: Heather Brasell & Kathi Murray, Valdosta State University 2. The Evolution/Creation Controversy: New Approaches to an Old Problem National Association for Research in Science Teaching, San Francisco, CA - 2006 With: Glen Branch, NCSE; Leila Amiri, Univ S Florida and Others 3. Deciphering the Evolution/Creation Controversy: Theoretical Attempts to Untangle Differing Epistemologies Division C – Section 4 Science Structured Poster Session at the AERA Conference 2006 With: Glen Branch, NCSE; Leila Amiri, Univ S. Florida; and Others 4. Scientific Literacy – The “Missing Link” in the Evolution/Creationism Controversy GET LIT: Wiregrass Literacy Festival - Invited Session, Valdosta, GA 2006 With: Christine James, VSU Dept of Philosophy Barry Golden, Florida State Univeresity Milton West, First Christian Church, Valdosta 5. We’re Looking “Over the White Cliffs of Dover” Delaware for the Next Iteration of Creationism

Southeastern Association of Science Teacher Educators October 7, 2006 With: Barry Golden & Wilbert Butler, Florida State Univ

6. We Need More than Standards to Convince Them to Teach Evolution Southeastern Association of Science Teacher Educators October 7, 2006 With: Leila Amiri & Samantha Fowler, Univ South Florida
7. Enhancing Teacher Education with Support from *Project Learning Tree* School Science & Mathematics Association, Missoula, Montana October 26,2006
8. Patterns in Nature: The Beauty of Intrinsic Relationships between Mathematics and Science Annual Meeting of the School Science & Mathematics Association, Missoula, Montana October 28, 2006 With: Peggy Moch, Valdosta State University

Name (Last, First, MI.) Kang, Jonghoon
Rank and Academic Discipline: Assistant Professor, Cell Biology
Degrees Earned and Institution: Ph.D. University of Texas Medical Branch M. Sc. POSTECH, Korea B. Sc. Yonsei University, Korea
Semester Work Load: 12 classroom contact hours plus service and professional duties. Courses Taught: BIOL 2010 Unifying Principles of Biology Workload will not change with new program.
Scholarship and Publication Record (past five years only): Publications: <ol style="list-style-type: none"> 1. Kang J, Lee MS, Copland JA 3rd, Luxon BA, Gorenstein DG. Combinatorial selection of a single stranded DNA thioaptamer targeting TGF-beta1 protein. <i>Bioorg Med Chem Lett.</i> 2008 Mar 15;18(6):1835-9. 2. Kang J, Samuels DC. The evidence that the DNC (SLC25A19) is not the mitochondrial deoxyribonucleotide carrier. <i>Mitochondrion.</i> 2008 Mar;8(2):103-8. 3. Kang J, Lee MS, Gorenstein DG. Magnesium ion is an effective inhibitor of the binding of Escherichia coli to heparin. <i>J Microbiol Methods.</i> 2007 Dec;71(3):340-2. 4. Kang J, Martins AM. The strong correlation between alkaline phosphatase activity and cell viability. <i>Cell Biol Int.</i> 2008 Jan;32(1):163-4. 5. Kang J, Warren AS. Thermodynamic analysis of additivity between the heavy and light chains in affinity maturation of an antibody. <i>Mol Immunol.</i> 2008 Jan;45(1):304-5. 6. Gwak YS, Kang J, Leem JW, Hulsebosch CE. Spinal AMPA receptor inhibition attenuates mechanical allodynia and neuronal hyperexcitability following spinal cord injury in rats. <i>J Neurosci Res.</i> 2007 Aug 15;85(11):2352-9. 7. Kang J, Lee MS, Watowich SJ, Gorenstein DG. Combinatorial selection of a RNA thioaptamer that binds to Venezuelan equine encephalitis virus capsid protein. <i>FEBS Lett.</i> 2007 May 29;581(13):2497-502. 8. Kang J, Warren AS. Enthalpy-entropy compensation in the transition of a monospecific antibody towards antigen-binding promiscuity. <i>Mol Immunol.</i> 2007 Jul;44(14):3623-4. 9. Kang J, Tseng TT. Analysis of S-adenosylmethionine binding to Afsk, a protein kinase from Streptomyces coelicolor. <i>FEMS Microbiol Lett.</i> 2007 Jun;271(1):1-2. 10. Kang J, Lee MS, Gorenstein DG. Application of RNase in the purification of RNA-binding proteins. <i>Anal Biochem.</i> 2007 Jun 1;365(1):147-8. 11. Kang J, Lee MS, Gorenstein DG. Characterization of heparin-living bacteria interactions by chemiluminescence electrophoretic mobility shift assay. <i>Anal Biochem.</i> 2007 Apr 15;363(2):312-4. 12. Kang J. Application of a cooled charge-coupled device (CCD) camera for the detection of chemiluminescence signal. <i>Biologicals.</i> 2007 Jun;35(3):217. 13. Kang J, Lee MS, Gorenstein DG. Chemiluminescence-based electrophoretic mobility shift assay of heparin-protein interactions. <i>Anal Biochem.</i> 2006 Feb 1;349(1):156-8. 14. Kang J, Lee MS, Watowich SJ, Gorenstein DG. Chemiluminescence-based electrophoretic mobility shift assay of RNA-protein interactions: application to binding of viral capsid proteins to RNA. <i>J Virol Methods.</i> 2006 Feb;131(2):155-9. 15. Kang J, Lee MS, Gorenstein DG. Quantitative analysis of chemiluminescence signals using a cooled charge-coupled device camera. <i>Anal Biochem.</i> 2005 Oct 1;345(1):66-71. 16. Kang J, Lee MS, Gorenstein DG. The enhancement of PCR amplification of a random sequence DNA library by DMSO and betaine: application to in vitro combinatorial selection of aptamers. <i>J Biochem Biophys Methods.</i> 2005 Aug 31;64(2):147-51.
Grants: None
Presentations: <ol style="list-style-type: none"> 1. J. Kang, E.L. Ezell, S.H. Khan, B.S. Kaphalia, D.E. Volk, M.J. Quast, K.V. Soman, B.A. Luxon and G.A. Ansari. Metabonomic Analysis of Hepatic Steatosis by 1-D NMR Spectroscopy and

Name (Last, First, MI.) Lockhart, Jack M.
Rank and Academic Discipline: Professor, Zoology, Parasitology
Degrees Earned and Institution: Ph.D. – 1996, The University of Georgia, Veterinary Parasitology M.S. – 1992, The University of Arkansas, Zoology B.S./B.A. – 1989, Hendrix College, Biology
Semester Work Load: 12 classroom contact hours plus service and professional duties.
Courses Taught: BIOL 1020 Biodiversity Laboratory BIOL 1040 Organismal Biology Laboratory BIOL 2010 Introductory Biology for Majors BIOL 2270 General Zoology BIOL 2651 Human Anatomy and Physiology I BIOL 2652 Human Anatomy and Physiology II BIOL 3870 Parasitology BIOL 4010 Special Topics in Biology II – Wildlife Biology BIOL 4300 Comparative Vertebrate Anatomy BIOL 4840 Laboratory Practicum II BIOL 4900 Senior Seminar BIOL 4950 Directed Study BIOL 6010 Special Topics in Biology II – Wildlife Biology
Workload will not change with new program
Scholarship and Publication Record (past five years only):
Publications: <ol style="list-style-type: none"> 1. Yabsley, M.J., Dugan, V.G., Stallknecht, D.E., Little, S.E., Lockhart, J.M., Dawson, J.E., W.R. Davidson, W.R. 2003. Evaluation of a prototype <i>Ehrlichia chaffeensis</i> surveillance system using white-tailed deer (<i>Odocoileus virginianus</i>) as natural sentinels. <i>Vector Borne and Zoonotic Diseases</i> 3:195-207. 2. J.M. Lockhart. 2007. <i>Gnathostoma procyonis</i> from South Georgia and North Florida Racoons. <i>Journal of Parasitology</i>. 93:1533-1536. 3. Colleen M. McDonough, J. Mitchell Lockhart, and W.J. Loughry. 2007. Population Dynamics of Nine-Banded Armadillos: Insights from a Removal Experiment. <i>Southeastern Naturalist</i>. 6(3): 381-392. 4. Lockhart, J.M., G. Lee, J. Turco, and L. Chamberlin. 2008. <i>Salmonella</i> from gopher tortoises (<i>Gopherus polyphemus</i>) in south Georgia. <i>Journal of Wildlife Diseases</i> (in press).
Grants: <ol style="list-style-type: none"> 1. Lockhart, J.M. 2003. Serologic and PCR analysis of raccoon tissues for the presence of <i>Trypanosoma cruzi</i>. Valdosta State University, Faculty Research Grant. \$900 2. Lockhart, J.M. 2005. Gopher tortoise demographic study at Moody Air Force Base, Georgia. Department of Defense. \$114,332 3. Lockhart, J.M. 2005. Rickettsial agents in wild mammals of south Georgia and north Florida. Valdosta State University, Faculty Research Grant. \$1000 4. Lockhart, J.M. 2006. Canine distemper virus in wild mammals of south Georgia and north Florida. Valdosta State University, Faculty Research Grant. \$1000 5. Lockhart, J.M. 2007. Ecology of bobcat diseases in south Georgia. Valdosta State University, Faculty Research Grant. \$1000 6. Lockhart, J.M., and D. Ingram. 2007. Effects of commercial poultry operations on diseases in wild turkeys in southwest Georgia. Graduate Faculty Development Grant, Valdosta State University. \$300
Presentations: <ol style="list-style-type: none"> 1. Partin, C.N., J. M. Lockhart, and J. Wedincamp, Jr (presenter). 2003. Survey of the ectoparasites of the white-tailed deer (<i>Odocoileus virginianus</i>) in southeastern Georgia. Eightieth Annual Meeting of the Georgia Academy of Science. Reinhardt College, Waleska, Georgia, March 21-22, 2003. 2. Lockhart, J.M. 2004. Initial disease studies of mesomammalian predators of bobwhite-quail.

- Annual Fall Meeting of the Georgia Chapter of the Wildlife Society. Flinchum's Phoenix, The University of Georgia, Athens, Georgia. September 14-15, 2004.
3. Cox, K.A., and **J.M. Lockhart**. 2005. Canine distemper virus in southwest Georgia raccoons. Eighty Second Annual Meeting of the Georgia Academy of Science. Gordon College, Barnesville, Georgia. April 1-2, 2005.
 4. Waters, B., and **J.M. Lockhart**. 2005. *Trypanosoma cruzi* in southwest Georgia raccoons. Eighty Second Annual Meeting of the Georgia Academy of Science. Gordon College, Barnesville, Georgia. April 1-2, 2005.
 5. Gillis, J.L., and **J.M. Lockhart**. 2005. *Trypanosoma cruzi* in southwest Georgia opossums. Eighty Second Annual Meeting of the Georgia Academy of Science. Gordon College, Barnesville, Georgia. April 1-2, 2005.
 6. Mederos, D.I., J.F. Elder, G. Lee, and **J.M. Lockhart**. 2005. Population genetics of gopher tortoises at Moody Air Force Base, Georgia. Eighty Second Annual Meeting of the Georgia Academy of Science. Gordon College, Barnesville, Georgia. April 1-2, 2005.
 7. **Lockhart, J.M.**, and G. Lee. 2006. Gopher tortoise studies at Moody Air Force Base, Georgia. 28th Annual Gopher Tortoise Council Meeting. Valdosta State University, Valdosta, Georgia, October 26-29 2006.
 8. Ingram, D.R., D.L. Miller, C.A. Baldwin, and **J.M. Lockhart**. 2007. Detection of viral antigens for WNV and SLE by rt-PCR in wild turkeys (*Meleagris gallopavo*) from South Georgia. Southeastern Association of Fish and Wildlife Agencies. Charleston, West Virginia.
 9. Ingram, D.R., D.L. Miller, C.A. Baldwin, and **J.M. Lockhart**. 2007. Preliminary findings of viral antigen detection for MNV, EEE, SLE, and AI in tissues from wild turkeys (*Meleagris gallopavo*) in south Georgia. Wildlife Disease Association. YMCA of the Rockies, Estes Park, Colorado.
 10. **Lockhart, J.M.**, and G. Lee. 2007. *Mycoplasma* and *Salmonella* from gopher tortoises from Moody Air Force Base. Eighty Fourth Annual Meeting of the Georgia Academy of Science. Albany State University, Albany, Georgia.
 11. **Lockhart, J.M.** 2007. Prevalence of *Gnathostoma procyonis* (Nematoda: Gnathostomidae) in raccoons in north Florida and south Georgia. Eighty Fourth Annual Meeting of the Georgia Academy of Science. Albany State University, Albany, Georgia.
 12. Ingram, D., **J.M. Lockhart**, D. Miller, and C. Baldwin. 2007. Effects of commercial poultry operations on diseases in wild turkeys in southwest Georgia. Eighty Fourth Annual Meeting of the Georgia Academy of Science.
 13. McDonough, C.M., **J.M. Lockhart**, and W.J. Loughry. 2008. Population dynamics of nine-banded armadillos (*Dasypus novemcinctus*): Insights from a removal experiment. Georgia Academy of Science/Florida Academy of Science. Jacksonville, Florida. March 14-15, 2008.

Name (Last, First, MI.) Loughry, William J.
Rank and Academic Discipline: Professor, Animal Behavior
Degrees Earned and Institution: Ph.D.---Animal Behavior, University of California, Davis, 1987 B.S---Biology, University of Pittsburgh, 1980
Semester Work Load: 12 classroom contact hours plus service and professional duties. Courses Taught: BIOL 1020L Biodiversity Lab BIOL 2652 Human Anatomy and Physiology II BIOL 4600 Evolution BIOL 4650 Animal Behavior BIOL 7010 Special Topics in Ecology and Evolution
Workload will not change with new program
Scholarship and Publication Record (past five years only): Publications: 1 McDonough, C. M., Loughry, W. J. 2003. Armadillos (Dasypodidae). In <i>Grzimek's Animal Life Encyclopedia</i> . (M. Hutchins, ed.). Thomson Gale, Farmington Hills, MI, Volume 13 (Mammals II): 181-192. 2 McDonough, C. M., Loughry, W. J. 2005. Impacts of land management practices on a population of nine-banded armadillos in northern Florida. <i>Wildlife Society Bulletin</i> . In press. 3 McDonough, C. M., Loughry, W. J. Armadillos. 2005. In: <i>Encyclopedia of Mammals</i> , 3rd edition, (D. W. Macdonald, Ed.). Brown Reference Press, London, in press. 4 Loughry, W. J., Prodöhl, P. A., McDonough, C. M. 2005. The inadequacy of observation: understanding armadillo biology with molecular markers. In: <i>Recent Research Developments in Ecology</i> , (S. G. Pandalai, Ed.). Transworld Research Network, Kerala, India, In press. 5 Colleen M. McDonough, J. Mitchell Lockhart, W.J. Loughry. 2007. Population Dynamics of Nine-Banded Armadillos: Insights from a Removal Experiment. <i>Southeastern Naturalist</i> . 6(3): 381-392. 6 Vizcaíno, S. F., Loughry, W. J. (Eds.). 2008. <i>The Biology of the Xenarthra</i> . University Press of Florida, Gainesville, 370 pp. 7 Vizcaíno, S. F., Loughry, W. J. 2008. Xenarthran research: past, present, and future. In: <i>The Biology of the Xenarthra</i> (S. F. Vizcaíno & W. J. Loughry, eds.). University Press of Florida, Gainesville, pp. 1-7. 8 McDonough, C. M., Loughry, W. J. 2008. Behavioral ecology of armadillos. In: <i>The Biology of the Xenarthra</i> (S. F. Vizcaíno & W. J. Loughry, eds.). University Press of Florida, Gainesville, pp. 281-293. 9 Prodöhl, P. A., Loughry, W. J., McDonough, C. M. 2008. Genes and demes: population genetic analyses of the Xenarthra. In: <i>The Biology of the Xenarthra</i> (S. F. Vizcaíno & W. J. Loughry, eds.). University Press of Florida, Gainesville, pp. 205-211. 10 Loughry, W. J., Truman, R. W., McDonough, C. M., Tilak, M-K., Garnier, S. & Delsuc, F. 2009. Is leprosy spreading among nine-banded armadillos in the southeastern United States? <i>Journal of Wildlife Diseases</i> , in press. 11. Loughry, W. J. & McDonough, C. M. <i>The Nine-Banded Armadillo</i> . Book contract signed with the University of Oklahoma Press for their Animal Natural History series; manuscript delivery tentatively scheduled for December, 2009. Grants: 1 National Geographic Society, 2005. "Spread of an Ancient Plague: Leprosy in Nine-Banded Armadillos". \$14,960. 2 VSU Faculty Research Award, 2005. "Armadillo Biology". \$525. 3 VSU Center for Applied Research, Applied aspects of armadillo ecology. 2006. \$1500.00. 4 Time allocation in nine-banded armadillos. 2006. Faculty Research Award, Valdosta State University \$1000. 5 Identification of bait attractants and repellents of nine-banded armadillos (<i>Dasypus novemcinctus</i>) through bioassays Center for Applied Research, 2006. Valdosta State University \$1500 6 VSU Faculty Development Award, Paper presentation at the joint Georgia/Florida Academy of Science meeting, Jacksonville, FL, 2008, \$450.

Presentations:

1. **Loughry, W. J.** Is leprosy spreading among nine-banded armadillos in the southeastern United States? Joint meeting of the Georgia/Florida Academy of Science, Jacksonville, FL, March, 2008.
2. Colleen M. McDonough, Lockhart, J. M. and **Loughry, W. J.** Population dynamics of nine-banded armadillos: insights from a removal experiment. Joint meeting of the Georgia/Florida Academy of Science, Jacksonville, FL, March, 2008.

Name (Last, First, MI.) McDonough, Colleen, M.

Rank and Academic Discipline: Professor, Animal Behavior

Degrees Earned and Institution:

Ph.D. University of California at Davis, 1992

B.S./B.A. University of Wisconsin, Madison, 1980

Semester Work Load: 12 classroom contact hours plus service and professional duties.

Courses Taught:

BIOL 1020 Biodiversity Laboratory

BIOL 1040 Organismal Biology Laboratory

BIOL 2270 General Zoology

BIOL 2651 Human Anatomy and Physiology I

BIOL 3300 Ecology

Workload will not change with new program.

Scholarship and Publication Record (past five years only):

Publications:

- 1 **McDonough, C. M., Loughry, W. J.** 2003. Armadillos (Dasypodidae). In *Grzimek's Animal Life Encyclopedia*. (M. Hutchins, ed.). Thomson Gale, Farmington Hills, MI, Volume 13 (Mammals II): 181-192.
- 2 **McDonough, C. M., Loughry, W. J.** 2005. Impacts of land management practices on a population of nine-banded armadillos in northern Florida. *Wildlife Society Bulletin*. 33: 1198-1209.
- 3 Loughry, W. J., Prodöhl, P. A., **McDonough, C. M.** 2005. The inadequacy of observation: understanding armadillo biology with molecular markers. In: *Recent Research Developments in Ecology*, (S. G. Pandalai, Ed.). Transworld Research Network, Kerala, India, pg. 55-73.
- 4 McDonough, C. M. & Loughry, W. J. 2006. Armadillos. In: *The New Encyclopedia of Mammals*, 2nd edition (D. W. Macdonald, ed.). Brown Reference Group, London, pp. 124-127.
- 5 Colleen M. **McDonough**, J. Mitchell Lockhart, and W.J. Loughry. 2007. Population Dynamics of Nine-Banded Armadillos: Insights from a Removal Experiment. *Southeastern Naturalist*. 6(3): 381-392.
- 6 **McDonough, Colleen M.** and W. J. Loughry. 2008. Behavioral Ecology of Armadillos. In: *The Biology of Xenarthra* Edited by Sergio F. Vizcaino and W. J. Loughry, University Press of Florida, Gainesville, pgs 281-293.
- 7 Prodöhl, P. A., W. J. Loughry, and C. M. **McDonough**. 2008. Genes and Demes: Population genetic analyses of the xenarthrans. In: *The Biology of Xenarthra* Edited by Sergio F. Vizcaino and W. J. Loughry, University Press of Florida, Gainesville, pgs 205-211.
- 8 Loughry, W. J., Richard T. Truman, Colleen M. **McDonough**, Marie-Ka Tilak, Stephane Garnier and Frederic Delsuc. 2009. Is leprosy spreading among nine-banded armadillos in the southeastern United States? *Journal of Wildlife Diseases*, *in press*.

Grants:

- 1 The Center for Field Research (Earthwatch), 2003. entitled, "Behavioral ecology of nine-banded armadillos" (W. J. Loughry, co-PI), \$8580.
- 2 Valdosta State University, Faculty Research Award, 2004. \$1000
- 3 National Geographic Society, 2005. Spread of an Ancient Plague: Leprosy in Nine-Banded Armadillos, \$14,960.
- 4 Valdosta State University, Faculty Research Award, 2005. Understanding armadillo biology with molecular markers, \$515.
- 5 Center for Applied Research 2006. ARSG Proposal entitled, Applied aspects of armadillo ecology, \$1500.
- 6 Valdosta State University, Faculty Research Award, 2006. Species Interactions and Burrow Behavior of Armadillos in Southeastern Georgia, \$1000.
- 7 Valdosta State University, Faculty Research Award, 2007. Population Dynamics of Nine-Banded Armadillos: Insights from a Removal Experiment, \$780.
- 8 Center for Applied Research 2007. ARSG Proposal entitled, Identification of bait attractants and repellents of nine-banded armadillos (*Dasypus novemcinctus*) through bioassays, \$1500.

Presentations:

- 1 **McDonough**, Colleen M., J. Mitchell Lockhart, and W. J. Loughry. 2008. Population Dynamics of Nine-Banded Armadillos: Insights from a Removal Experiment. Joint meeting of Georgia Academy of Science and Florida Academy of Science, March 14-15, Jacksonville, FL.

Name (Last, First, MI.) Nienow, James, A.
Rank and Academic Discipline: Professor, Biology
Degrees Earned and Institution: Ph.D. Biology, Florida State University M.A. Mathematics, University of California, San Diego B.A. Mathematics, University of California, San Diego
Semester Work Load: 12 classroom contact hours plus service and professional duties.
Courses Taught: BIOL 1010 Introduction to Biology: The Evolution and Diversity of Life BIOL 1020L Biodiversity Lab BIOL 1030 Introduction to Biology: Organismal Biology BIOL 1040L Organismal Biology Lab BIOL 2010 Introductory Biology for Majors BIOL 2652 Human Anatomy and Physiology II BIOL 2900 Microbiology in Health and Disease BIOL 3000 Biostatistics BIOL 3550 Phycology BIOL 4950 Directed Study BIOL 4900 Senior Seminar SCI 3000 Science for Early Childhood Education Majors
Workload will not change with new program.
Scholarship and Publication Record (past five years only): Publications: <ol style="list-style-type: none"> 1 G.I. Matsumoto, J. A. Nienow, E.I. Friedmann, E. Sekiya, R. Ocampo-Friedmann,. 2004. Biogeochemical features of lipids in endolithic microbial communities from the Ross Desert (McMurdo Dry Valleys) in Antarctica. <i>Cellular and Molecular Biology</i> 50: 591-604. 2 J. M. North, T.J. Manning, J. Purcell, J. A. Nienow, E. Olsen, N.S. Dalal, K. Riddle, J. Ekman. 2004. Exfoliated Graphite and Ozonated Single-Wall Nanotubes for Encapsulation of the Single-Molecule Magnet Mn12. <i>Carbon</i> 42:199-203. 3 T.J. Manning, J. Purcell, J. A. Nienow, E. Olsen, K. Riddle, J. Ekman. 2005. A comparison of diatoms, exfoliated graphite, single wall nanotubes, mutiwall nanotubes and silica for the synthesis of the nanomagnet Mn12. <i>J. Nanoscience and Nanotechnology</i> 5: 167-174. 4 T.J. Manning,, G. Abadi, J.A. Nienow, E. Lochner, K. Riddle, D. Phillips, and D. A. Kring. 2006. A meteor impact in the classroom? A micro and nano view of the thermite reaction. <i>The Chemical Educator</i>. 11:271-280. 5 A. K. S. K. Prasad and J. A. Nienow. 2006. The centric diatom genus <i>Cyclotella</i> (Stephanodiscaceae: Bacillariophyta) from Florida Bay, USA, with special reference to <i>C. choctawhatcheeana</i> Prasad and <i>C. desikacharyi</i>, a new marine species related to the <i>C. striata</i> complex. <i>Phycologia</i>. 45: 127-141. 6 A. K. S. K. Prasad, J. A. Nienow and K.A. Riddle. 2006. A light and scanning electron microscopical study of the diatom <i>Pseudauliscus peruvianus</i> living in the northern Gulf of Mexico, with comments on lectotypification and systematics. <i>Nova Hedwigia</i>. 130:225-244. 7 J. Turco and J. A. Nienow. 2007. Enumeration and identification of selected bacteria in water samples from the Alapahoochee River system. <i>Georgia Journal of Science</i> 65: 126-142. 8 A.K.S.K. Prasad and J. A. Nienow. 2008. The marine diatom <i>Pseudauliscus radiatus</i> (Eupodiscaceae), living in Gulf coast of Florida waters: lectotypification, systematics, distribution and validation of generic name <i>Mastodiscus</i>. <i>Nova Hedwigia Beihefte</i> 133:251-267. 9 H. J Sun, J. A. Nienow, and C. P. McKay. In press. Antarctic endolithic microbial ecosystems In: P. T. Doran, W. B. Lyons, & D. M. McKnight, editors. <i>Life in Antarctic Deserts and other Cold Dry Environments: Astrobiological Analogues</i>. Cambridge University Press, Astrobiology Series 10 J. A. Nienow. Extremophiles: Dry Environments. In press. <i>Encyclopedia of Microbiology</i>. 3rd Edition. Elsevier.
Grants: <ol style="list-style-type: none"> 1 NSF Chemistry Program. <i>Nanotechnology Across The Undergraduate Chemistry Curriculum</i>. Co-PI. \$100,000 (2003).

- 2 VSU Faculty Research Grant. *Photosynthetic capacity of photosynthetic microorganisms in Death Valley, California*. \$900.00 (2003).
- 3 VSU Faculty Development Grant. *17th North American Diatom Symposium*. \$500 (2003).
- 4 EPA's Section 319(h) Fy01 Nonpoint source Implementation Grant Program. *The Watershed Restoration Action Strategy Development and Implementation in the Alapahoochee River Watershed*. Co-I. \$42,920 (2004).
- 5 NSF's Major Research Instrumentation program. *Acquisition of a variable-pressure scanning electron microscope for interdisciplinary research and teaching*. Co-PI. \$245,505 (2004).
- 6 NASA-Ames Joint Research Initiative. *Photosynthetic microbial communities in extreme dry environments*. (2004) \$20,000.
- 7 VSU Faculty Research Grant. *Microbialites from Pavilion Lake, Canada*. \$1000. (2004)
- 8 VSU Faculty Research Grant. *A comparison of the diatom flora of the Gulf and Atlantic coasts of Florida and Georgia*. \$1000 (2005).
- 9 VSU Faculty Research Grant. *Adaptations to desiccation and water stress in desert microalgae* \$1000 (2006).
- 10 VSU Faculty Development Grant. NASA-Ames's Spaceward Bound Mojave. \$500 (2007).
- 11 VSU Faculty Research Grant. Towards a phylogenetic analysis of the marine members of the diatom genus *Cyclotella*. \$1,000 (2008).

Presentations:

- 1 North American Diatom Symposium, Islamorada, Florida. Presentation--A comparison of diatoms, exfoliated graphite, single wall nanotubes, multiwall nanotubes and silica for the synthesis of the nanomagnet Mn₁₂, by T. J. Manning, J. Purcell, N. Dalal, M. North, J. A. Nienow, E. Olsen, K. Riddle, and J. Ekman. 2003.
- 2 North American Diatom Symposium, Islamorada, Florida. Presentation--New records of centric diatoms from Florida and Georgia, with special reference to the Thalassiosiraceae, by A. K. S. K Prasad and J. A. Nienow. 2003.
- 3 American Society for Microbiology, Washington, DC. Presentation-- Ecology of Subaerial Algae: Photosynthetic Capacity as a Function of Relative Humidity in a Naturally-occurring Association, by J. A. Nienow and C. P. McKay. 2003.
- 4 Georgia Academy of Science, Reinhardt College, Waleska, Georgia. Presentation--Seasonal changes in the phytoplankton of Lake Louise, by P. R. Jones, S. W. Burroughs, T. E. Nienow and J. A. Nienow. 2003.
- 5 Georgia Academy of Science, Reinhardt College, Waleska, Georgia. Presentation--High voltage discharge in the production of organic salts, by E. Olsen, T. Manning, J. A. Nienow, and L. Chamberlin. 2003.
- 6 Georgia Academy of Science, Reinhardt College, Waleska, Georgia. Presentation--Impact of size on the magnetochemistry of Mn₁₂, by J. Purcell, T. Manning, M. North, N. Dalal, J. A. Nienow, and K. Riddle. 2003.
- 7 American Society for Microbiology, New Orleans. Presentation--Seasonal changes in sulfur cycle bacteria in a kraft-process paper mill, by L. Chamberlin, J. A. Nienow, and V. Holton. 2004.
- 8 Georgia Academy of Science, Berry College, Georgia. Presentation--From diatoms to nanotechnology--investigations of parameters that influence formation of siliceous nanospheres, by E. A. Olsen, A. Sanford, J. A. Nienow, and T. Manning. 2004.
- 9 Georgia Academy of Science, Berry College, Georgia. Presentation--Phytochemical investigations of *Sargassum fluitans* and *Rumex hastatulus* -- with J. D. Mann, J. R. Carter, J. A. Nienow, J. T. Baxter. 2004.
- 10 American Chemical Society, California. Presentation--Nanotechnology in the physical sciences, by T. F. Manning, K. Olsen, L. Hardin, L. Chamberlin, J. Elder, M. Land, C. Hardeman, E. Rhodes, and J. A. Nienow. 2004.
- 11 Georgia Academy of Science, Gordon College, Barnesville, Georgia. Presentation--Effects of nano-sized particles of copper oxide (CuO) on *Selenastrum capricornutum* (Chlorophyta), by A. E. Sanford, J. A. Nienow, and T. J. Manning. 2005.
- 12 International Botanical Congress, Vienna, Austria. Presentation--The marine diatom genus *Pseudauliscus* Schmidt: a light and electron microscopical study of the diatoms *P. peruvianus* and *P. radiatus* from the northeastern Gulf of Mexico, with comments on lectotypication and systematics, by A. K. S. K. Prasad and J. A. Nienow. 2005.
- 13 Southeast/61st Southwest Regional Meeting, Memphis, Tennessee. Presentation--The Thermite Reaction: Introducing Nanotechnology and Material Science in an Undergraduate Class, by T. J. Manning, G. Abadi, J. Nienow, K. Riddle, E. Lochner, D. Phillips, D. Kring. 2005.
- 14 Winter Conference on Medicinal and Bioorganic Chemistry, Clearwater Beach, Florida.

- Presentation--The Hunt for Bryostatin: Is *Bugula nertina* simply a Colonization Surface for Marine Bacteria, by T. J. Manning, G. Abadi, R. Loftis, J. Geddings, P. Albritton, W. Palen, K. Jones, N. Kasali, T. Irwin, N. Richardson, J. Smith, S. Berilonson, J. Rudloe, L. Noble, P. Groundwater, I. Barton, J. Bryant, D. Phillips, **J. Nienow**, and A. Asadchev. 2006.
- 15 Georgia Academy of Science, Georgia Perimeter College. Presentation--A light and scanning electron microscope study of the marine diatom *Neohuttonia reichardtii* (Grunow) Kuntze (Triceratiaceae), by A. K. S. K. Prasad and **J. A. Nienow**. 2006.
 - 16 Georgia Academy of Science, Georgia Perimeter College, Lawrenceville, Georgia. Presentation--Effect and pH on survival and growth of Enterococci, by .Sanford, J. Turco, and **J. A. Nienow**. 2006.
 - 17 ACS National Meeting, Atlanta, Georgia. Presentation--Tracking bacterial growth in a bryostatin microbial broth, by J. Geddings, T. Irwin, T. Manning, G. Abadi, D. Phillips, **J. Nienow**, L. Noble, and P. Groundwater. 2006.
 - 18 Conference on the Ecological and Evolutionary Ethology of Fishes, Soka University, Aliso Viejo, CA. Presentation-- The role of a brown diatom and a blue-green alga on the culture and emersion of the mangrove killifish *Kryptolebias (Rivulus) marmoratus*, by D. Shockley, M. J. Sanders, D. L. Bechler, **J. A. Nienow**, and D. S. Taylor. 2006
 - 19 Southeast Regional Meeting of the American Chemical Society, Augusta, Georgia, Presentation--*Artificial surfaces for the colonization of marine bacteria*, by T. J. Manning, G. Abadi, R. Loftis, J. Geddings, P. Albritton, W. Palen, K. Jones, N. Kasali, T. Irwin, N. Richardson, J. Smith, S. Berilonson, J. Rudloe, L. Noble, P. Groundwater, I. Barton, J. Bryant, D. Phillips, **J. Nienow**, and A. Asadchev. 2006.
 - 20 Southeastern Phycological Colloquy, Dauphin Island, Alabama. Presentation--A light and scanning electron microscopical study of the benthic diatom genus *Plagiogramma* Greville (Bacillariophyta) from coastal marine habitats of Florida, Georgia and Alabama, by **J. A. Nienow** and A. K. S. K. Prasad. 2007.
 - 21 Southeastern Regional Meeting of the American Chemical Society, Greenville, North Carolina. Presentation--Electron microscope studies of the marine bacteria correlated with bryostatin production, by G. Abadi, **J. Nienow**, T. Potter, T. J. Manning, P. Groundwater, L. Noble, D. Phillips, R. Goddard, J. Purcell, A. G. Marshall, and C. Nilson. 2007.
 - 22 Georgia Academy of Science, Albany, Georgia. Presentation--Investigations of cell wall structure and ease of chlorophyll extraction in sub-aerial microalgae by J.Griner, J. Trull, and **J. A. Nienow**. 2007.
 - 23 Georgia Academy of Science, Albany, Georgia. Presentation--Aspects of Lake Fertilization, by **J. A. Nienow**. 2007.
 - 24 Joint meeting of the Georgia Academy of Science and the Florida Academy of Sciences, Jacksonville, Florida. Presentation-- A phylogenetic comparison of aquaporin gene sequences in subaerial green algae by J. D. Griner, **J. A. Nienow**, and T. J. Grove 2008.
 - 25 Choctawhatchee Bay Symposium, Destin, Florida. Presentation--Long-term observations on phytoplankton blooms in the northeastern Gulf of Mexico, by A. K. S. K. Prasad and **J. A. Nienow**. 2008.

Name (Last, First, MI.) Ring, Brian
Rank and Academic Discipline: Assistant Professor, Molecular Genetics and Developmental Biology
Degrees Earned and Institution: Ph.D. Florida State University B.S. Florida State University
Semester Work Load: 12 classroom contact hours plus service and professional duties. Courses Taught: BIOL 2010 Unifying Principles of Biology BIOL 4350 Developmental Biology BIOL 4580 Molecular Genetics BIOL 1951 Honors Biology: Cellular Processes Workload will not change with new program.
Scholarship and Publication Record (past five years only): Publications: 1. Chiu H, Ring BC , Sorrentino RP, Kalamarz M, Garza D, Govind S. dUbc9 negatively regulates the Toll-NF-kappaB pathways in larval hematopoiesis and drosomycin activation in Drosophila. Dev Biol. 2005, 288(1):60-72. Grants: 1. Genetic Transformation of the mangrove killifish VSU Faculty Research Grant, FY 2007\$1,000 Presentations: 1. Figueroa, D., Amarillo, I.E., Ring, B. , Strobel, C., Lawrence, C.J., Bass, H.W. Constructing a cytogenetic map of maize core bin markers in oat addition lines using sorghum BACs as FISH probes. 48th Annual Maize Genetics Conference Program and Abstracts. p. 71. 2006

Name (Last, First, MI.) Smith, Michael E.
Rank and Academic Discipline: Professor, Limnology, Invertebrate Biology
Degrees Earned and Institution: Ph.D. University of Wisconsin-Milwaukee M.S. University of Wisconsin-Milwaukee B.S./B.A. Washington State University
Semester Work Load: 12 classroom contact hours plus service and professional duties. Courses Taught: BIOL 2651 Human Anatomy and Physiology I BIOL 2652 Human Anatomy and Physiology II BIOL 3870 Parasitology BIOL 4700 Limnology Workload will not change with new program.
Scholarship and Publication Record (past five years only): Publications: Grants: Presentations:

Name (Last, First, MI.) Turco, Jenifer

Rank and Academic Discipline: Professor, Microbiology, Bacteriology, Virology

Degrees Earned and Institution:

Ph.D., Medical Microbiology, West Virginia University

M.S., Biology, West Virginia University

B.S., Biology, Marywood College

Semester Work Load: 12 classroom contact hours plus service and professional duties.

Courses Taught:

BIOL 1030 Introduction to Biology: Organismal Biology

BIOL 2900 Microbiology in Health and Disease

BIOL 3100 Microbiology

BIOL 4510 Virology

BIOL 4900 Senior Seminar

BIOL 4950 Directed Study

BIOL 5100 Microbiology

BIOL 6510 Virology

BIOL 7900 Graduate Seminar

Workload will not change with new program.

Scholarship and Publication Record (past five years only):

Publications:

- 1 **Turco, J.** 2005 *Rickettsia prowazekii*-infected, cultured human fibroblasts. Microbe Library (American Society for Microbiology) [Online]. Available: <http://www.microbelibrary.org>.
- 2 **Turco, J.** and J.A. Nienow. 2007. Enumeration and identification of selected bacteria in water samples from the Alapahoochee River system. Georgia J. Sci. 65: 126-142.
- 3 Barnett, J., D. L. Bechler, C. Denizman, J. Grable, J. Nienow, W. Tietjen, **J. Turco**, and G. L. Wood. 2007. Water quality and aquatic habitat assessment for the Alapahoochee watershed. Nonpoint Source Management Program, Section 319(h) Report. Submitted to the Environmental Protection Division, Department of Natural Resources, Georgia, USA.
- 4 Lockhart, J.M., G. Lee, **J. Turco**, and L. Chamberlin. 2008. *Salmonella* from gopher tortoises (*Gopherus polyphemus*) in south Georgia. Journal of Wildlife Diseases (in press).

Grants:

- 1 VSU Faculty Research Grant; "Role of hydrogen peroxide and apoptosis in cytokine-mediated alterations in *Rickettsia prowazekii*-host cell interactions"; 2003, \$900
- 2 VSU Faculty Research Grant; "Role of STAT1, NF- κ B, and IRF-1 transcription factors in cytokine-mediated alterations in *Rickettsia prowazekii*-host cell interactions"; 2005. \$990
- 3 VSU Faculty Research Grant, "Phosphorylation of STAT1 in untreated and gamma interferon-treated mouse L929 cells infected with interferon-sensitive or interferon-resistant *Rickettsia prowazekii* strains"; 2006. \$1,000
- 4 VSU Faculty Development Grant for travel to give a presentation at the Georgia Academy of Science meeting in Lawrenceville, GA, 2006 \$355
- 5 Effect of cytokines on the interactions between *Rickettsia typhi* and cultured host cells, VSU Faculty Research Grant, 2007, \$1000

Presentations:

- 1 **Turco, J.**, and M. Byrd. 2004. History under the microscope: Creative collaboration between biology and history. VSU Interdisciplinary Conference, Feb. 26-28.
- 2 **Turco, J.**, and M. Byrd. 2006. Clyde Eugene Connell Jr.: Outstanding Georgia Citizen, Scientist, and Educator. Georgia Journal of Science 64: 51
1. Sanford, A., **J. Turco**, and J. Nienow. 2006. Effect of pH on survival and growth of enterococci. Georgia Journal of Science 64: 19.

5.5 Expected responsibilities of faculty in this program.

Each of the faculty listed in the previous section will teach courses in this program, most will teach upper-level biology electives specific to their discipline. Only one course, BIOL 1200 The History of The Life Sciences, is unique to the B.A. Biology degree, all other courses are taught in support of the existing B.S. Biology degree. It is expected that courses will have a mix of students seeking either the B.A. Biology or B.S. Biology degree.

5.6. Need for additional faculty.

Additional faculty will be required only to meet increased enrollment in the biology program at VSU and will be hired as necessary. The new hires will be required to have a Ph.D. in Biology or a related discipline.

6. Outstanding programs in three other institutions.

I. Duke University

Responsible Official:

Daniel P. Kiehart, Ph.D., Chair
Department of Biology
(919) 613-8157

Degree: A.B. Biology

The A.B. Biology degree at Duke University is very similar to the proposed B.A. Biology degree at VSU: one year of freshman biology, one year of introductory chemistry, two math courses, genetics, ecology & evolution, and a structure/function courses comprise the core. From there students go on to take three upper-level biology electives and a capstone course in biology.

II. Amherst College

Responsible Official:

Patrick L. Williamson, Ph.D., Chair
Department of Biology
(413) 542-2143

Degree: B.A. Biology

The B.A. Biology degree at Duke University is very similar to the proposed B. A. Biology degree at VSU. The most notable exception is the requirement for one physics course at Amherst. The Amherst degree consists of one year of freshman biology, one math course, one year of introductory chemistry, a physics course, and five biology electives from three separate areas to include topics such as genetics, developmental biology, and ecology and evolution.

III. University of Richmond

Responsible Official:

Malcolm Hill, Ph.D., Chair
Department of Biology
(804) 287-6628

Degree: B.A. Biology

The B.A. Biology degree at the University of Richmond is very similar to the proposed B.A. Biology degree at VSU with the notable exception that organic chemistry is required at the University of Richmond. The Richmond degree consists of one freshman biology course, one introductory chemistry course, one core course in each theme area of genetics, evolution and ecology, and organismal biology followed by five upper-level biology electives.

IV. Summary of features that make these programs exceptional:

Each of the degrees listed above are offered at prestigious schools and all have the same characteristic of a minimal set of 5-6 core biology courses followed by 3-5 upper level biology electives. The math requirements are minimal and each selects either chemistry or physics for an extra science concentration. This arrangement allows students to obtain a firm foundation in biological principles while at the same time allowing them the flexibility to choose elective courses of interest to their educational goals.

7. Inventory of pertinent library resources

Valdosta State University - Odum Library			
Print Title Counts as of September, 2008			
Subject	Call Number Range	Title Count	Volume Count
Natural History	QH1-QH278.5	811	908
Biology (General)	QH301-QH705.5	1,980	2,383
Botany	QK1-QK989	1,837	2,065
Zoology	QL1-QL991	2,768	3,190
Human Anatomy	QM1-QM695.99	266	322
Physiology	QP1-QP981	1,850	2,216
Microbiology	QR1-QR502.9	449	614
	Totals	9,961	11,698

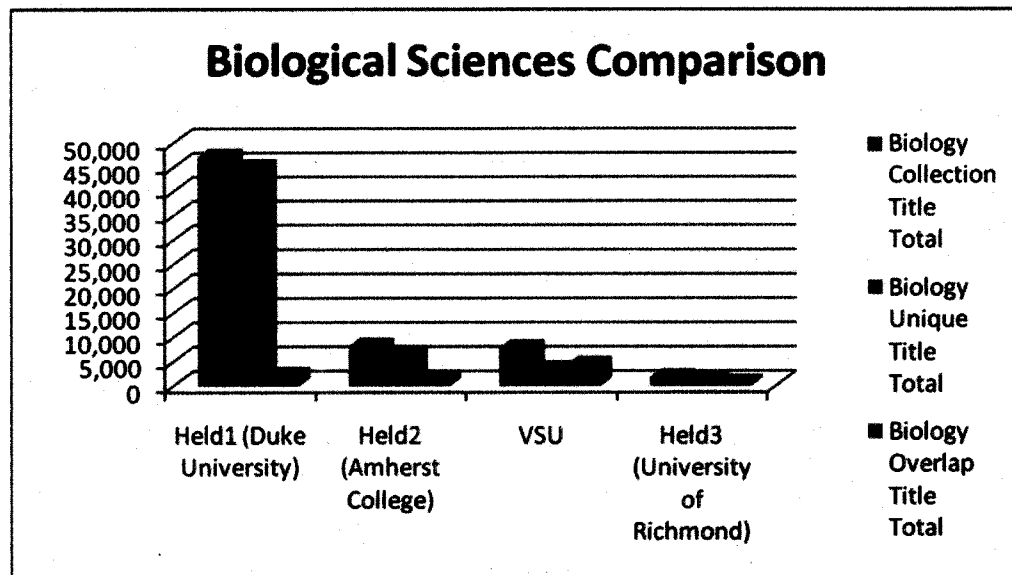
Valdosta State University - Odum Library				
Electronic Book Counts as of September, 2008				
Subject	Call Number Range	Ebrary Titles	NetLibrary Titles	Totals
Natural History	QH1-QH278.5	125	86	211
Biology (General)	QH301-QH705.5	289	136	425
Botany	QK1-QK989	77	49	126
Zoology	QL1-QL991	175	106	281
Human Anatomy	QM1-QM695.99	11	2	13
Physiology	QP1-QP981	258	175	433
Microbiology	QR1-QR502.9	85	34	119
	Totals	1,020	588	1,608

Valdosta State University - Odum Library		
September, 2008		
<u>Database</u>	<u>Producer</u>	<u>Source</u>
<u>Academic Search Complete</u>	EBSCO	GALILEO
<u>Agricola</u>	EBSCO	GALILEO
<u>Alt HealthWatch</u>	EBSCO	GALILEO
<u>ArticleFirst</u>	OCLC	GALILEO
<u>Chemical Abstracts - SciFinder Scholar</u> - Expanded electronic version of Chemical Abstracts available only in Odum Library and Chemistry Computer Labs. Access restricted to one Valdosta State University user at a time.	CAS	VSU
<u>Biological Abstracts</u>	EBSCO	VSU
<u>Consumer Health Complete</u>	EBSCO	GALILEO
<u>Current Contents Connect</u>	ISI	GALILEO
<u>Dissertation Abstracts</u>	Proquest	GALILEO
<u>Environment Complete</u>	EBSCO	GALILEO
<u>Garden, Landscape & Horticulture Index</u>	EBSCO	GALILEO
<u>JSTOR (Arts & Sciences I, II, III & Biological Sciences & Ecology & Botany)</u>	JSTOR	VSU
<u>Medline with Full Text</u>	EBSCO	GALILEO
<u>PapersFirst</u>	OCLC	GALILEO
<u>ProceedingsFirst (conference proceedings)</u>	OCLC	GALILEO
<u>Research Library</u>	Proquest	GALILEO
<u>Science & Technology Collection</u>	EBSCO	GALILEO
<u>SKS WebSelect (SIRS Knowledge Source)</u>	Proquest	GALILEO
<u>State Academies of Science Abstracts</u>	SASA	VSU
<u>Zoological Record</u>	ISI	VSU

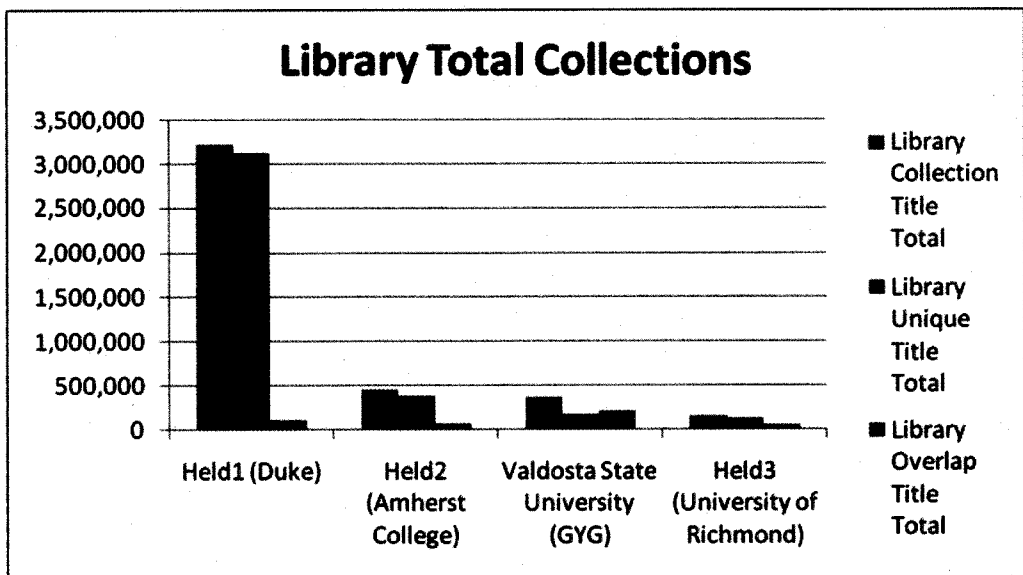
Valdosta State University - Odum Library	
September, 2008	
GALILEO Journal A-Z Find It	
Life Sciences - All Subcategories (1289)	
Andrology	24
Animal Physiology	32
Biochemistry	167
Bioinformatics	32
Biology	205
Biophysics	38
Biotechnology	70
Botany	90
Computational Biosciences	26
Cytology, Cell Biology	135
Entomology	31
Ethology	2
Evolutionary Studies	41
General and Others	364
Genetics	167
Genomics	33
Immunology	168
Limnology	10
Metabolism	37
Micro and Molecular Biology	207
Morphology	16
Ornithology	15
Palaentology	7
Taxonomy & Systematics	32
Toxicology	47
Virology	32
Zoology	93

Comparison with schools in section 6

Biological Sciences	Biology Collection Title Total	Biology Unique Title Total	Biology Overlap Title Total
Held1 (Duke University)	47,191	44,975	2,216
Held2 (Amherst College)	8,075	6,533	1,542
VSU	7,786	3,414	4,372
Held3 (University of Richmond)	1,750	1,136	614



Library Total Collection	Library Collection Title Total	Library Unique Title Total	Library Overlap Title Total
Held1 (Duke)	3,223,567	3,122,338	101,229
Held2 (Amherst College)	440,379	378,287	62,092
Valdosta State University (GYG)	361,247	156,963	204,284
Held3 (University of Richmond)	149,750	108,787	40,963



	Library Collection Title Total	Biology Collection Title Total	Biology Collection Percentage of Total Collection	Library Unique Title Total	Biology Unique Title Total	Biology Unique Collection Percentage of Total Collection	Library Overlap Title Total	Biology Overlap Title Total	Biology Overlap Collection Percentage of Total Collection
Held1 (Duke)	3,223,567	47,191	1.46%	3,122,338	44,975	1.44%	101,229	2,216	2.19%
Held2 (Amherst College)	440,379	8,075	1.83%	378,287	6,533	1.73%	62,092	1,542	2.48%
VSU Held3 (University of Richmond)	361,247	7,786	2.16%	156,963	3,414	2.18%	204,284	4,372	2.14%
	149,750	1,750	1.17%	108,787	1,136	1.04%	40,963	614	1.50%
3 Peer Libraries Total:	3,813,696	57,016	1.50%	3,609,412	52,644	1.46%	204,284	4,372	2.14%
All 4 Libraries Total:	4,174,943	64,802	1.55%	3,766,375	56,058	1.49%	408,568	8,744	2.14%

Duke University

Uniqueness	Totals	Unique	Overlap
BIOLOGY Duke, Amherst, Richmond Aggregate Total	3,813,696	3,609,412	204,284
Biological Sciences	47,191	44,975	2,216
Biological Sciences	47,191	44,975	2,216
Animal Behavior, Anatomy, Embryology	1,675	1,542	133
Biology, General	3,512	3,291	221
Birds	2,550	2,407	143
Botany, General	5,361	5,134	227
Botany, Specific Fields	4,741	4,512	229
Chordates - Vertebrates	107	97	10
Cytology	866	810	56
Ecology	1,975	1,883	92
Economic Biology	11	11	0
Fishes	1,131	1,081	50
Genetics	1,215	1,120	95
Invertebrates	4,858	4,668	190
Mammals	1,838	1,736	102
Microbiology	1,317	1,264	53
Microscopy	396	372	24
Natural History	7,381	7,157	224
Plant Anatomy	492	454	38
Plant Ecology	775	718	57
Plant Physiology	1,315	1,248	67
Reproduction & Life	601	573	28
Reptiles & Amphibians	786	746	40
Virology	65	60	5
Zoology, General	4,223	4,091	132

Amherst College

Uniqueness	Totals	Unique	Overlap
BIOLOGY Duke, Amherst, Richmond Aggregate Total	3,813,696	3,609,412	204,284
Hold by (Amherst) Total Collection	440,379	378,287	62,092
Biological Sciences	8,075	6,533	1,542
Animal Behavior, Anatomy, Embryology	452	349	103
Biology, General	969	762	207
Birds	462	388	74
Botany, General	563	430	133
Botany, Specific Fields	508	394	114
Chordates - Vertebrates	28	19	9
Cytology	272	217	55
Ecology	497	407	90
Economic Biology	5	4	1
Fishes	201	169	32
Genetics	462	369	93
Invertebrates	573	457	116
Mammals	475	408	67
Microbiology	165	147	18
Microscopy	79	64	15
Natural History	1,037	878	159
Plant Anatomy	122	87	35
Plant Ecology	143	120	23
Plant Physiology	298	250	48
Reproduction & Life	181	145	36
Reptiles & Amphibians	173	125	48
Virology	7	6	1
Zoology, General	403	338	65

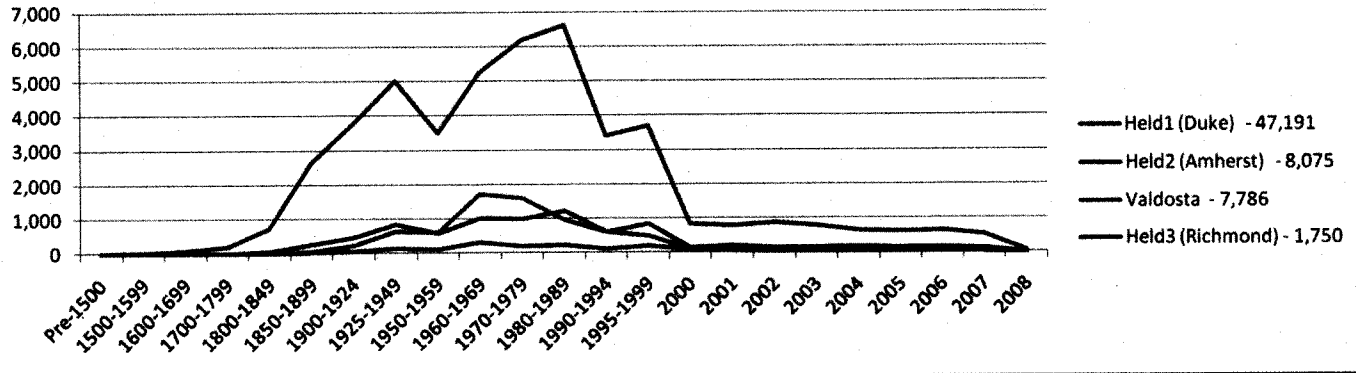
Valdosta State University

Uniqueness	Totals	Unique	Overlap
BIOLOGY Duke, Amherst, Richmond Aggregate Total	3,813,696	3,609,412	204,284
VALDOSTA STATE UNIV (GYG) Total	7,786	3,414	204,284
Biological Sciences	7,786	3,414	4,372
Animal Behavior, Anatomy, Embryology	578	274	304
Biology, General	755	230	525
Birds	456	222	234
Botany, General	684	286	398
Botany, Specific Fields	598	231	367
Chordates - Vertebrates	33	7	26
Cytology	173	45	128
Ecology	384	166	218
Economic Biology	2	1	1
Fishes	186	92	94
Genetics	304	86	218
Invertebrates	762	403	359
Mammals	479	273	206
Microbiology	168	88	80
Microscopy	72	31	41
Natural History	784	339	445
Plant Anatomy	118	35	83
Plant Ecology	117	30	87
Plant Physiology	183	45	138
Reproduction & Life	123	46	77
Reptiles & Amphibians	234	132	102
Virology	12	6	6
Zoology, General	581	346	235

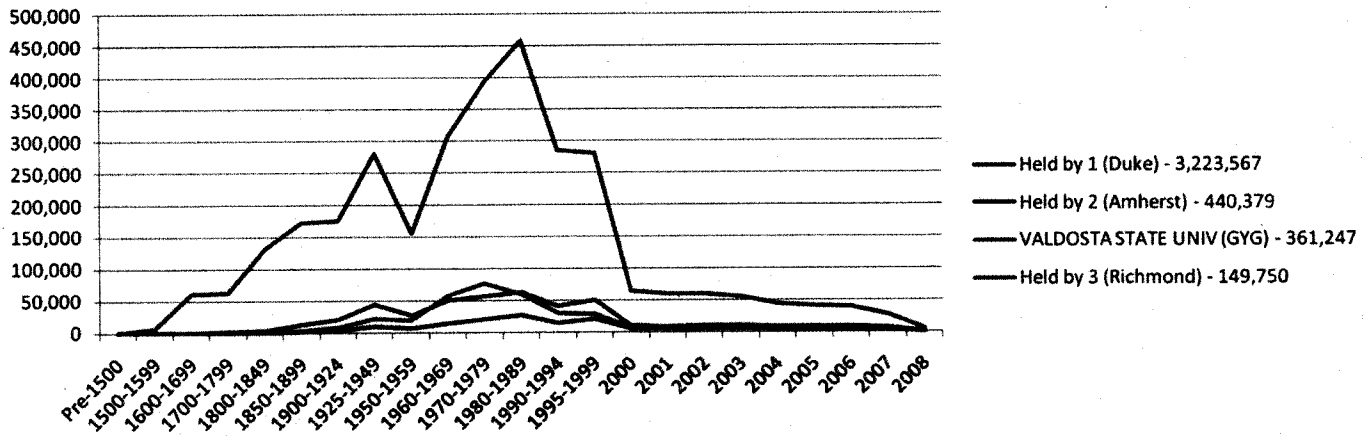
University of Richmond

Uniqueness	Totals	Unique	Overlap
BIOLOGY Duke, Amherst, Richmond Aggregate Total	3,813,696	3,609,412	204,284
Held by 1 (University of Richmond) total	12,759	108,787	40,963
Biological Sciences	1,750	1,136	614
Animal Behavior, Anatomy, Embryology	138	70	68
Biology, General	284	187	97
Birds	63	46	17
Botany, General	85	47	38
Botany, Specific Fields	61	37	24
Chordates - Vertebrates	12	5	7
Cytology	52	35	17
Ecology	109	73	36
Economic Biology	0	0	0
Fishes	35	23	12
Genetics	110	80	30
Invertebrates	130	77	53
Mammals	122	85	37
Microbiology	21	12	9
Microscopy	16	14	2
Natural History	234	172	62
Plant Anatomy	21	11	10
Plant Ecology	29	22	7
Plant Physiology	45	22	23
Reproduction & Life	59	46	13
Reptiles & Amphibians	34	20	14
Virology	1	1	0
Zoology, General	89	51	38

Biological Sciences Titles - Publication Date



Collection Title Totals - Publication Date



Publication Date	Held1 Duke		Held2 Amherst		Valdosta GYG		Held3 Richmond	
	Total Collection	Biological Sciences	Total Collection	Biological Sciences	Total Collection	Biological Sciences	Total Collection	Biological Sciences
Pre-1500	377	0	2	0	1	0	0	0
1500-1599	6,966	21	54	0	5	0	1	0
1600-1699	61,616	90	202	0	419	1	1	0
1700-1799	62,646	190	1,023	12	92	2	23	1
1800-1849	131,768	727	3,559	67	412	4	162	1
1850-1899	172,586	2,648	12,724	250	2,591	61	1,065	16
1900-1924	176,441	3,788	20,943	459	7,938	242	2,804	50
1925-1949	281,089	5,028	44,062	849	21,373	638	9,203	142
1950-1959	154,972	3,514	27,316	569	19,073	601	6,558	131
1960-1969	308,156	5,261	50,439	1,015	58,487	1,717	14,736	326
1970-1979	395,158	6,184	57,257	985	77,436	1,615	20,500	214
1980-1989	459,934	6,625	63,432	1,218	59,823	956	27,193	250
1990-1995	286,519	3,429	41,456	619	29,726	621	14,780	119
1995-1999	281,749	3,700	50,738	827	28,239	492	21,446	194
2000	65,351	852	9,734	159	6,661	130	4,915	79
2001	60,363	779	8,622	193	7,433	129	4,065	54
2002	59,524	861	8,911	150	8,672	127	4,213	28
2003	55,763	788	8,765	139	8,397	88	4,387	42
2004	43,525	633	7,837	162	7,688	114	4,010	35
2005	41,033	608	7,575	136	5,629	131	3,197	23
2006	40,256	629	7,594	143	4,678	59	3,636	23
2007	27,236	530	6,471	107	3,775	43	2,726	19
2008	4,402	61	774	9	311	1	99	3
Other	46,137	245	889	7	2,388	14	30	0
Totals:	3,223,567	47,191	440,379	8,075	361,247	7,786	149,750	1,750

As shown in the tables above, VSU has significant library holdings and electronic databases in the life sciences that are equal or better than the comparison institutions. Therefore, no additional library support is needed to support the proposed BA Biology.

8. Desired qualifications of students recruited and admitted to the program.

Students will be admitted into the degree program based upon the undergraduate admission standards of VSU in effect each term. However, special efforts will be made to recruit students interested in allied health careers. VSU has recently provided support for the Southwest Georgia Area Health Education Center (AHEC). Part of the duties assigned to AHEC is to recruit high school students into health careers that are underserved in rural areas such as south Georgia where VSU is located. The Department of Biology will work with the AHEC manager who resides at VSU in order to recruit students into the BA Biology degree program which is well suited to meet the needs of students wishing to pursue careers in the allied health sciences.

Approximately 39 % of the students majoring in biology at VSU are identified as ethnic minorities, and 57 % of the undergraduates are female. It is expected that a similar population of students will be recruited into this program in the future.

9. Facilities

With the opening of the new \$22.9 million Biology/Chemistry building in spring 2001, Valdosta State University has one of the most sophisticated life science facilities in South Georgia. The new state-of-the-art science building includes the following facilities in the Department of Biology, all connected to the Internet:

- 4 classrooms ranging in size from 48-96 seats.
- 14 teaching Laboratories.
- 2 auditoriums of 150 and 275 seats.
- A computer laboratory.
- 24 Research laboratory modules.
- A BSL3 level biohazard containment laboratory suite.
- Animal care facilities that meet National Institutes of Health (NIH) guidelines.
- An aquatic lab with an environmental chamber.
- A microscopy suite with electron microscopy capabilities.
- An herbarium specializing on Coastal Plain flora.
- 3 modern greenhouse units.
- 3 temperature controlled rooms.

10. Administration

The BA Biology degree will be housed in the Department of Biology within the College of Arts and Sciences at VSU. The Department Head of biology will be responsible for all course scheduling and staffing related to the degree.

11. Assessment

The effectiveness of this new program will be assessed by the number of students who successfully complete the degree. In addition, the graduation rates between the BA and BS Biology degrees will be compared, and it is expected that the BA Biology degree will have a higher graduation rate since there is a greater flexibility in course scheduling.

Learning outcomes for the students enrolled in the BA Biology degree will be assessed several separate ways. First, students will be given a benchmark exam devised by the faculty in the BIOL 1100 Freshman Seminar. This same exam will be given to students in the BIOL 4900 Senior Seminar as a method to determine value-added learning. In addition, the Major Fields Test for Biology will also be given in the Senior Seminar as a method to assess benchmark learning for the degree. Finally, there is a new ongoing curriculum assessment plan that will begin in spring 2009 whereby hidden assessments will be included in exams that will be used to determine learning outcomes on specific topics determined by the faculty.

12. Accreditation

VSU is accredited by the Southern Association of Colleges and Schools. The proposed BA Biology degree satisfies the standards set out in "The Principles of Accreditation" 2008 edition published by SACS. This program proposal specifically addresses the following section requirements of the guide published by SACS: Section 2.7.3 General Education Component, Section 3.3.1.1 Student learning outcomes, Section 3.5 Undergraduate Programs, Section 3.7 Faculty, Section 3.8 Library and Other Learning Resources, Section 3.10 Financial Resources and Section 3.11 Physical Resources.

13. Affirmative Action impact

The Department of Biology has a larger minority population among its majors than the population of undergraduates in the university as a whole, 39 % compared to 29 %, respectively. It is expected that this trend will continue and the new degree will comprise a significant proportion of the undergraduate minority population at VSU. Approximately 18 % of all VSU employees are identified as ethnic minorities (15 % African American, 3 % other), while at most 12 % of VSU faculty are identified as ethnic minorities (4 % African American, 8 % other). The Director for Equal Opportunity Programs/Multicultural Affairs also states that "As with all programs within the Biology Department, institutional recruitment activities will be conducted to attract eligible students including those from diverse backgrounds."

14. Degree inscription

The inscription on the student's diploma will read: Bachelor of Arts
Major: Biology

15. Fiscal and Enrollment Impact, and Estimated Budget

Narrative: No new faculty or staff or start-up costs will be required. Expenditures are based upon lab fees spent which is equal to revenue generated from the fees, so the net is zero. Total revenues from the program are related to additional tuition from increased enrollment. Budget justifications are below:

Line

- I.A.1. It is estimated that some students currently enrolled in the BS Biology degree will shift to the new BA Biology degree the first year with substantially more each year thereafter.
- I.A.2. Estimates are based upon 40 % of new biology freshman signing up for the BA Biology. Based upon the last seven years, a growth of 10 % is forecast for subsequent years.
- I.B.1. Estimates are based upon the current number of faculty teaching a full course load each semester for the following three years. No new positions are included.
- I.B.2. The only new course specific to the BA Biology degree is BIOL 1200, and larger sections with 100 students will be offered.
- I.C.2. Credit hours are calculated by each of the new majors listed in Section I.A.2 taking 11 hrs of biology courses their first year, and for years two and three the freshmen plus 75 % of the preceding year's class taking biology courses according to the schedule in Section 4.
- I.D. Estimates are based upon some students switching from the BS Biology degree the first two years along with a 30 % graduation rate for year 4.
- II.E. Costs are based upon lab fees of \$30/student/course. The number of students from section I.A. is divided by a fixed number of 750 enrolled majors overall to obtain a percentage of all biology majors who are enrolled in the BA Biology degree program. That percentage is then applied to an annual expenditure of \$120,000 of lab fees.
- III.A.3 The number of new students from section I.A.2 is multiplied by \$1598/semester for freshmen and 75 % retention of students in years 2 and 3.
- III.A.6 The same calculation as in section II.E.

FY_2010__ FY_2011 FY_2012__
 First Year Second Year Third Year

I. ENROLLMENT PROJECTIONS

(indicate basis for projections
 in narrative)

A. Student majors

1. Shifted from other programs	75	150	150
2. New to institution	130	143	157
Total Majors	205	293	307

B. Course sections satisfying program requirements

1. Previously existing	40	40	40
2. New	2	3	4
Total Program Course Sections	42	43	44

C. Credit Hours generated by those courses

1. Existing enrollments	6000	6000	6000
2. New enrollments	1170	1970	3236
Total Credit Hours	7170	7970	9236

D. Degrees awarded

10	20	60
(yr 2)	(yr 3)	(yr 4)

II. COSTS

	EFT	Dollars	EFT	Dollars	EFT	Dollars
A. Personnel--reassigned or existing positions						
1. Faculty	26	1,484,954	26	1,484,954	26	1,484,954
2. Part-time Fac.						
3. Grad. Assist.						
4. Administrators						
5. Support staff	2	41,079	2	41,079	2	41,079
6. Fringe benefits		436,631		436,631		436,631
7. Other personnel costs						

TOTAL EXISTING PERSONNEL COSTS 1,962,664 1,962,664 1,962,664

B. Personnel--new positions

1. Faculty						
2. Part-time Fac.						
3. Grad. Assist.						
4. Administrators						
5. Support staff						
6. Fringe benefits						
7. Other personnel costs						

TOTAL NEW PERSONNEL COSTS 0 0 0

	FIRST YEAR	SECOND YEAR	THIRD YEAR
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C. Start-up Costs (one-time expenses)

1. Library/learning resources			
2. Equipment			
3. Other ()			

D. Physical Facilities: construction or major renovation

TOTAL ONE-TIME COSTS 0 0 0

E. Operating Costs			
(recurring costs--base budget)			
1. Supplies/Expenses	<u>32,800</u>	<u>46,900</u>	<u>49,120</u>
2. Travel	_____	_____	_____
3. Equipment	_____	_____	_____
4. Library/learning resources	_____	_____	_____
5. Other (_____)	_____	_____	_____
TOTAL RECURRING COSTS	<u>32,800</u>	<u>46,900</u>	<u>49,120</u>
GRAND TOTAL COSTS	<u>32,400</u>	<u>46,900</u>	<u>49,120</u>

III. REVENUE SOURCES

A. Source of Funds			
1. Reallocation of existing funds	_____	_____	_____
2. New student workload	xxxxxxxxxxxx	xxxxxxxxxxxx	_____
3. New tuition	<u>415,480</u>	<u>768,638</u>	<u>1,156,153</u>
4. Federal funds	_____	_____	_____
5. Other grants	_____	_____	_____
6. Student fees	<u>32,800</u>	<u>46,900</u>	<u>49,120</u>
7. Other (_____)	_____	_____	_____
Subtotal	<u>448,280</u>	<u>815,538</u>	<u>1,205,273</u>
New state allocation requested	_____	_____	_____
GRAND TOTAL REVENUES	<u>448,280</u>	<u>815,538</u>	<u>1,205,273</u>
B. Nature of funds			
1. Base budget	_____	_____	_____
2. One-time funds	_____	_____	_____
GRAND TOTAL REVENUES	_____	_____	_____