

Agenda

**UWF Board of Trustees
Academic and Student Affairs Committee
Fort Walton Beach
8:30 a.m., Friday, February 20, 2004**

Roll call

Approve minutes of Nov. 7, 2003 committee meeting

Action items

- 1) Four academic degree programs seeking implementation
 - a. B.S. in Oceanography
 - b. M.S. in Environmental Sciences
 - c. M.S. in Administration
 - d. M.Ed. in reading

Other business

Adjournment

**UWF Board of Trustees
Academic and Student Affairs Committee
February 20, 2004**

Issue: Four academic degree programs

Proposed action: Approve

Background information:

The Division of Academic Affairs seeks approval to implement four academic degree programs. They are:

- B.S. in Oceanography. The request to explore and plan was approved in May 2003
- M.S. in Environmental Sciences. The request to explore and plan was approved in May 2003.
- M.S. in Administration. The request to explore and plan was approved in November 2003.
- M.Ed. in Reading. This is a conversion of an existing specialization to free-standing degree program status. The Academic and Student Affairs Committee at its November meeting approved combining the request to explore and plan and the request to implement for consideration at the February meeting.

All required reviews and signatures have been obtained, in accordance with the Board of Trustees' procedure to approve academic degree programs.

Supporting documentation: B.S. in Oceanography program proposal
M.S. in Environmental Sciences program proposal
M.S. in Administration program proposal
M.Ed. in Reading program proposal

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College of Arts & Sciences

NEW PROGRAM PROPOSAL

Bachelor of Science in Oceanography

A Distance-Learning Program

January 2004

Table of Contents

Request to Offer a New Program	1
I. Program Description	2
II. Institutional Mission	2
III. Planning Process and Timetable	3
IV. Assessment of Demand and Need.....	4
V. Curriculum.....	6
VI. UWF Capability.....	13
VII. Assessment of Impact on Programs Currently Offered	26
VIII. Community College Articulation	27
IX. Assessment of Applicable Accreditation Standards.....	28
X. Productivity	28
Table 1A. Number of Anticipated Majors from Potential Sources	32
Table 2. Faculty Participation in Proposed Degree Program by Fifth Year	33
Table 3. Costs for Proposed Program	35
Appendix. Publications and Research Activities of Key Faculty	36
XI. History.....	51

The University of West Florida
REQUEST TO OFFER A NEW DEGREE PROGRAM

College Requesting Program: Arts and Sciences

Department Requesting Program: Dept. of Environmental Studies AND Dept. of Biology

Academic Specialty or Field: Oceanography

Name of Program Requested: Bachelor of Science in Oceanography

Proposed Implementation Date: Fall 2004

Proposed Classification of Instruction Program (CIP) Code: 40.0607

The submission of this proposal constitutes a commitment by the Division of Academic Affairs, the appropriate College, and the Department that, if the proposal is approved, the necessary financial commitment and the criteria for establishing new programs have been met prior to the initiation of the program.

Approved for Submission to the UWF Board of Trustees:

_____ Vice President for Academic Affairs, Date _____

_____ President, Date _____

Indicate the dollar amounts appearing as totals for the first and fifth years of implementation as shown in the appropriate summary columns in New Program Table Three. Provide headcount and FTE estimates of majors for years 1 through 5. Headcount and FTE estimates should be identical to those in New Program Table One.

	Projected Total Estimated Costs <u>(from Table Three)</u>	Student HDCT / FTE <u>(from Table One)</u>
First Year of Implementation	\$ <u>43,560</u>	<u>16</u> / <u>12.0</u>
Second Year of Implementation		<u>36</u> / <u>27.0</u>
Third Year of Implementation		<u>45</u> / <u>33.75</u>
Fourth Year of Implementation		<u>54</u> / <u>40.5</u>
Fifth Year of Implementation	\$ <u>138,700</u>	<u>65</u> / <u>48.75</u>

I. PROGRAM DESCRIPTION

Describe the degree program under consideration, including its level, and emphases (including tracks or specializations).

The B.S. in Oceanography is designed to provide students with broad-based knowledge in biological, chemical, geological and physical oceanography. This 120-sh degree is based on collaboration between the Departments of Biology and Environmental Studies at UWF and will be offered via distance learning (DL). It will be a science-based program with a broad spectrum of science courses within the common prerequisites. There is sufficient expertise in the two departments involved to offer the majority of the core oceanography courses. For those few courses for which UWF lacks the appropriate expertise, we will contract the courses to personnel at the University of South Florida or Florida State University. There is only one track in this program.

The proposed program is being developed as a collaborative effort between Biology and Environmental Studies. It also engages at least eight other departments at UWF via the general studies requirements and common prerequisites. Thus, not only does this effort utilize faculty from a number of different sources on campus, but it will also provide significant income for all of those programs. This effort is in direct response to the needs of SOCNAV and NCPACE programs of the U.S. Navy and will be available internationally to Navy personnel. We submit this request to implement a distance learning B.S. in Oceanography for the following reasons: 1) this is clearly a degree that would be of significant service to the military; 2) the degree enjoys significant and enthusiastic support of SOCNAV and NCPACE administrators as a valuable and unique educational opportunity; 3) the degree has enormous student enrollment potential; 4) the B.S. in Oceanography can generate significant funding for involved units at UWF outside the mainstream of State support; and 5) this effort falls within an academic realm—environmental studies—that was identified as an “area of distinction” by the President’s Task Force for Undergraduate Program Review in 2003.

The details of the program are described in Section V (Curriculum).

II. INSTITUTIONAL MISSION

Is the proposed program listed on the current List of Proposed New Degree Programs for Exploration, Planning, and Implementation? How do the goals of the proposed program relate to the UWF mission statement as contained in the Partnership Strategic Plan?

The proposed Bachelor of Science in Oceanography is on the current list of proposed programs for exploration, planning, and implementation. The Academic and Student Affairs Committee of the UWF Board of Trustees authorized exploration of the program on May 24, 2003. The Program CCR was routed through the university and the Academic Council, and was approved by the Faculty Senate on December 12, 2003, and by the Provost December 19, 2003.

Demand for a B.S. in Oceanography is expected to be high among servicemen and – women deployed on ships or overseas, especially within the naval branches of the military. There is no such on-line B.S. in Oceanography program anywhere in the United States, and we feel that the potential for student enrollment is quite high. In 1997, it was estimated that perhaps 500 active local Navy personnel would be potential students for distance-learning programs. This

request to implement is the result of discussions held with UWF administrators, oceanographers at the University of South Florida, and U.S. Navy personnel. Several meetings were held with Directors of the U.S. Navy's Service Members Opportunities Colleges Program (SOCNAV) and the Navy College Program for Afloat College Education (NCPACE) to formulate UWF's participation in these efforts and to assess the desirability and value of specific offerings in providing educational opportunities for military personnel. Of all of the programs that were discussed as possible offerings by UWF, a proposed distance learning-based B.S. degree in Oceanography was most enthusiastically received and strongly supported by SOCNAV and NCPACE representatives. Not only was this offering considered a "natural" for Navy personnel, but also it was noted to be the only offering of its type within the Navy's educational matrix.

The goals of the program fall well within the framework goals of the university's mission as outlined in the Partnership Strategic Plan. Both the focus on environmental preservation (in this case, the marine and coastal environment) and the outreach to the community (in this case, members of the armed services) are integral components of the university's mission.

III. PLANNING PROCESS AND TIMETABLE

Describe the planning process leading up to submission of this proposal. Include a chronology of activities, listing UWF personnel directly involved and any external individuals who participated in planning. Provide a timetable of events for the implementation of the proposed program.

1997: In the Spring of 1997, the U.S. Navy met with UWF administrators to see if UWF might be interested in offering a B.S. program in Oceanography via distance-learning. As a result of these discussions, the then-Dean of the College of Science and Technology—Dr. Ranga Rao—approached Drs. Johan Liebens and Hilde Snoeckx (the latter holding a Ph.D. in Marine Geology) to develop a curriculum for such a program in Summer 1997. After meeting with Cdr. Diunizio at NAS Pensacola, various UWF personnel (including Kitty Fouché, Grady Morein, Sneed Collard, and Sharon Hunt), and oceanographers at the University of South Florida, the core of the presently proposed curriculum was developed in Fall 1997.

1998: When Klaus Meyer-Arendt was hired as department chair in Fall 1998, he was soon contacted by Navy personnel regarding the status of the distance-learning program in Oceanography. Dean Ranga Rao had endorsed the program and forwarded the proposal to the upper administration. The proposal apparently went no further.

2002: Then-interim dean of the College of Arts and Sciences (CAS) Wes Little and other UWF personnel met with SOCNAV officials, who were very interested in receiving distance-learning programs from UWF. At a subsequent meeting, the university proposed Maritime Studies and Oceanography as two potential programs. The military officials were enthusiastic about both.

2003: Because of the enthusiastic responses, the Departments of Biology and Environmental Studies embarked upon fine-tuning and updating the previously prepared proposal. The Board of Trustees approved the Request to Explore in May 2003, and Drs. Meyer-Arendt and Stewart spoke to various groups (including the CAS Council) about the merits and benefits of such a

program. The program CCR and several course CCRs were submitted, and they were routed through the university system (CAS Council, Academic Council, etc.). By December, all requisite signatures for the CCRs were in place. Also, some courses serving as common prerequisites for the Oceanography B.S. program were developed as DL courses, in part because they were important for other programs (e.g., Maritime Studies) as well.

2004: Once all approvals for the program are in place, the two departments will actively recruit students to begin their Oceanography DL studies in Fall 2004. The Division of Continuing Education is anticipated to play a key role in the marketing—and the initial start-up--of this program. Also, the new Education Technology Center under the direction of Dr. Pam Northrup will take the lead in helping faculty prepare and package the courses for delivery. We expect two additional courses to be completed by Fall 2004, so the first enrollees can sign up for the program. Perhaps 15-20 students are anticipated as the initial student cohort.

IV. ASSESSMENT OF NEED AND DEMAND

- A. What national, state, or local data support the need for more people to be prepared in this program at this level? (This may include national, state, or local plans or reports that support the need for this program; demand for the proposed program which has emanated from a perceived need by agencies or industries in Northwest Florida; and summaries of prospective student inquiries.) Indicate potential employment options for graduates of the program. If similar programs exist in the Northwest Florida region, provide data that support the need for an additional program.**

Assessment of demand for a distance-learning program in Oceanography is a difficult proposition. It may be measured by perceptions of demand, as discussed by SOCNAV and other military officials in meetings with UWF administrators. It may also be measured by support information provided by agencies such as the National Science Foundation's Directorate for Geosciences, Division of Ocean Sciences and a document (also a Power-Point presentation) entitled "Are We Adequately Preparing Students for Ocean Careers" by Diedre Sullivan, Bruce Ford, and Tom Murphree of COSEE (Centers for Ocean Science Education Excellence). On a broader note, oceanography is a field a study that develops environmental professionals who specialize in coastal and marine issues. According to the new website OceanCareers.com, there are over 10,000 businesses and industries that employ graduates in the ocean sciences. Judging by the job announcements posted on the website of The Coastal Society, an organization of public/private coastal and marine professions, the employment market is quite healthy.

This distance-learning program in Oceanography—unique in the world—has been designed for the U.S. Navy but is open to any student. The Navy claims a total of 100,000 potential students afloat and stationed at land facilities. Judging from the incredible enthusiasm displayed by the group of directors and associate directors of SOCNAV and NCPACE for the proposed program in Oceanography, it seems reasonable to assume strong enrollment in the B.S. in Oceanography degree. The Oceanography program will earn UWF international exposure and will establish our University as a major player in educational service to the military.

- B. Use UWF Table One A (baccalaureate) or UWF Table One B (graduate) to indicate the number of students (headcount and FTE) you expect to major in the proposed program during each of the first 5 years of implementation, categorizing them according to their primary sources.**

Table One A is presented on Page 32 for reference to the narrative below. The numbers in the table are cumulative and assume that students will remain in the program for only 2 years.

In the narrative following Table One, the rationale for enrollment projections should be provided and the estimated headcount to FTE ratio explained. If, initially, students within the institution are expected to change majors to enroll in the proposed program, describe the shifts from disciplines that will likely occur.

Upper-level students who are transferring from other majors within UWF

We will make an effort not to “cannibalize” students from other programs at UWF. This B.S. program is distance learning, and classes will be by permission only. Because we see this program as appealing to students who would not normally enroll at UWF (e.g., military personnel, distant and foreign residents), resident UWF students will be discouraged from enrolling in the courses. (We prefer to see resident student in face-to-face courses and in hands-on laboratory sections.) However, there may be a few students who see this program as a means of acquiring a B.S. degree from their remote home—and not on-campus—locations. We estimate three per year by Year 5.

Students who initially entered UWF as FTIC students and who are progressing from the lower to the upper level

As noted above, this B.S. program is distance learning, classes will be by permission only, and resident UWF students will be discouraged from enrolling in the courses. However, there may be a few students who see this program as a means of acquiring a B.S. degree from their remote home locations. We estimate three per year by Year 5.

Florida community college transfers to the upper level

We anticipate that a few students in Florida community colleges will be attracted to this unique program, perhaps five per year by 2008-09.

Transfers to the upper level from other Florida colleges/universities

We anticipate that a few students in other Florida colleges and universities will be attracted to this unique program, perhaps five per year by 2008-09.

Other

This category includes the majority of Navy personnel whom this program targets, and this is where the highest numbers of enrollees will be. The potential for foreign enrollees in this program is also quite high because of the uniqueness of the program, and we estimate perhaps two or three per year once the program is well marketed. We expect to start with 10 majors the first year, increasing to perhaps 20 new majors per year by Year 5.

C. For all programs, indicate what steps will be taken to recruit and achieve a diverse student body in this program.

- Although this is a distance-learning program, we hope to appeal to a diverse cross section of students. First, the military—our primary source of students—is quite diverse in its ethnic make-up. Second, we will rely upon UWF marketing efforts to ensure a broad spectrum of enrollees.
- Our web pages will reflect our commitment in these regards.

V. CURRICULUM

A. For all programs, provide expected specific learning outcomes, a sequenced course of study, and list the total number of credit hours for the degree. Degree programs in the science and technology disciplines must discuss how industry-driven competencies were identified and incorporated into the curriculum. For bachelor's programs, also indicate the number of credit hours for the major coursework, the number of credit hours required as prerequisites to the major (if applicable), and the number of hours available for electives.

Specific learning outcomes:

Students completing this distance-learning B.S. in Oceanography program will have:

1. mastered a broad base of knowledge, including general studies, that prepares them for graduate studies or entry-level professional careers.
2. mastered a broad base of knowledge in the four sub-areas of oceanography (biological oceanography, chemical oceanography, geological oceanography, and physical oceanography).
3. acquired basic skills in inductive scientific reasoning and research techniques grounded in the scientific method.
4. gained writing skills sufficient to summarize content knowledge and concepts in oceanography.
5. acquired a solid foundation in the basic sciences (chemistry, mathematics, and physics).

Sequenced course of study:

ADMISSION TO PROGRAM

The distance-learning B.S. program in Oceanography is an upper-division program. Applicants seeking admission to the program must meet all UWF requirements.

DEGREE REQUIREMENTS

Lower-Division Requirements (60 sh)

We recommend that students complete their lower-division requirements before applying to the B.S. in Oceanography program. (See Section VD on page 12.)

Upper-Division Major Requirements (35 sh)

BSC 3xxx Coral Reefs (3)
BSC 4263 Biological Oceanography (3)
EVR 4023 Coastal and Marine Environments (3)
GEO 3250/L Weather and Climate + Lab (4)
GEO 4890/L Coastal Morphology and Processes (3)
OCE 4xxx Geological Oceanography (3)
OCE 4xx1 Chemical Oceanography (3)
OCE 4xx2 Physical Oceanography (3)
OCE 4xx3 Global Climate Change: Oceanic/Atmospheric Interactions (3)
OCE 4xx4 Global Biogeochemical Cycles (3)
OCE 4xx5 Remote Sensing of Oceans (4)

Upper-Division Electives (25 sh)

Sufficient 3000/4000-level electives to meet UWF's requirement of 48 semester hours in the upper division and sufficient overall electives to meet the university's requirement of 120 semester hours total. The following are recommended upper-division choices:

BOT 4406 Marine Algae (3)
GEO 4133 Applications in Remote Sensing (3)
GEO 4151 Geographic Information Systems (3)
GEO 4152 Applications in GIS (3)
HIS 4284 Maritime History
PCB 4364 Marine Ecological Physiology (3)
ZOO 4485 Marine Mammology (3)

B. For bachelor's programs, if the total number of credit hours exceeds 120, provide a justification for an exception to the FBOE policy of a 120 maximum.

The total number of credit hours does not exceed 120.

C. Provide a one or two sentence description of each required or elective course.

COMMON PREREQUISITES

BSC1005 General Biology for Non-Majors (3)

Survey of abiotic and biotic principles as they apply to basic structural and functional topics at the cellular, organismal, population and community levels; and the application of these principles to issues of current interest.

BSC1XXX Fundamentals of Ecology (4)

Intended for non-Biology majors who have an interest in nature and how they interact with nature. Gives general overview of ecological principles and how these principles influence the outside world around us. Imbedded are several activities that are associated

with each chapter. The activities were developed so that the student will gain a respect for ecology as well as show how ecological principles affect your daily life.

BSC 2311 Introduction to Oceanography and Marine Biology (3)

An introduction to the chemical, physical and geological features of the world ocean and the major groups of living marine organisms that inhabit it. Physical, chemical and biological interrelationships will be emphasized.

BSC 2311L Introduction to Oceanography and Marine Biology Laboratory (1)

Lab correlating with BSC 2311.

CHM 2045 General Chemistry I (3)

Chemical and physical properties, relationship between observables and concepts and the development of a theoretical framework. Topics include atomic and molecular structure, theories of bonding, properties of the elements and periodicity. Prerequisite: MAC 1105.

CHM 2045L General Chemistry I Laboratory (1)

Introduction to laboratory safety, experimental techniques, graphing of data, chemical reactivity and separations, calorimetry and volumetric analysis.

CHM 2046 General Chemistry II (3)

Continuation of CHM 2045 with emphasis on chemical calculations and problem solving. Topics include thermodynamics, equilibria, kinetics and an introduction to transition metal complexes. Prerequisite: CHM 2045, CHM 2045L.

CHM 2046L General Chemistry II Laboratory (1)

Experiments based on colligative properties, qualitative analysis, solution equilibria, kinetics, electrochemistry, radioactivity and synthesis.

GEO 1200 Physical Geography (4)

Relationship between the natural environment and humans. Weather, climate, soils, biogeography and landforms.

GLY 2010 Physical Geology (3)

Material, structures, surface features of the earth and processes that have produced them.

GLY 2010L Physical Geology Laboratory (1)

Lab correlating with GLY 2010.

MAC 2311 Analytic Geometry and Calculus I (4)

Introductory topics through differentiation and integration of algebraic functions and applications. Prerequisite: MAC 1114 and MAC 1140.

PHY 2048 University Physics I (3)

Linear and rotational motion of objects in 1, 2, and 3 dimensions, concepts of work and energy, oscillations and waves, heat and thermodynamics. Prerequisite: MAC 2311.

PHY 2048L University Physics I Lab (1)

Selected experiments in mechanics, oscillatory motion, and heat.

PHY 2053 General Physics I (3)

Mechanics, heat, waves, and sound. Prerequisite: MAC 1105.

PHY 2053L General Physics I Laboratory (1)

Selected experiments in mechanics, oscillatory motion, and heat.

STA 2023 Elements of Statistics (3)

Fundamental statistical concepts. Probability, inference, estimation, hypothesis testing.

Prerequisite: MAT 1033.

UPPER-DIVISION REQUIREMENTS (MAJORS COURSES)

BSC3XXX Coral Reefs (3)

A general overview of tropical and sub-tropical coral reefs for non-biology majors. Covers basic concepts dealing with the structure, formation, biology and ecology of Atlantic and Pacific coral reefs. Includes interactive exercises, projects, and module-assessments that will reinforce major biological concepts and promote critical thinking.

BSC 4263 Biological Oceanography (3)

Biota of the oceans, including systematics, special morphological adaptations, physiology, natural history and zoogeography of plankton and nekton. Relationship between biota and the physiochemical properties of the pelagic realm.

BSC4263L Biological Oceanography Laboratory (1)

Corresponding laboratory for BSC 4263 Biological Oceanography

EVR 4023 Coastal and Marine Environments (3)

The world's ocean and its marine environments such as beaches, estuaries, coral reefs, upwelling areas, and hydrothermal vents. The physical, chemical, and biologic components that make each environment unique. Case studies of the environmental impact of anthropogenic and natural phenomena based on readings of scientific papers.

Prerequisite: GLY 2010, GLY 2010L or GEO 1200, GEO 1200L.

GEO 3250 Weather and Climate (4)

Nature of individual weather elements, their measurements, and analysis over time and space. Analysis of global climate emphasizing control factors, resulting areal patterns and climatic classifications. Emphasis upon North American weather and climate patterns, microclimates, climate change, modification and related problems.

GEO 4131 Photo Interpretation and Remote Sensing (4)

Applied skills emphasizing the fundamentals of aerial photograph interpretation and basics of multiband spectral reconnaissance of the environment-multispectral photography, infrared, microwave scanning and multifrequency radar systems.

Application includes their uses in the study of cultural and biophysical phenomena.
Prerequisite: GEO 3100. Corequisite: GEO 4131L.

GEO 4890 Coastal Morphology and Processes (3)

An introduction to the world's coastal landforms, with emphasis upon dominant processes (especially waves, tides, and currents), geographical variations, human impacts and policies and environmental concerns. Prerequisite: GEO 1200 or GLY 2010, GLY 2010L.

GEO 4890L Coastal Morphology and Processes Laboratory (1)

Laboratory correlating with GEO 4890. Offered concurrently with GEO 5225L; graduate students will be assigned additional work. Material and supply fee will be assessed.

OCE4XXX Geological Oceanography (3)

The study of the morphology, formation, and evolution of ocean basins; of the sediments in coastal, shelf, and pelagic environments; and biogeochemical cycling. Includes paleoceanography and the sedimentary history of the ocean basins. Prerequisite: GEO 1200, GEO 1200L, GLY2010, GLY 2010L or BSC2311, BSC 2311L.

OCE4XX1 Chemical Oceanography (3)

The chemical composition of the oceans and the physical, chemical, and biological processes governing this composition in the past and present. Topic covered include cycling of carbon, nitrogen, phosphorus, silicon, and oxygen, and processes of primary production, export production, remineralization, diagenesis, and air-sea gas exchange. Prerequisite: CHM2046, CHM 2045L.

OCE4XX2 Physical Oceanography (3)

An introduction to concepts in physical oceanography. Topics include: observation of temperature, salinity, density, and currents; wind-driven and geostrophic currents; density-driven circulation; upwelling; surface waves, tides, and internal waves; air/sea interaction; and waves and coastal processes. Prerequisite: MAC2311, PHY2048, PHY2048L or PHY2053, PHY2053L.

OCE4XX3 Global Climate Change: Oceanic/Atmospheric Interactions (3)

The role of the world ocean on climate in the present, past, and future. Causes and effects (like sea level change) of natural climate variability on time scales of millions to a few years. Interaction of ocean and atmosphere (greenhouse gases, currents, and wind). Discussions of impact of human activity and of future climate scenarios. Prerequisite: BSC 2311, BSC 2311L, GEO 3250, GEO 3250L.

OCE4XX4 Global Biogeochemical Cycles (3)

The biogeochemical cycles of water, carbon, nitrogen, and sulfur; the atmosphere and oceans as reservoirs and reaction media; the fate of natural and artificial sources of carbon, nitrogen, and sulfur compounds; the interactions among the major biogeochemical cycles and global change; anthropogenic perturbation of the global carbon cycle and climate, greenhouse gases, acid rain and ozone depletion. Prerequisite: CHM2046, CHM 2046L.

OCE4XX5 Remote Sensing of Oceans (4)

Provides a foundation in cartographic and remote sensing principles, and practical experience with remote sensing applications as they relate to the world's oceans. It examines basic concepts of electromagnetic radiation and its interaction with earth. Remotely sensed images from sensors such as SeaWiFS, AVHRR, and Topex/Poseidon will be discussed. Exercises will cover ocean color, sea surface temperature, altimetry, and sea ice. Prerequisite: EVR4023.

UPPER-DIVISION ELECTIVES**BOT 4406 Marine Algae (4)**

Physiology, ecology, reproduction, and taxonomy of marine algae categorized as phytoplankton, periphyton, and seaweeds. Experimental evidence for effects of sea environment on algal abundance, diversity, distribution, and competition and direct experience with field and lab techniques, data analysis and manuscript writing. Electronic enhancement used. Prerequisite: BOT 2010; BOT 4503 recommended. Corequisite: BOT 4406L.

GEO 4133 Applications in Remote Sensing (3)

The purpose is to make students familiar with digital image processing methods and techniques as applied in solving environmental and urban problems. The course is divided into four basic components: introduction of the generic process of remote sensing applications, introduction of some advanced digital image processing techniques and methods, case studies illustrating this process, and student projects using this process. Prerequisite: GEO 4131 and GEO 4131L.

GEO 4151 Geographic Information Systems (3)

Spatial database will be queried to solve spatial problems, analyze related attributes, and produce computerized cartographic output. Examines spatial data structures, data acquisition, processing, management, manipulation, and analysis for interdisciplinary applications and research. Prerequisite: GEO 3100/L. Corequisite: GEO 4151L.

GEO 4152 Applications in Geographic Information Systems (3)

The application of GIS methods and techniques in solving practical problems. A generic process for applying GIS techniques in problem solving is introduced, and several case studies of GIS applications in environmental and social domains will be analyzed. Prerequisite: GEO 4151, GEO 4151L.

HIS 4284 Maritime History (3)

Survey of impact of oceans, rivers and other bodies of water upon the development of mankind. Focus on settlement in maritime areas, maritime commerce, exploration, military and naval history, social intellectual and other activities and developments impacted or influenced by the sea.

PCB4364 Marine Ecological Physiology (3)

Interdisciplinary approach to understanding and interpreting interrelationships between

adaptation and environment in marine animals. Examines life history strategies and tactics unique to organisms found living in or around marine habitats. Specific behavioral and physiological responses of marine animals exposed to feeding, metabolic, osmotic and thermal challenges are discussed.

ZOO4485 Marine Mammalogy (3)

Application of current mammalogy principles to the study of marine mammal biology and phylogeny. Emphasizes ecology, physiology and behavior of the sixteen marine mammal families.

D. For bachelor's programs, list any prerequisites, and provide assurance that they are the same as the standardized prerequisites for other such degree programs within the FBOE. If they are not, provide a rationale for a request for exception to the policy of standardized prerequisites.

Students admitted to the upper-division program need to complete 60 semester hours of lower-division courses, ideally prior to admission to the program. This include:

1) Common Prerequisites (35 sh)

BSC 1005/L General Biology for Non-Majors + Lab (4)

BSC 1xxx/L Fundamentals of Ecology + Lab (4)

BSC 2311/L Introduction to Oceanography and Marine Biology + Lab (4)

CHM 2045/L General Chemistry I + Lab (4)

CHM 2046/L General Chemistry II + Lab (4)

GLY 2010/L Physical Geology + Lab OR GEO 1200/L Physical Geography + Lab (4)

MAC 2311/L Analytical Geometry and Calculus I (4)

PHY 2053/L General Physics I + Lab OR PHY 2048/L University Physics I + Lab (4)

STA 2023 Elements of Statistics (3)

2) Additional General Studies (23 sh)

Thirteen (13) hours of General Studies are met by courses in the Common Prerequisites list above. An addition 23 sh is thus needed. These courses may be selected from the choices listed under General Studies in the UWF catalog. One of the GS courses should be a course that meets UWF's multi-cultural requirement. We recommend GEA 2000.

3) Other Lower-Division Electives (2)

NOTE: Several of the above courses are available in distance-learning format at UWF, and others are being prepared in that format. Courses not available in DL format at UWF are available in the form of equivalent courses at other institutions and may be used to satisfy the general studies and other lower-division requirements. An articulation agreement with local two-year institutions (e.g., PJC, OWCC) calls for those institutions to develop General Studies courses in DL format over the next several years.

- E. For bachelor’s programs, if the Department intends to seek formal Limited Access status for the proposed program, provide a rationale which includes an analysis of diversity issues with respect to such a designation.**

Not applicable

VI. UWF CAPABILITY

- A. How does the proposed program specifically relate to existing UWF strengths such as programs of distinction, other academic programs, and/or institutes and centers?**

A recent report on undergraduate education at UWF, which was submitted to President Cavanaugh, identified “environmental programs” as programs of distinction at UWF. These programs include Biology as well as Environmental Sciences. Oceanography, which overlaps the academic realms of both departments, fits quite well into this strength of UWF.

We see the following relationships particularly useful for the proposed B.S. program:

1. The existing curricular strengths within the Departments of Biology and Environmental Studies. These include the study of coastal, estuarine, and marine environments.
2. UWF formerly had an excellent reputation as a center for Coastal Zone Studies, both in science as well as in policy. We would like to build upon that former reputation.
3. The Center for Environmental Diagnostics and Bioremediation (CEDB) does much research in the field of coastal and oceanographic pollution. CEDB researchers have much training in the oceanographic sciences, and their links with the Department of Biology are quite strong.
4. The newly established Educational Technology Center under the direction of Dr. Pam Northrup. Its purpose is to produce a product for marketing to potential distance-based students.
5. The proximity of the various military installations, in particular the U.S. Navy.

- B. If there have been program reviews, accreditation visits, or internal reviews in the discipline pertinent to the proposed program, or related disciplines, provide all the recommendations and summarize progress toward implementing the recommendations.**

The following narrative addresses the above statement in two parts, by department:

Part 1. The Department of Environmental Studies

In Spring 2002, the Department of Environmental Studies underwent a five-year review. In addition to a thorough self-study produced by the department, there was a report produced by an external review team in June 2002. This report—authored by Dr. John Mylroie (Mississippi State University), Dr. Judy Bense (UWF), and Dr. Rick Harper (UWF)—made several observations about and several recommendations for the department. According to the review team:

- 1) Discussions with faculty and students reveal a Department with a professional attitude and a very collegial atmosphere. Faculty feel they have capable, motivated students, and students feel they have experienced, rigorous but compassionate instruction. The Department's high student retention rate and high faculty productivity support the anecdotal comments made to the Committee.
- 2) There is significant involvement with the community, both lay and professional. In particular, the Department has created an Advisory Board made up of professionals from the Pensacola region that includes private business; local, state and federal agencies; and other educational institutions. This board is extremely interested in the Department, especially in the teaching and career preparation of students, and in professional interaction with the faculty.
- 3) The Department is forward-looking and aggressive in its approach to teaching. The curriculum has been recently revised and a new minor in Geography added. Plans to develop a MSc degree with Biology have been initiated. The new GIS facility has created new career opportunities for students in the Department and across campus.
- 4) The Department's recent development of a GIS lab with concurrent GIS instruction and research is a major benefit to the University and the local community. While only in existence a short time, links have been made with other units in the College of Arts and Sciences, and to other colleges, making the GIS lab an active and important University resource. The expenditures to buy equipment, allocate space, and staff the lab with a faculty member and a technician was an extremely productive move by the Department and the University.
- 5) The Department is active in research. Extramural funding is appreciable, and the publication record is very good. Given the high teaching loads, no graduate program, and inadequate space, the research productivity is exemplary.
- 6) The Department has solid support through the Dean and the Upper Administration. Other units on campus, both within Arts and Sciences and in the other colleges, interact well with the Department.
- 7) The Department Chair, Dr. Klaus Meyer-Arendt, has shown outstanding leadership and creativity. He has been aggressive in building the Department but also effective in building links within the UWF community and to the outside community. He has the support of faculty, students, and the administration.

The following numbered points below paraphrase the recommendations made by the external review team and summarize progress made to date in terms of implementing those recommendations.

1. The department is understaffed. It should add at least two faculty lines.

PROGRESS TO DATE: The university administration recognized the understaffing problem. A new faculty line was awarded to the department for the

2003-04 year during the budget hearings in Spring 2003. The search to fill this faculty line was completed in February 2004.

2. There is over-reliance upon adjunct instructors. Perhaps some adjunct positions could be converted to instructor lines.

PROGRESS TO DATE: One adjunct instructor—Dr. Wil Hugli, who taught multiple courses, was upgraded to a full-time instructor. This added stability to the department in that Dr. Hugli spent more time in the department and was available for advising as well as assisting on research projects

3. The department is woefully short on space.

PROGRESS TO DATE: As a result of two separate studies by the facilities-use teams at UWF, improvements to departmental space have been made. First, a 1400-ft² room on our floor (2nd floor, Building 13) was reassigned to our department, increasing our space from 4400 ft² to 5800 ft². The space was converted to a large classroom plus a 500-ft² hydrogeology lab (to be used for both research and teaching purposes. Other renovations include creating two new offices (one for the new faculty member, one for new research personnel) and one teaching/research lab—stocked with seven state-of-the-art computers—to be used for upper-level GIS courses and research projects.

4. The department should investigate offering coursework necessary to train Registered Professional Geologists (RPGs), perhaps via the offering of a Minor in Geology.

PROGRESS TO DATE: We have contacted the state agency responsible for licensing professional geologists, but it has been extremely negligent in responding to us in a timely manner. Nonetheless, to offer additional geology courses or to offer a minor will require more expertise. We are waiting to see who will be hired for the three positions we presently have vacant.

5. The department should offer a Master's degree. There is a demand for this professional degree. Also, graduate students would be available to teach the various lab sections, thereby freeing up faculty time as well as dollars spent on adjunct instructors.

PROGRESS TO DATE: In terms of importance, this point was number one. Since the recommendation was made, we have had numerous faculty discussions on this topic. A separate Request to Implement an M.S. in Environmental Science degree has been prepared, and it awaits UWF Board of Trustees' approval.

6. At the undergraduate level, the department should investigate greater flexibility among required courses, thus allowing students to focus upon specific academic subfields (e.g., geology, GIS, geography, coastal studies) as well as electives in other fields.

PROGRESS TO DATE: The department is waiting until Fall 2004, when new faculty are in place, to discuss making modifications to the undergraduate curriculum. We anticipate that changes allowing for greater flexibility will be made.

NOTE: Although the external review did not specifically address a proposed B.S. in Oceanography distance-learning program, the strengths in coastal and marine geosciences in the Department of Environmental Studies were noted by the reviewers.

Part 2. The Department of Biology

The Department of Biology underwent a 5-yr program review in 2002, as did the B.S. in Marine Biology which is an integral component foundation supporting the proposed Oceanography degree. The report of the external review team included several observations about the Marine Biology program and provided comments on programmatic weaknesses as well as suggestions for improvement in the program. These comments are organized below into “strengths”, “opportunities” and “barriers”, followed by recommendations for program improvement and what has been accomplished thus far in responding to these recommendations.

1. Strengths, Opportunities and Barriers:

A. Strengths

The Marine Biology program has many strengths which have been identified and described throughout the Program Review. These include:

- * Close working relationships between faculty and students on several levels.
- * Low student to faculty ratios in the classroom.
- * Young, energetic, highly motivated faculty engaged in productive scholarly activity.
- * An excellent coastal location perfect for conducting a program in Marine Biology.
- * A research vessel and a large fleet of boats and other marine-related equipment.
- * A Director of the marine activities and dive program who qualifies faculty and students in research diving, dive safety, and oversees all of the underwater and above water activities.
- * Several opportunities each year for students to accompany faculty on research expeditions to the Florida Keys, Malaysia, and other locations around the globe.
- * An excellent record of grantsmanship and publication among faculty.
- * A central facility for storage and maintenance of all of the marine-related equipment and boats.
- * A 187-acre track of pristine beach property on Santa Rosa Island preserved for conducting marine projects and collection of marine organisms.
- * Several student organizations that promote student involvement as volunteers in many worthy community and environmental causes.
- * A marine wet lab and public display facility.
- * Excellent teaching facilities and teaching of the highest quality by full-time faculty.
- * and many other strengths.

B. Opportunities

- * The R/V Nautilus is opening new vistas in marine research and expansion of our program to include courses and research efforts that were heretofore unimaginable.

- * The new wet lab and public display area will not only support new efforts in research and maintenance of marine organisms but will promote student recruitment into the program and provide yet another forum for serving the outside community.
- * Establishment of a relationship with the Costa Rican government and the University of Costa Rica
- * Our new “fast-track” in Marine Biology for junior college graduates should increase recruitment from this heretofore untapped pool of students.
- * The marine courses included in our new certificate programs will increase enrollment in these courses, increasing faculty teaching efficiency and productivity.
- * Our new SEM will broaden the research/teaching options for faculty and students and should be a valuable and heavily utilized asset for the program.
- * Establishment of the proposed downtown marine facility in cooperation with the County and City will create yet another avenue for serving and interacting with the outside community, and will provide unique opportunities for teaching, research and service.
- * and many other opportunities

Barriers:

- * Recruitment of a large pool of the best grade of graduate students is impeded by low TA salaries.
- * A shortage of research laboratory space will slow our efforts to hire sorely needed faculty into the program.
- * The growth and expansion of the program and its survival in the face of stiff competition from new programs in Marine Biology is impeded by a shortage of qualified faculty.
- * A shortage of office and lab space will slow our efforts to hire needed faculty.
- * The marine services supervisor has become an integral part of a quality program in Marine Biology and we need to have his line made a permanent part of the budgets of Biology and Marine Underwater Archeology.
- * For the growth and development of the program it is essential that we fill the critical need for three additional faculty in Marine Biology.
- * The lack of a lab coordinator for lower division courses has an adverse effect on both the quality and consistency of key undergraduate labs, which impacts negatively on retention and recruitment of students.

Recommendations for Program Improvement:

1. The program in Marine Biology is offered through the UWF Department of Biology. This program is currently supported by five faculty and one individual specializing in Marine Vertebrate Zoology being sought in a faculty search to begin this Fall. Success in extramural funding has reduced the participation in all aspects of the program of two of the current faculty who have only 25% appointments in Biology to begin with. Thus, by Fall 2003, we will have only four full-time faculty directly involved in all aspects of the Marine Biology Program. While the program continues to attract students from around the nation, the establishment of similar programs with greater resources and more personnel have begun to erode enrollment. We have made significant strides in acquiring resources for the Marine Biology program, but these have been tied to collaborative efforts with Marine Underwater Archeology, and while this shared

effort has netted our program a 53' research vessel (R/V Nautilus), a Director of Marine Facilities, an updating of our dive program, increased organization of our equipment and efforts in research and teaching, and a central facility for housing all marine-related equipment and staff, it has not resulted in acquisition of the new faculty positions so desperately needed to offer a curriculum and research opportunities which would recapture our competitive edge against the growing number of programs in this area nationwide.

Progress: We have actively sought equipment donations from a variety of sources and have enjoyed significant success in acquiring three additional boats for our fleet as well as a variety of other sorely needed equipment.

2. The Marine Biology program is a powerful recruiting tool for UWF, and the UWF Administration has been very supportive of this program. Clearly it recognizes that Marine Biology is a valuable University asset, and one that has traditionally been a good investment with a great potential for return. In order for Marine Biology to compete effectively with newer, better funded and better manned programs nationwide, it is imperative that at least three tenure-track lines be allocated to the program in addition to existing positions (at least one of which will come open during Fall 2003). These hires will dramatically broaden curricular options and research opportunities for undergraduates and will insure that we remain in the race to attract a large share of students interested in Marine Biology to UWF.

Progress: We have hired a Marine Vertebrate Biologist and a Geneticist who will help broaden the course offerings and research opportunities for students. We have requested a tenure-track line for a marine systems ecologist for 2004-2005.

3. One difficulty we are currently facing, no available space for offices or research labs for new faculty, will have as heavy an impact on Marine Biology as it will on all other programs within the Department. The Department will be out of research lab space by the end of 2003 with the final of three currently active faculty recruitment efforts, and presently does not have a single free office to provide for new hires for next year, let alone our adjuncts, graduate teaching assistants and student organizations. These issues will be addressed if the Department is granted its request for a building to house the Division of Life and Health Sciences of which Biology is a key part.

Progress: Renovation of space in our building will take place in Spring 2004 and will provide two additional research labs for faculty. In addition, the administration has committed to renovate one additional lab/year until all of the labs in the building have been upgraded.

4. The space issue is especially critical in view of the fact that the building in which Biology is currently housed is 30 years old and a renovation within the last 6 years was poorly done, leaving a majority of research labs with walls that do not extend up to the ceiling, rendering these labs inadequate for the support of all research requiring a degree of cleanliness (microbiology, molecular biology, immunology, cell biology, etc.). The Chair has requested renovation of four of these labs to correct this situation and to replace cracked and deteriorating bench tops and to provide new cabinets with adequate storage space. Again, this will only serve

as a stop-gap measure since a shortage of lab and office space will remain a key issue in future hires.

Progress: A new building to house Biology, Marine Biology and several sister programs in the Division of Life and Health Sciences has been established as a top fund-raising priority for 2004-2005-2006.

5. The hiring of Captain Keith Plaskett has had an enormous positive impact on all aspects of the Marine Biology and Underwater Archeology programs. He has created from scratch a dive safety program second to none. He runs annual boat and dive safety training workshops for all students actively participating in research or fieldwork. He has saved both Archeology and Biology enormous sums of money in repairs and replacement of equipment integral to both programs. He has organized all of our extensive inventory of boats, motors, tanks and other marine related equipment, oversees safe use of all of these materials by students and faculty, and maintains all of this equipment in good working order. He or his assistant personally accompany all deepwater excursions and any operations that involve diving or heavy equipment work. Both programs served by Captain Plaskett are incredibly safer, more efficient and cost effective, and growing in quality and reputation under his guidance. His expertise and hard work have been key to the acquisition of a UWF research vessel, which he has arranged through his personal and business contacts to be leased at a significant profit to the joint venture between Biology and Archeology. This project has provided, and will continue to provide, funds from outside the University for large measure of support for both programs. In view of the incredible impact that he has had on two key UWF programs, it is essential that we secure Captain Keith's continued service to the University. Accordingly, Dr. Judy Bense, Director of the Archeology Institute and I request that a half line be added to the budget of Biology and to that of Archeology Institute/Anthropology to create a permanent position for a Director of Marine Services to be shared by the two departments.

Progress: While Capt. Keith has departed UWF, Capt. Mike Lavender, who is as capable and proactive in all aspects of the marine services arena, has taken his place. We have also hired a Marine Services mechanic and created, with the help of Sponsored Projects, a Marine Services Center that houses, maintains and manages the large fleet of boats shared between Biology and Archeology. The Center has funding for the next two years and is developing leasing arrangements with the R/V Nautilus and continuing education courses that are designed to establish the center as financially self-sufficient.

6. There is a great need in Biology for a lab coordinator to provide consistency and high standards in lab sections for the larger freshman and sophomore courses. Currently we are using graduate teaching assistants in this role. While students are conscientious and hard-working in their lab assignments, the rapid and routine turnover of TAs eliminates any hope for continuity in the quality and consistency of the undergraduate experience in key lower division labs. These laboratories are central to serving both majors and non-majors and are essential in the recruitment and retention efforts of our department. Such an individual with an MS degree in Biology would be sought to supervise laboratory teaching assistants in General Biology, General Zoology, General Botany, Anatomy and Physiology, cell Biology and other courses as needed. This person would also be responsible for ordering, distribution and maintenance of equipment

and supplies for the labs, and would help recruit, select and evaluate teaching assistants in the courses he/she was overseeing.

Progress: We included a lab coordinator in last year's budget request, which made it to the last round of budget negotiations but was finally deleted from consideration. We will resubmit this position as a high priority on next year's budget request.

- C. Describe briefly the anticipated delivery system for the proposed program as it may relate to resources e.g., traditional delivery on main campus; traditional delivery at branches or centers; or nontraditional instruction such as instructional technology (distance learning), self-paced instruction, and external degrees. Include an analysis of the feasibility of providing all or a portion of the proposed program through distance learning technologies. Include an assessment of the UWF's technological capabilities as well as the potential for delivery of the proposed program through collaboration with other universities or community colleges. Cite specific queries made of other institutions with respect to the feasibility of utilizing distance learning technologies for this degree program.**

This program is being set up to be entirely distance-learning. We will develop the courses in conjunction with the new Educational Technology Center, and they will be made available to off-campus students. There is no such program in the United States, if not the world, at this time, and we would like to be poised to take advantage of this unique niche market.

D. Assessment of Current and Anticipated Faculty

- 1. Use UWF Table Two to provide information about each existing faculty member who is expected to participate in the proposed program by the fifth year. If the proposal is for a graduate degree, append to the table the number of master's theses directed, number of doctoral dissertations directed, and the number and type of professional publications for each faculty member.**

Table Two is on page 33. It lists the faculty members who will be involved in this program. However, there will be no faculty FTE commitment, as all arrangements for course development will be contractual. The estimates for the equivalence in FTEs are provided.

- 2. Also, use UWF Table Two to indicate whether additional faculty will be needed to initiate the program, their faculty code (i.e., one of five unofficial budget classifications as explained on the table), their areas of specialization, their proposed ranks, and when they would be hired. Provide in narrative the rationale for this plan; if there is no need for additional faculty, explain.**

This narrative follows Table Two on page 34.

3. **Use UWF Table Two to estimate each existing and additional faculty member's workload (in percent person-years) that would be devoted to the proposed program by the 5th year of implementation, assuming that the program is approved. (Note: this total will carry over to UWF Table Three's fifth year summary of faculty positions.)**

Table Two is on page 33.

E. Assessment of Current and Anticipated Resources

1. **In narrative form, assess current facilities and resources available for the proposed program in the following categories:**
 - a. **Library volumes (Provide the total number of volumes available in this discipline and related fields.)**

The John C. Pace Library has an excellent collection of books in the field of environmental science and in oceanography in particular. The holdings, listed on the table on the next page, are more than sufficient to support a B.S. in Oceanography program. Being a distance-learning program, there will be less material on hard-copy materials anyway. (Thanks are extended to Mr. Dan North for supplying the data on the table.)

In addition to the total number of volumes, it is important to point out that Environmental Studies was a recipient of special Collection Development Project funds (\$9,500) in 1999-2000 (information courtesy of Ms. Helen Wigerson). Collection Development Project funding is one-time funding which allows a discipline to significantly enhance its library collection and purchase book and media materials which support current and planned programs. As a result, the book collection in Environmental Studies (which includes Oceanography and Coastal Studies) is especially current and capable of supporting the B.S. in Oceanography program.

- b. **Serials (Provide the total number available in this discipline and related fields, and list those major journals which are available at UWF.)**

The University of West Florida Libraries subscribe to over 5,000 serials including 2,100 in print format, 1,292 in print format with online access, and 1,735 in electronic format. In addition, the library has access to many more full-text serials through aggregator indexes provided by companies such as FirstSearch and Gale.

The summary sheet on page 23 provides serials information related to Environmental Studies, as follows:

- The total number of journal subscriptions currently received by UWF whether in print or electronic format
- A listing by title of major journals available at UWF
- The primary indexing/abstracting services available and whether they provide full-text journal access

- A sample of titles for which UWF does not have a print or electronic subscription, but for which full-text access is available

Pace Library holdings in LC class areas related to Environmental Studies

Call number area	Subject area	1 # Physical titles owned (1995-date)	2 (All pub dates)	3 # Electronic titles (netLibrary)	DN 12/11/03 4 TOTAL COUNT (2 + 3)
G	Geography, GIS, remote sensing, etc.	365	1,361	36	1,397
GA	Cartography	25	184	0	184
GB	Physical geography, geomorphology, water	101	553	23	576
GC	Oceanography	55	523	15	538
GF	Human ecology, anthropogeography	81	388	15	403
QC801 - QC999	Geophysics, meteorology, climatology	102	509	36	545
QE	Geology	222	1,040	40	1,080
QH	Natural history, biology	706	4,275	118	4,393
QK	Botany	149	1,692	26	1,718
QP501 - QP801	Animal biochemistry	65	725	18	743
QR	Microbiology	101	888	12	900
S	Agriculture, soil science, conservation	69	611	46	657
SB481 - SB991	Parks, public reservations, etc.	29	200	39	239
SD	Forestry	44	194	14	208
SK	Wildlife management	16	126	3	129
TC203 - TC345	Coastal engineering & protection	11	28	0	28
TD	Environmental technology, bioremediation, etc.	119	971	79	1,050

TOTAL

2,260

14,268

520

14,788

Environmental Studies
UWF Journals
December, 2003

Number of Serial Subscriptions	
In Environmental Studies	78
In Biology (with Environmental Studies emphasis)	30
In Chemistry (with Environmental Studies emphasis)	5
TOTAL	113

Major Titles	Format
Applied and Environmental Microbiology	Print
Aquatic Ecology	Electronic
Biodiversity and Conservation	Electronic
The Ecologist	Print
Environment International	Electronic
Environmental Ethics	Print
Environmental Management	Print
Environmental Pollution	Electronic
Ethics and the Environment	Electronic
Forest Ecology and Management	Electronic
Global Environmental Change	Electronic
Global Environmental Politics	Electronic
Journal of Applied Ecology	Print/Online
Journal of Coastal Research	Print
Journal of Ecology	Print
Journal of Environmental Economics and Management	Electronic
Marine Environmental Research	Electronic
Remote Sensing of Environment	Electronic
Urban Ecosystems	Electronic
Water Resources Research	Print
Wetlands Ecology and Management	Electronic
Wildlife Society Bulletin	Print

Abstracting and Indexing Services	Full-Text Articles Available?
Agricola	No
Agricultural and Environmental Biotechnology Abstracts	No
Biological and Agricultural Index	Yes
Ecology Abstracts	No
Environmental Sciences and Pollution Management	No

EnvironLine (DIALOG)	No
InfoTrac One File	Yes
Oceanic Abstracts	No
Pollution Abstracts	No
Water Resources Abstracts	No
Wilson Select	Yes

Sample Titles for which UWF has Electronic Full-Text Journal Access

Environment Bulletin
Environmental & Planning Law Journal
Environmental technology
Journal of Climate
Journal of Environmental Quality
Pollution Engineering
Water Quality Research Journal of Canada
World Watch

The Pace library also maintains a more complete listing which shows the price paid for each UWF subscription for a three-year period. Those titles which do not have costs associated with them are part of a bundled package (Elsevier, Kluwer, Oxford University Press). UWF receives those titles as electronic subscriptions through a consortium purchase with other Florida state university libraries. This latter category includes journals with a marine, coastal, and oceanographic focus, thus making them ideal for linking to distance-based students enrolled in the B.S. in Oceanography program.

c. Describe classroom, teaching laboratory, research laboratory, office, and any other type of space that is necessary and currently available for the proposed program.

The space available in the Department of Environmental Studies (EVR) and the Department of Biology includes:

- Fourteen dedicated laboratory classrooms (in EVR the cartography/physical geography lab, capacity: 49, room 13/221; the soils/physical geology lab, capacity: 24, room 13/214; and the advanced GIS/remote sensing lab, capacity: 20, room 13/222; in Biology rooms 118, 122, 111, 107, 140 and 144 on the second floor of Bldg 58, and 67, 61 and 27 on the first floor of Bldg. 58; as well as 201 and 207 in Bldg. 58A)
- Two research laboratories (the hydrogeology lab, room 13/221a; the sediments lab, room 13/213) in EVR and 16 research laboratories in Biology.
- One GIS computer lab (GeoData Center) (capacity: 20, room 13/216) in EVS and two state-of-the-art computer labs, an electron microscopic facility, and animal facility, a shop, 8 prep rooms, a common equipment lab, a wet lab, a large marine

services center where all of the boats and marine-related equipment is housed and maintained, and two greenhouses.

- Faculty offices (8 in EVR and 18 in Biology) and main office reception areas.
- One conference/seminar room, which includes a map repository (13/202), in EVR and two conference rooms in Biology
- Weather station and storage shed (roof of Bldg. 13)
- Plenty of field space, including the UWF property on Santa Rosa Island

As the B.S. in Oceanography program develops, one of the faculty offices (present used by a senior research scientist) may be converted into space for a program administrator and teaching associate to keep up correspondence with the students enrolled in the various courses.

d. Equipment

The Department of Environmental Studies is relatively well equipped in terms of computers, analytical equipment, and field equipment. The two research labs have much analytical equipment (including fume hoods and a gas chromatograph), and the two GIS labs have 26 computers between them. The current faculty have sufficient field equipment, and it is anticipated that the new faculty will use their start-up funds to acquire their necessary research equipment in Fall 2004. The Department of Biology has a long list of modern research equipment purchased mostly on grants which supports the application of molecular and biochemical as well as less sophisticated research in the marine sciences. The R/V Nautilus and a fleet of 10 boats of different sizes as well as a long-list of marine-related equipment and tools provide unlimited opportunities for faculty and student research in the marine sciences.

e. Fellowships, scholarships, and graduate assistantships (List the number and amount allocated to the academic unit in question for the past year.)

Not applicable. This is a distance-learning program, and no scholarships or fellowships will be awarded.

f. Internship sites

Both departments have placed undergraduate interns in a variety of employment sectors in the Pensacola area. These employers include: Escambia County (Neighborhood and Environmental Services, GIS Services), Florida Department of Environmental Protection, Gulf Power Company, U.S. Army Corps of Engineers (Pensacola field office), and the U.S. Environmental Protection Agency lab at Gulf Breeze. There are also occasional internships available with the various private environmental consulting firms in the region. However, there will be no internship requirements for the distance-learning students enrolled in the B.S. in Oceanography program.

2. Describe additional facilities and resources required for the initiation of the proposed program (e.g., library volumes, serials, space, assistantships, specialized equipment, other expenses, OPS time, etc.).

If a new capital expenditure for instructional or research space is required, indicate where this item appears on UWF's capital outlay priority list. The provision of new resources will need to be reflected in the budget table (UWF Table Three), and the source of funding indicated. UWF Table Three requires the display of Instruction and Research (I&R) costs only, unless expected enrollment in the new program is high enough to impact non I&R costs, such as library staffing, university support, and student services.

No additional facilities will be required for the implementation of the B.S. in Oceanography program. No capital expenditures for instruction or research space is foreseen at this time, although space may become necessary if the program is highly successful.

The following summarizes needs in terms of resources by Year 5:

Other Personal Services (OPS)

Estimated at \$20,000, for graduate student assistance, which will be covered by the revenues generated by tuition.

Expenses

Estimated at \$3000, for office expenses, to be paid by the revenues generated by tuition.

Equipment

Estimated at \$5000, for computers, to be paid by the revenues generated by tuition.

Technology

A distance-learning program requires additional technology expenses. We estimate \$3000 for such expenses annually, to be paid by the revenues generated by tuition.

Learning Resources

Estimated at \$2000, to be paid by the revenues generated by tuition.

VII. ASSESSMENT OF IMPACT ON PROGRAMS CURRENTLY OFFERED

A. Budget

- 1. Assuming no special appropriation or UWF allocation for initiation of the program, how would resources within the College and Department be shifted to support the new program?**

Faculty are available to develop the on-line courses during the summer. The UWF Provost's Office has committed a certain amount of funds to assist in developing on-line courses through the new Educational Technology Center. We plan to develop a minimum of two courses per year until all are available in DL format.

- 2. Use UWF Table Three to display dollar estimates of both current and new resources for the proposed program for the first through the fifth years of the program. In narrative form, identify the source of both**

current and any new resources to be devoted to the proposed program.

Table 3 is presented on page 35. Under the Instruction & Research section, items listed under “current” as well as “new” will be funded out of revenue distributions from tuition generated via this program.

- 3. Describe what steps have been taken to obtain information regarding resources available outside the institution (businesses, industrial organizations, governmental entities, etc.). Delineate the external resources that appear to be available to support the proposed program.**

We have entered into negotiations with researchers at the University of South Florida to provide on-line courses in the subject areas in which UWF does not have the capability. General counsel Ms. Gina DeJulio has stated that such contractual arrangements are easy to execute. Florida State University also has expertise in Oceanography, and we may contact them as well once this program is approved to implement.

- B. Describe any other projected impacts on related programs, such as prerequisites, required courses in other departments, etc.**

The B.S. in Oceanography program is an upper-division program. All of the core courses in this program are taught by the two departments (Biology and Environmental Studies), as are half of the suggested upper-level electives. Students that are admitted into this program are expected to take care of their lower-division requirements before being admitted to the program. All of the lower-division requirements, including the Common Prerequisites and General Studies courses are available on-line at other institutions (including the University of Maryland at Montgomery County). It is anticipated, however, that as distance-learning expands at UWF, many of the lower-division courses will be made available locally in DL format, at least by our local two-year institutions.

VIII. COMMUNITY COLLEGE ARTICULATION

For undergraduate programs, describe in detail plans for articulation with area community colleges.

At the undergraduate level, both departments have articulated especially with OWCC and with PJC. PJC recently restructured its AA in Environmental Science so that students can now easily transition from the lower division to the upper division. This articulation has not specifically included Oceanography, however. Recently, UWF entered into articulation agreements with PJC and OWCC to provide DL versions of General Studies courses, to tie right in to new distance-learning initiatives.

IX. ASSESSMENT OF APPLICABLE ACCREDITATION STANDARDS

List the accreditation agencies and learned societies that would be concerned with the proposed program. Does the department or program anticipate seeking accreditation from any of these agencies? If so, indicate when accreditation will be sought. If the proposed program is at the graduate level, and a corresponding undergraduate program is already in existence, is the undergraduate program accredited? If not, why?

There is no discipline-specific accreditation process for programs in Oceanography at any level.

X. PRODUCTIVITY

Provide evidence that the academic unit(s) associated with this new degree have been productive in teaching, research, and service. Such evidence may include trends over time for average course-load, FTE productivity, student headcounts in major or service courses, degrees granted, external funding attracted; as well as qualitative indicators of excellence.

Since this is a newly proposed program, there is no track record for it yet. The market for distance-learning students is also volatile and not well understood. However, the Department Chair of Environmental Studies—Klaus J. Meyer-Arendt—came to UWF from a department (Geosciences) at Mississippi State University that developed distance-learning courses in the late 1980s (with a private \$30,000 loan), including one to the U.S. Navy. The Department of Geosciences now offers three D-L programs, has hired a dozen instructors and program support personnel, and brings in over \$1 million/year into the department.

Although there is no track record yet, the following applies to the Department of Environmental Studies in general:

1. Teaching

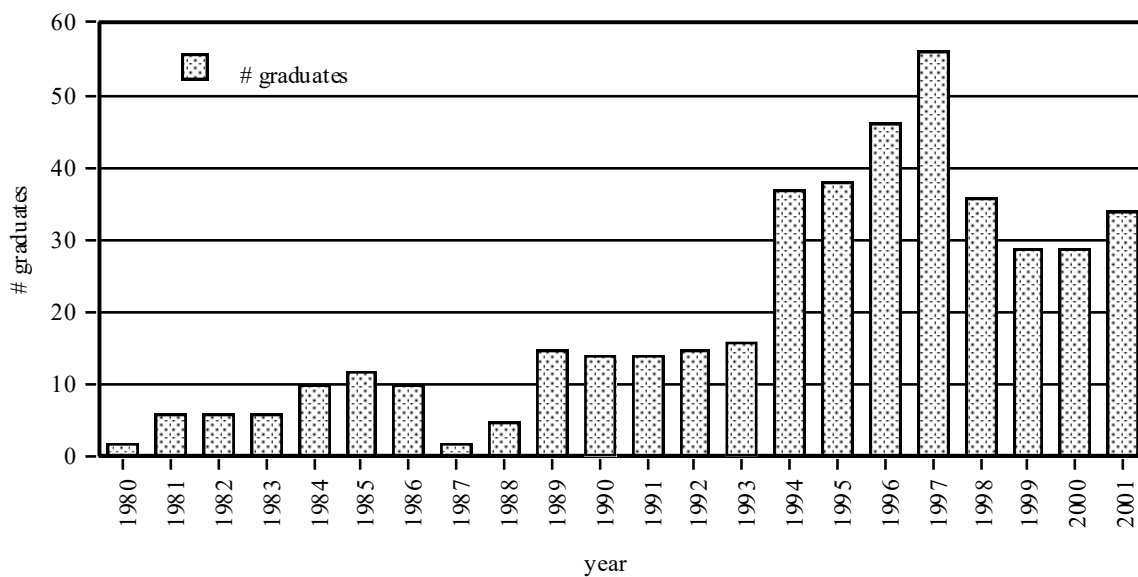
There are many ways to measure the success of a program, and enrollment and graduation trends are but some of those ways. The number of majors, the number of graduates, and enrollments in departmental course offerings--measured in semester credit hours (sch) or full-time equivalents (FTEs) are three of the most common ways is showing trends.

In terms of number of majors (and 'special students'), there have been around 150/year since the B.S. in Environmental Science (referred to as Environmental Studies) program was established in 1995. The table below presents enrollment data from the Fall semester of the respective year. EVR—General refers to students admitted to the program but who have not yet declared a track. EVR—Unclassified: Spec. refers to students taking courses in the department who have not yet declared a major. (Many of these go on to declare a major, and thus they are counted here.) Since the last remaining students in the ERMP track graduated in 1998, the Environmental Policy track has been most favored by majors—at a 2:1 ratio over the Natural Science track. A third track—Geography—was added in 2003, and so far about 12 students are enrolled in that track.

	1989*	1990*	1991*	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
EVR--General							59	80	24	29	24	20	13
EVR--Natural Science							2	9	21	36	36	37	35
EVR--Environ. Policy							11	36	85	67	73	81	76
EVR Res. Mgmt. (ERMP)	49	61	77	93	104	119	66	14	4	2			
EVR Unclassified: spec.	4	0	10	10	8	4	11	4	10	12	20	13	6
TOTAL	53	61	87	103	112	123	149	143	144	146	153	151	130

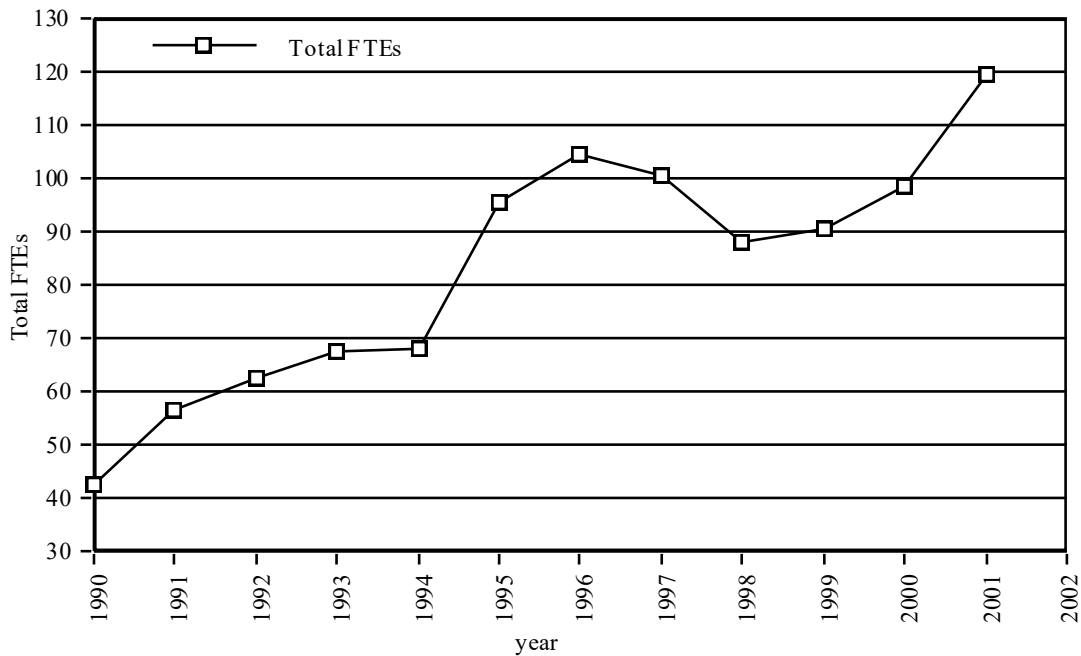
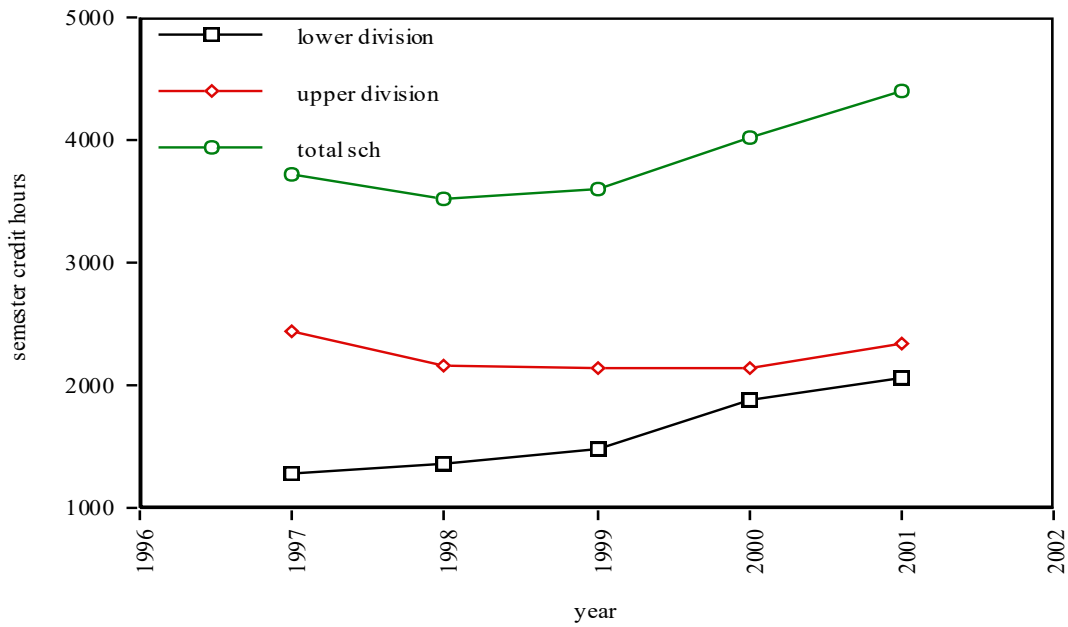
* lower division not included

The number of departmental graduates also shows a rapid increase in the mid-1990s. In recent years, the number of graduates has leveled off at about 30/year (for example, 2001 = Summer and Fall 2001 + Spring 2002).



In terms of course enrollments, there has been a steady rise in numbers since Fall 1998 (perhaps not coincidentally, also the semester the chair began his tenure at UWF). Based upon data kept by the Department of Environmental Studies, the graph (next page) shows semester credit hour (sch) production for a five-year period (1997 = Fall 1997 + Spring and Summer 1998, for example). Enrollment growth rates have exceeded 10%/year over the past two years. Although much of this growth has taken place in the lower-division service courses, upper-division enrollments have also begun to climb—over 10% during the last academic year. The data on the graph below actually underestimate enrollments because Directed Study or Honors courses are not included.

Official enrollment statistics kept by the UWF Office of Institutional Research (bottom graph on the next page) show trends that are somewhat similar to those shown by Department of Environmental Studies data (here 2001 = Summer and Fall 2001 + Spring 2002). The longer-term perspective also shows the recent growth has exceeded the peak enrollments of the mid-1990s.



The student retention rates within the Department of Environmental Studies also exceed university averages, according to data provided by the Office of Institutional Research and Planning. For 1991-95, of entering students FTIC (first time in college), UWF only retained 45%, whereas EVR retained 86%. For students transferring with Associate's degree (1992-1996 data), the comparable figures are 69% for UWF and 72% for EVR. While the transfer students

show no significant difference, it is apparent that the department does a good job in retaining those students that initially come to UWF.

2. Research

The two departments (Biology and Environmental Studies) have been especially productive in terms of research. This can be measured in success in attracting external funding as well as in terms of publications, professional presentations, and the like. The Appendix, beginning on page 36, lists key publications and research activities of departmental personnel who will contribute to this proposed B.S. in Oceanography program.

3. Service

The departments have an excellent record of service, especially in the local area. Johan Liebens conducted the bathymetric surveys for Project Greenshores, a successful community shorefront restoration project. Klaus Meyer-Arendt served as chairman of the Technical Advisory Committee of the Bay Area Resources Council (BARC), a regional environmental advisory body. He is also a board member of the local chapter of the Air & Waste Management Association (AWMA). Dick Snyder has conducted numerous water quality studies for local jurisdictions, and he serves as a member of the Northwest Florida Legislative Delegation Environmental Advisory Group (as does Meyer-Arendt). These are but a few of the examples of service performed by Biology and Environmental Studies faculty in the community.

XI. HISTORY

Provide a history page at the end of the proposal document to display approvals at each level (see page 51 at the end of this document).

UWF TABLE ONE A

NUMBER OF ANTICIPATED MAJORS FROM POTENTIAL SOURCES

BACCALAUREATE DEGREE PROGRAM

**NAME OF PROGRAM: B.S.
in Oceanography
CIP CODE: 40.0607**

ACADEMIC YEAR	YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5	
	04	05	05	06	06	07	07	08	08	09

SOURCE OF STUDENTS (Non-Duplicative Count in Any Given Year)	HC	FTE	HC	FTE	HC	FTE	HC	FTE	HC	FTE
Upper-level students who are transferring from other majors within UWF	1	0.75	3	2.25	4	3.00	5	3.75	6	4.5
Students who initially entered UWF as FTIC students and who are progressing from the lower to the upper level	1	0.75	3	2.25	4	3.00	5	3.75	6	4.5
Florida community college transfers to the upper level	2	1.5	5	3.75	6	4.5	7	5.25	9	6.75
Transfers to the upper level from other Florida colleges/universities	2	1.5	5	3.75	6	4.5	7	5.25	9	6.75
Other (Explain)	10	7.5	20	15.0	25	18.75	30	22.5	35	26.25
TOTAL	16	12.0	36	27.0	45	33.75	54	40.5	65	48.75

Notes: HC = Headcount of students in this major
 FTE = Annualized Full-Time-Equivalent students taking courses offered by this major. Annualized FTE's are calculated at 40 credit hours for undergraduate courses.
 The average student is calculated as 0.75 FTE (30 sh/year) and graduating within two years of entering the upper-division B.S. in Oceanography program.

UWF TABLE TWO

FACULTY PARTICIPATION IN PROPOSED DEGREE PROGRAM BY FIFTH YEAR

Faculty CODE (see below)	Faculty Name or "New Hire"	Academic Discipline/Specialty	Rank	(For Existing Faculty Only)		Initial Date for Participation in Proposed Program	5th Year Workload in Proposed Program (portion of Person-year)
				Contract Status (tenure?)	Highest Degree Granted		
A	Meyer-Arendt	EVR	Professor	Tenured	Ph.D.	2004	0.0 FTE
A	Liebens	EVR	Associate Professor	Tenured	Ph.D.	2005	0.0
E	Snoeckx	EVR	Adjunct Instructor	Non-tenured	Ph.D.	2004	0.5
D	Bennett	BIO	Assistant Professor	Tenured	Ph.D.	2004	0.2
A	Jeffrey	BIO/CEDB	Associate Professor	Tenured	Ph.D.	2005	0.0
A	Pomory	BIO	Assistant Professor	Tenure-track	Ph.D.	2005	0.0
A	Snyder	BIO/CEDB	Associate Professor	Tenured	Ph.D.	2005	0.0
A	Winter	BIO	Associate Professor	Tenured	Ph.D.	2005	0.0
E	New hire	EVR	Administrative Assoc.			2006	0.5
E	New hire	EVR	Research Associate			2006	1.0

Faculty CODE	Corresponding Faculty Position Category in TABLE 3 for the Fifth Year	Proposed Source of Funding for Faculty	TOTAL 5th Year Workload by Budget Classification
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A	Current General Revenue	Existing Faculty -- Regular Line	
B	Current General Revenue	New Faculty -- To Be Hired on Existing Vacant Line	

C	New General Revenue	New Faculty -- To Be Hired on a New Line	
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D	Contracts & Grants	Existing Faculty -- Funded on Contracts & Grants	0.2 FTE
E	Contracts & Grants	New Faculty -- To Be Hired on Contracts & Grants	2.0 FTE

Overall Total for 5th Year			2.2 FTE
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Narrative (based in part on questions listed on page 20):

1) There are sufficient faculty members with expertise in oceanography to kick-start this upper-level distance-learning B.S. program in Oceanography. The development of the courses will be done either as part of the normal teaching assignment of the instructors or with summer or overload stipends (on the order of \$3000-\$5000 per class). Most of the faculty listed on Table 2 will be involved in the development of the courses but not in the administration of the courses. Dr. Pam Northrup, not listed on Table 2, will need to devote perhaps 0.2 of her time to help develop the courses, but her expertise will no longer be needed by Year 5. Dr. Hilde Snoeckx, a Ph.D. in Marine Geology, will serve as initial program administrator as well as distance-instruction coordinator in this program. As the program grows, and more students enroll, an administrative assistant (half-time) and a research associate (full-time) will be needed to maintain the program. We anticipate starting this program through the Division of Continuing Education, so that tuition/fee revenues can operate the program and generate resources for the Departments of Biology and Environmental Studies as well as the College of Arts and Sciences and the University.

In terms of experience in oceanography, the faculty are fully capable of developing the courses needed for a top-notch B.S. program in Oceanography. The appendix includes a record of publication, grants, and ship-time experience for the principal UWF participants.

2) There is no need for any new faculty to begin this program. There are at least eight UWF faculty members (or adjunct instructors) with expertise in Oceanography (Appendix). However, UWF personnel do not have expertise in all aspects of Oceanography, and contractual arrangements with personnel at the University of South Florida are the most viable solution to this minor problem. One meeting at the USF campus was quite positive, and oceanographers expressed interest in entering into contractual agreements with UWF.

UWF TABLE 3
**COSTS FOR PRO-
POSED PROGRAM**

FIRST YEAR				FIFTH YEAR			
GENERAL REVENUE		CONTRACTS & GRANTS	SUMMARY	GENERAL REVENUE		CONTRACTS & GRANTS	SUMMARY
CURRENT	NEW			CURRENT	NEW		

**INSTRUCTION &
RESEARCH**

POSITIONS (FTE)

FACULTY	0.6			0.6			2.2	2.2
A&P								
USPS								
TOTAL	0.6			0.6			2.2	2.2

SALARY RATE

FACULTY	30,000			30,000			90,000	90,000
A&P								
USPS								
TOTAL	30,000			30,000			90,000	90,000

I&R

SALARIES & BENEFITS	39,000			39,000			117,000	117,000
OTHER PERSONAL SERVICES							5,000	5,000
EXPENSES	1,000			1,000			1,500	1,500
EQUIPMENT							2,000	2,000
TECHNOLOGY	1,000			1,000			1,500	1,500
LEARNING RESOURCES							1,000	1,000
SPECIAL								
TOTAL I&R	41,000			41,000			128,000	128,000

NON-I&R

OTHER ACTIVITIES

LIBRARY STAFFING		480		480	2,000			2,000
UNIV SUPPORT		1200		1200	5,000			5,000
FINANCIAL AID		280		280	1,200			1,200
STUDENT SVCS		600		600	2,500			2,500
TOTAL OTHER ACTIVITIES		2,560		2,560	10,700			10,700
SUMMARY	41,000	2,560		43,560	14,980			138,700

APPENDIX. Publications and Research Activities of Key Faculty of the Departments of Biology and Environmental Studies, 1990-2003.

WAYNE BENNETT

Assistant Professor of Vertebrate Physiology 1998-
University of West Florida, Pensacola, Florida

EDUCATION:

Ph.D., Animal Physiology 1994
University of North Texas, Denton, Texas
Major Advisor: Dr. Thomas L. Beitinger.
M.S., Biological Science 1990
University of Texas, Pan American, Edinberg, Texas
Major Advisor: Dr. Frank W. Judd.
B.S., Biological Science 1980
Michigan State University, East Lansing, Michigan

PUBLICATIONS:

- Fangue, N. A., K. E. Flaherty, J. L. Rummer, G. Cole, K. S. Hansen, R. Hinote, B. L. Noel, H. Wallman, and **W. A. Bennett**. 2001. Temperature and Hypoxia Tolerance of Selected Fishes from a Hyperthermal Rockpool in the Dry Tortugas, with Notes on Diversity and Behavior. *Caribbean Journal of Science* 37(1-2): 81-87.
- Bevelhimer, M. and **W. Bennett**. 2000. Assessing cumulative thermal stress in fish during chronic intermittent exposure to high temperatures. *Environmental Science & Policy*, 3:S211-S216.
- Beitinger, T. L., **W. A. Bennett** and R. W. McCauley. 2000. Temperature tolerances of North American freshwater fishes exposed to dynamic changes in temperature. *Environmental Biology of Fishes*, 58:237-275.
- Beitinger, T. L. and **W. A. Bennett**. 2000. Quantification of the role of acclimation temperature in temperature tolerance of fishes. *Environmental Biology of Fishes*, 58:277-288.
- Bennett, W. A.**, R. W. McCauley and T. L. Beitinger. 1998. Rates of gain and loss of heat tolerance in the channel catfish. *Transactions of the American Fisheries Society*, 127:1051-1058.
- Currie, R. J., **W. A. Bennett** and T. L. Beitinger. 1998. Heat and cold tolerance of three game-fish species exposed to constant acclimation temperatures. *Environmental Biology of Fishes*, 89:127-134.
- Bennett, W. A.**, R. J. Currie, P. F. Wagner and T. L. Beitinger. 1997. Cold tolerance and potential overwintering of red-bellied piranha *Pygocentrus nattereri* in the United States. *Transactions of the American Fisheries Society* 126:841-849.
- Bennett, W. A.** and T. L. Beitinger. 1997. Temperature tolerance of the sheepshead minnow, *Cyprinodon variegatus*. *Copeia* 1997:77-87.
- Bennett, W. A.**, A. Sosa and T. L. Beitinger. 1995. Minimum oxygen tolerance of fathead minnows, (*Pimephales promelas*), previously exposed to copper. *Bulletin of Environmental Contamination and Toxicology* 55:517-524.
- Bennett, W. A.** and T. L. Beitinger. 1995. Overview of techniques for removing oxygen from water and a description of a new oxygen depletion system. *The Progressive Fish-Culturalist* 57:84-87.
- Heath, S., **W. A. Bennett**, J. H. Kennedy and T. L. Beitinger. 1994 Heat and cold tolerance of the fathead minnow exposed to the synthetic pyrethroid cyfluthrin. *Canadian Journal of Fisheries and Aquatic Science* 124:145-1256.
- Bennett, W. A.** and F. W. Judd. 1992. Factors affecting the low-temperature tolerance of Texas pinfish. *Transactions of the American Fisheries Society* 121:659-666.
- Bennett, W. A. and F. W. Judd. 1992. A comparison of methods for determining low temperature tolerance: Experiments with pinfish, *Lagodon rhomboides*. Copeia 1992:1059-1065.**

RESEARCH GRANTS:

Florida Department of Environmental Protection & Benedict Engineering Co, Inc., – \$104,007. Title: Effects of Porous Groyne Installations on Reproductive Activity of Loggerhead Sea Turtle (Funded Summer 2001).

- Florida Institute of Oceanography – \$12,000.** Title: Use of Marginal Habitats by Reef Fishes of the Dry Tortugas (Funded Summer 2001).
- College of Arts and Sciences, Student Travel Grant Proposal – \$738.** Title: Funding for Student Accommodations at the Southern Division Meeting of the American Fisheries Society (Funded Spring 2001).
- Florida Institute of Oceanography – \$8,000.** Title: A study of Ichthyofauna and Reef Ecology of the Dry Tortugas (Funded Summer 2000).
- University of West Florida, Enhancement Funds Proposal - \$110,000.** Title: Construction of a Marine Research Facility (Funded 2000).
College of Arts and Sciences, Enhancement Fund Proposal – 10,000. Title: Funding for a Public Display and Education Materials (Funded 2000).
- Florida Department of Environmental Protection & Benedict Engineering Co, Inc., – \$103,869.** Title: Biological Monitoring of Porous Groyne Installation at Eglin AFB (Funded Fall 2000).
- Office of Research and Graduate Studies - \$8,250.** Graduate students in my laboratory have awarded either \$250 or \$500 for their theses proposals from 1999 to present.
- Florida Sea Grant Research Proposal – \$30,000.** TITLE: Modeling effects of near-lethal high temperature exposure on Florida estuarine fishes (not funded in 2000)
- Florida Sea Grant Research Proposal – \$23,000.** Title: Bioenergetics modeling of differential growth rates of largemouth bass, *Micropterus salmoides*, in estuarine and freshwater habitats (not funded in 2000)
- Solutia Inc., grant-in-aid of research in science and technology – \$1,500.** Award of to support a proposal titled “Characterization of the Methodological and Physiological Bases of Discrepancy Between Dynamic and Static Thermal Tolerance Limits” (Summer 1998).
- CoST Award for curriculum and research development –**Awarded 0.25 reduction in summer requirement to pursue proposed research titled “Temporal and Spatial Reproductive Resource Partitioning between Gulf Toadfish (*Opsanus beta*) and Florida Blenny, *Chasmodes saburrae*” (Summer 1998).
- National Research Council competitive postdoctoral grant - 1995 & 1996 -** The grant included \$32,000 annual stipend and \$40,000 start-up funding and incidental expenses. Initially awarded for 1995, the grant (annual stipend and incidental expenses) was renewed for 1996. Resigned grant in September of 1996 to accept a position of Visiting Assistant Professor at University of West Florida.

WADE JEFFREY

2000-pres. Associate Professor, Department of Biology and Center for Environmental Diagnostics and Bioremediation (CEDB). University of West Florida, Pensacola, FL.

EDUCATION

- Ph.D. Marine Science. University of South Florida, St. Petersburg, FL, 1989.
Dissertation Title: *Validation of [³H]thymidine incorporation and its application to detecting natural transformation in the environment* Dissertation Advisor: John H. Paul
- M.S. Marine Science. University of South Florida, St. Petersburg, FL, 1985.
Thesis Title: *The activity of attached and free-living estuarine bacteria* Thesis Advisor: John H. Paul
- B.S. Biology. Virginia Polytechnic Institute and State University, Blacksburg, Virginia, 1981.

PUBLICATIONS

- Jeffrey, W.H.,** J.H. Paul, and G.J. Stewart. 1990. Natural transformation of a marine *Vibrio* sp. by plasmid DNA. *Microb. Ecol.* 19: 259-268.
- Jeffrey, W.H.,** J.H. Paul, L.H. Cazares, M.F. DeFlaun, and A.W. David. 1990. Correlation of non-specific macromolecular labeling with environmental parameters during [³H]thymidine incorporation in the waters of southwest Florida. *Microb. Ecol.* 20: 21-35.
- Paul, J.H., **W.H. Jeffrey,** and J.P. Cannon. 1990. Production of dissolved DNA, RNA, and protein by microbial populations in a Florida reservoir. *Appl. Environ. Microbiol.* 56: 2957-2962.
- Paul, J.H., L.H. Cazares, A.W. David, M.F. DeFlaun, and **W.H. Jeffrey.** 1991. The distribution of dissolved DNA in oligotrophic and eutrophic rivers in southwest Florida. *Hydrobiologia* 218: 53-63.

- Jeffrey, W.H.**, S.M. Cuskey, P.J. Chapman, S. Resnick, and R.H. Olsen. 1992. *Pseudomonas putida* mutants unable to catabolize benzoate: Cloning and characterization of *Pseudomonas* genes involved in benzoate catabolism and isolation of a chromosomal DNA fragment able to substitute for *xylS* in the activation of the TOL lower pathway promoter. *J. Bacteriol.* 174: 4986-4996.
- Jeffrey, W.H.**, S. M Cuskey, R. B. Coffin, and M. Reagin. 1992. The use of lethal bacterial genes to limit the survival of intentionally released genetically engineered microorganisms, pp. 225-227. *In* Proceedings of the 4th investigators= meeting for EPA=s biotechnology-biological control agent risk assessment research program. United States Environmental Protection Agency, Washington, DC. EPA/600/R-92/147.
- Jeffrey, W.H.**, S. Nazaret, and R. Von Haven. 1994. Improved method for the recovery of mRNA from aquatic samples: application to detecting *mer* gene expression. *Appl. Environ. Microbiol.* 60: 1814-1821.
- Nazaret, S., **W.H. Jeffrey**, E. Saouter, R. VonHaven, and T. Barkay. 1994. *mer* gene expression in aquatic environments measured by mRNA production and Hg(II) volatilization. *Appl. Environ. Microbiol.* 60: 4059-4065.
- Santavy, D.L., **W.H. Jeffrey**, R.A. Snyder, J. Campbell, P. Malouin, and L. Cole. 1994. Microbial community dynamics in the mucus of healthy and stressed coral hosts. *Bull. Mar. Sci.* 54: 1077-1078.
- Barkay, T., S. Nazaret, and **W.H. Jeffrey**. 1995. Degradative genes in the environment. *In*: L.Y. Young and C. Cerniglia (ed) *Microbiological transformation and degradation of toxic organic chemicals*. Wiley-Liss, Inc., New York. pp. 545-577.
- Jeffrey, W.H.**, D.L. Mitchell, and R.B. Coffin. 1995. Molecular studies of ultraviolet radiation effects on marine bacteria, pp. 90-104. *In*: M. Levin, C. Grim, and J.S. Angle (eds.), *Biotechnology Risk Assessment: Risk Assessment Methodologies*, Proceeding of the Biotechnology Risk Assessment Symposium. Univ. of MD Biotechnology Institute, College Park.
- Jeffrey, W.H.**, R.J. Pledger, P. Aas, S. Hager, R.B. Coffin, R. Von Haven, and D.L. Mitchell. 1996. Diel and depth profiles of DNA photodamage in bacterioplankton exposed to ambient solar ultraviolet radiation. *Mar. Ecol. Progr. Ser.* 137: 293-304.
- Jeffrey, W.H.**, S. Nazaret, and T. Barkay. 1996. Detection of the *merA* gene and its expression in the environment. *Microb. Ecol.* 32: 293-303.
- Jeffrey, W.H.**, R. Von Haven, M.P. Hoch, and R.B. Coffin. 1996. Bacterioplankton RNA, DNA, protein content and relationships to rates of thymidine and leucine incorporation. *Aquatic Microbial Ecology* 10: 87-95.
- Pakulski, J.D., R.B. Coffin, C.A. Kelley, R. Downer, M. Maille Lyons, P. Aas, and **W.H. Jeffrey**. 1996. Iron stimulation of Antarctic bacteria. *Nature* 383: 133-134.
- Jeffrey, W.H.**, P. Aas, M. M. Lyons, R. Pledger, D.L. Mitchell, and R. B. Coffin. 1996. Ambient Solar Radiation Induced Photodamage in Marine Bacterioplankton. *Photochem. Photobiol.* 64 (3): 419-427.
- Aas, P., M. M. Lyons, R. J. Pledger, D.L. Mitchell, and **W.H. Jeffrey**. 1996. Inhibition of Bacterial Activities by Solar Radiation in Nearshore Waters and the Gulf of Mexico. *Aquat. Microb. Ecol.* 11: 229-238.
- Booth, C.R., J.H. Morrow, T.P. Coohill, J.J. Cullen, J.E. Frederick, D-P. Häder, O. Holm-Hansen, **W. H. Jeffrey**, D.L. Mitchell, P.J. Neale, I. Sobolev, J. Van Der Leun, and R.C. Worrest. 1997. Impacts of Solar UVR on Aquatic Microorganisms. *Photochem. Photobiol.* 65: 252-269.
- Jeffrey, W.H.**, R.V. Miller, and D.L. Mitchell. 1997. Detection of ultraviolet radiation induced DNA damage in microbial communities of the Gerlache Strait. *The Antarctic Journal of the United States.* 32: 85-87.
- Pakulski, J.D., P. Aas P, **W.H. Jeffrey**, M. Lyons, L. Von Waasenbergen, D. Mitchell, and R. Coffin. 1998. Influence of light on bacterioplankton production and respiration in a subtropical reef. *Aquat. Microb. Ecol.* 14:137-148.
- Jeffrey, W.H.** 1998. Induction of DNA Photodamage in Marine Microbial Communities By Ultraviolet Radiation. *In* H. Honigsmann, R.M. Knobler, F. Trautinger, and G. Jori (eds) *Proceedings of the 12th International Congress on Photobiology*. Associazione Internazionale de Photobiologie. Organizzazione Editoriale Medico Farmaceutica, Milano, Italy. pp. 26-30.
- Lyons, MM., P. Aas, J.D. Pakulski, L. Van Waasbergen, D.L. Mitchell, R.V. Miller, and **W.H. Jeffrey**. 1998. Ultraviolet radiation induced DNA damage in coral reef microbial communities. *Mar. Biol.* 130: 537-543.
- Wilhelm, S.W., M.G. Weinbauer, C.A. Suttle, and **W.H. Jeffrey**. 1998. The role of sunlight in the removal and repair of viruses in the sea. *Limnology and Oceanography* 43: 586-592.

- Massana, R. L. T. Taylor, A.E. Murray, K. Y. Wu, **W.H. Jeffrey**, and E. F. DeLong. 1998. Distribution of marine planktonic Archaea in the Gerlache Strait, Antarctic Peninsula, during early spring. *Limnology and Oceanography* 43: 618-624.
- Miller, R.V., **W. Jeffrey**, D. Mitchell, and M. Elasm. 1999. Bacterial responses to Solar Ultraviolet light. *ASM News*. 65: 535-541.
- Joux, F., **W.H. Jeffrey**, P. Lebaron, and D. Mitchell. 1999. Marine Bacteria Display Diverse Responses To Ultraviolet-B Radiation. *Appl. Environ. Microbiol.* 65: 3820-3827.
- Kelley, C.A, J.D. Pakulski, S.H. Sandvik, R.B. Coffin, R.C. Downer, Jr., P. Aas, M.M. Lyons, and **W.H. Jeffrey**. 1999. Phytoplanktonic and bacterial carbon pools and productivities in the Gerlache Strait, Antarctica during early austral spring. *Microb. Ecol.* 38: 296-305.
- Jeffrey, W.H.** J.P. Kase, and S.W. Wilhelm. 2000. Ultraviolet Radiation Effects on Bacteria and Viruses in Marine Ecosystems. In S. de Mora, S. Demers, and M. Vernet (ed). *The Effects of UV Radiation on Marine Ecosystems*. Cambridge University Press. pp. 206-236.
- Huot, Y., J.J. Cullen, **W.H. Jeffrey**, and R.F. Davis. 2000. Damage to DNA in bacterioplankton: a model of damage by ultraviolet radiation and its repair as influenced by vertical mixing. *Photochemistry and Photobiology* 72:62-74.
- Kepner, R.L., R.A. Wharton, R. Collier, C. Cockell, and **W.H. Jeffrey**. 2000. UV radiation and potential effects beneath the perennial ice cover of an Antarctic lake. *Hydrobiologia*. 427:155-165.
- Jeffrey, W.H.** And D.L. Mitchell. Measurement of UVB induced DNA damage in marine planktonic communities. 2001. In J. Paul (ed) *Methods in marine microbiology*. Vol. 30. Academic Press, NY. pp. 469-485.
- Booth, M.G, L. Hutchinson, M. Brumsted, P. Aas, R. B. Coffin, R. C. Downer, Jr., C. A. Kelley, M. M. Lyons, J. D. Pakulski, S. L. Holder Sandvik, **W. H. Jeffrey**, and R. V. Miller. 2001. Quantification of RecA as an Indicator of Repair Potential in Marine Bacterioplankton Communities of Antarctica. *Aquatic Microbial Ecology* 24: 51-59.
- Booth, M.G., **W.H. Jeffrey**, and R.V. Miller. RecA expression in response to solar ultraviolet radiation in the marine bacterium *Vibrio natriegens*. *Microb. Ecol.* (In press).

RESEARCH CRUISE EXPERIENCE

- 1982 R/V BELLOWS, 2 days, Gulf of Mexico, G. Vargo, Chief Scientist
- 1983 R/V BELLOWS, 6 days, Gulf of Mexico, S. Vargo, Chief Scientist
- 1984 R/V BELLOWS, 6 days, Gulf of Mexico, Ken Carder, Chief Scientist
- 1985 R/V BELLOWS, 5 days, Dry Tortugas, J.H. Paul, Chief Scientist
- 1985 R/V SUNCOASTER, 14 days, Gulf of Mexico, J.H. Paul, Chief Scientist
- 1986 R/V BELLOWS, 6 days, Gulf of Mexico, W.H. Jeffrey, Acting Chief Scientist
- 1987 R/V BELLOWS, 5 days, Dry Tortugas, J.H. Paul, Chief Scientist
- 1988 R/V BELLOWS, 6 days, Cay Sal, Bahamas, J. Paul, Chief Scientist
- 1990 R/V CAPE HATTERAS, 8 days, Bahamas, J.H. Paul, Chief Scientist
- 1992 OSV P. W. ANDERSON, 8 days, Northern Gulf of Mexico, R.B. Coffin, Chief Scientist
- 1992 R/V BELLOWS, 5 days, Northeastern Gulf of Mexico, W.H. Jeffrey, Chief Scientist
- 1992 R/V GYRE, 5 days, Northern Gulf of Mexico, L. Cifuentes, Chief Scientist
- 1992 OSV P.W. ANDERSON, 8 days, Northern Gulf of Mexico, W.H. Jeffrey, Chief Scientist
- 1993 R/V CAPE HENLOPEN, 3 days, Bermuda (BATS), J.W. Ammerman, Chief Scientist
- 1993 OSV P.W. ANDERSON, 9 days, Key West, FL, R.B. Coffin, Chief Scientist
- 1994 OSV P.W. ANDERSON, 7 days, Northern Gulf of Mexico, R.B. Coffin, Chief Scientist
- 1994 R/V BELLOWS, 5 days, Northeastern Gulf of Mexico, W.H. Jeffrey, Chief Scientist
- 1994 R/V BELLOWS, 4 days, Northeastern Gulf of Mexico, W.H. Jeffrey, Chief Scientist
- 1994 OSV P.W. ANDERSON, 4 days, Gulf of Mexico, R.B. Coffin, Chief Scientist
- 1995 R/V LONGHORN, 10 days, Gulf of Mexico, C. Suttle, Chief Scientist
- 1995 R/V POLAR DUKE, 40 days, Gerlache Straits, Antarctica, W.H. Jeffrey, Chief Scientist
- 1996 R/V POLAR DUKE, 40 days, Gerlache Straits, Antarctica, W.H. Jeffrey, Chief Scientist
- 1997 R/V POLAR DUKE, 22 days, Chile to Louisiana, W.H. Jeffrey, Chief Scientist
- 1997 R/V BELLOWS, 4 days, Biol. Oceanogr. Teaching Cruise, W.H. Jeffrey, Chief Scientist
- 1998 R/V BELLOWS, 3 days, Oceanogr. Tech. Teaching Cruise, W.H. Jeffrey, Chief Scientist
- 1998 R/V LAWRENCE M. GOULD. 40 days, Weddell Sea, Patrick Neale, Chief Scientist
- 1999 R/V BELLOWS, 3 days, Oceanogr. Tech. Teaching Cruise, W.H. Jeffrey, Chief Scientist

2000 R/V BELLOWS, 3 days, Oceanogr. Tech. Teaching Cruise, W.H. Jeffrey, Chief Scientist
 2000 RVIB NATHANIAL B. PALMER, 25 days, Chile to Louisiana, W. Jeffrey, Chief Scientist
 2000 R/V BELLOWS, 4 days, Biol. Oceanogr. Teaching Cruise, W.H. Jeffrey, Chief Scientist
 2001 R/V BELLOWS, 3 days, Oceanogr. Tech. Teaching Cruise, W.H. Jeffrey, Chief Scientist
 2001 R/V PELICAN, 13 days, Gulf of Mexico, W.H. Jeffrey, Chief Scientist

GRANTS AND CONTRACTS

United States Environmental Protection Agency. Molecular Microbial Ecology Research Program. Principal Investigator. 9/91 - 9/94. \$626,159.

Florida Institute of Oceanography. 1992. *UWF/CEDB Molecular Microbial Ecology Research Initiatives in Oceanography*. Principal Investigator. Shiptime Award. \$10,800.

National Oceanographic and Atmospheric Administration National Undersea Research Program. *Microbial Community Dynamics in mucus of healthy and stressed corals*. Principal Investigator. 6/92 - 6/93. \$7,000.

Florida Institute of Oceanography. 1993. *Microbial gene expression, trophic interactions, and nutrient dynamics in the waters of the northeastern Gulf of Mexico*. Principal Investigator. Shiptime award. \$7,200.

Office of Naval Research. *Detection of in situ genetic damage in marine bacteria resulting from introduced xenobiotics*. Principal Investigator. 7/93 - 6/97. \$307,486.

US Environmental Protection Agency. *Bacterial recA gene expression in the marine environment: the effect of ultraviolet light*. Principal Investigator. 10/93-9/97. \$468,410.

Florida Institute of Oceanography. 1994. *Microbial activity patterns in North Florida Coastal Waters and expression of bacterial genes indicative of stress*. Principal Investigator. Shiptime award. \$10,000.

National Science Foundation. *Ultraviolet radiation induced DNA damage in bacterioplankton in the southern ocean*. Principal Investigator. 8/1/95 - 7/31/98. \$421,041.

National Oceanographic and Atmospheric Administration National Undersea Research Program. 1995. *Molecular assessment of the effect of ultraviolet radiation on coral reef microbial ecology*. Principal Investigator. \$17,214

Florida Institute of Oceanography. 1995. *Ultraviolet radiation effects on coral reef microbial ecology and isolation of algal symbionts bearing protists*. Princ. Invest.. Shiptime award. \$8,000.

Office of Naval Research. *Detection of in situ genetic damage in marine bacteria resulting from introduced xenobiotics*. -Supplemental Funding. Principal Investigator. 6/96 - 5/97. \$37,118.

National Oceanographic and Atmospheric Administration National Undersea Research Program. *Ultraviolet radiation induced DNA damage in coral reef microbial communities*. Principal Investigator. 4/1/97 - 6/1/99. \$37,876

Florida Institute of Oceanography. 1997. *Biological Oceanography Sampling Methodologies*. Principal Investigator. Shiptime award. \$12,000.

Florida Institute of Oceanography. 1998. *Biological Oceanography Sampling Methodologies*. Principal Investigator. Shiptime award. \$6,000.

US Environmental Protection Agency. 1998. *Science Training in Ecology Program (STEP)*. Project Manager and Co-Principal Investigator. 3/1/98 - 2/28/01. \$898,024.

National Science Foundation. *Ultraviolet radiation induced DNA damage in bacterioplankton in the southern ocean. II. Photochemical & trophic interactions and seasonal patterns of UV response*. Principal Investigator. 8/1/98 - 7/31/01. \$344,422. (Total project budget: \$759,522).

National Science Foundation. *UV effects on marine production by bacteria and phytoplankton: Assessing the impact of UVB*. Co-Principal Investigator. 10/1/98 - 9/30/01. \$156,697 (Total project budget: \$ 335,750).

Florida Institute of Oceanography. 1999. *Biological Oceanography Sampling Methodologies*. Principal Investigator. Shiptime award. \$6,000.

National Science Foundation. *Ultraviolet radiation induced DNA damage in bacterioplankton in the southern ocean*. Supplemental Funding: *Latitudinal effects of ultraviolet radiation on marine microbial communities and molecular diversity of genes important in biogeochemical cycles*. Principal Investigator: \$12,810

National Science Foundation. *UV effects on marine production by bacteria and phytoplankton: Assessing the impact of UVB*. Supplemental Funding: *Summer Research Experience for Undergraduates (REU)*. Principal Investigator. \$5000.

- Florida Institute of Oceanography. 2000. *Biological Oceanography Sampling Methodologies*. Principal Investigator. Shiptime award. \$8,000.
- Florida Institute of Oceanography. 2001. *Oceanographic Techniques*. Principal Investigator. Shiptime award. \$6,000.
- National Science Foundation: *LexEn Collaborative research: Glacial Ahitchhiking: @ A mechanism for bacterial speciation in an extremely cold environment*. Co-Principal Investigator. 10/1/00 - 9/30/03. \$138,459. (Total project budget: \$500,000)
- University of West Florida. Faculty Small Grants Award. 2001. *Investigation of molecular diversity of important functional genes in marine bacteria*. Principal Investigator. \$2000
- University of West Florida. University Summer Research Award. *Spatial Heterogeneity of marine bacterial community structure and function*. Principal Investigator. \$7,500 (declined).
- National Science Foundation. *Ultraviolet radiation induced DNA damage in bacterioplankton in the southern ocean*. Supplemental Funding: *Summer Research Experience for Undergraduates (REU)*. Principal Investigator. \$5,000.

JOHAN LIEBENS

2001 - present Associate professor, Department of Environmental Studies, University of West Florida.

Education

- Ph D** (Geography) Michigan State University, 1996
Dissertation: Pedology and dating of colluvial deposits in the Southern Blue Ridge, North Carolina.
- M Sc** (Quaternary geology) Free University Brussels, Belgium, 1983
Thesis: Investigation of the Quaternary in relation to the prospecting of the "stone of Balegem".
- B Sc** (Geography) Free University Brussels, Belgium, 1981
Thesis: The influence of geographical factors on the distribution of heavy fog in the region of Lummen and Halen (Belgium).

Publications

- 2003 Liebens, J. and Van Molle, M. Effect of estimation procedure on soil organic carbon stock assessments in Flanders, Belgium. *Soil Use and Management* [page #s missing]
- 2003 Liebens, J. Map and database construction for a historic cemetery: Methods and applications. *Historical Archaeology*, 37(4):56-68.
- 2001 Liebens, J. Heavy metal contamination of sediments in stormwater management systems: The effect of land use, particle size, and age. *Environmental Geology*, 41:341-351.
- 2001 Liebens, J. Spreadsheet macro to determine USDA soil textural subclasses. *Communications in Soil Science and Plant Analysis*, 32(1&2):255-265.
- 2000 Schaeztl, R.J., Krist, F.J., Rindfleisch, P.R., Liebens, J., and Williams, T.E. Post-glacial landscape evolution of Northeastern lower Michigan, interpreted from geomorphology, soils and sediments. *Annals of the Association of American Geographers*, 90(3):443-466.
- 2000 Liebens, J. A simple method to evaluate the impact of tropical cyclones on coastlines: Hurricane Georges and the Gulf Coast. *Shore & Beach*, 68(1):17-24.
- 1999 Liebens, J. Characteristics of soils on debris aprons in the Southern Blue Ridge, North Carolina. *Physical Geography*, 20(1):27-52.
- 1997 Liebens, J. and Schaeztl, R.J. Relative age relationships of debris flow deposits in the Southern Blue Ridge, North Carolina. *Geomorphology*, 21(1):53-67.
- 1995 Barrett, L.R., Liebens, J., Brown, D.G., Schaeztl, R.J., Zuwerink, P., Hunkler, R.G., Cate, T.W. and Nolan, D.S. Relationships between soils and presettlement vegetation in Baraga County, Michigan. *American Midlands Naturalist*, 134(2):264-285.
- 1991 Liebens, J. The development of Quaternary geology in SE Asia in the framework of CCOP. Bangkok, *CCOP technical publications-25th anniversary volume*, pp 47-56.

Research Grants

Mapping and Analysis of CATE Project Data	2002	\$10,000	Escambia County, FL, Health Department:
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Effects of gully erosion on nutrient loading to estuaries along the Gulf of Mexico	2002	\$74,376	U.S. Department of Agriculture, National Research Initiative Competitive Grants Program
Effects of land use in low-order watersheds on sediment and nutrient input into Escambia Bay, FL	2001	\$7,500	University of West Florida, University Research Award
Human effects and physical processes in the Great Smoky Mountains National Park: A field experience (with Dr. Stephen Thorne)	2000	\$10,000	University of West Florida, College of Arts and Sciences, Awards for Summer Research & Curriculum Development.
Paleoenvironmental reconstruction of Santa Rosa Island, FL	1999	\$1,990	University of West Florida, Small Grants Program
Contamination of sediments in street sweepings and storm water systems: Pollutant composition and sediment reuse options (with Dr. Melvin Droubay)	1999	\$77,000	Florida Center for Solid and Hazardous Waste Management
Distance learning program in oceanography: Request for core faculty	1998	\$17,150	University of West Florida, Office of the Provost

KLAUS J. MEYER-ARENDRT

Professor and Chair, Department of Environmental Studies, UWF (since 1998)

Education

Ph.D., Coastal Geography, Louisiana State University, 1987

M.A. Geography, Louisiana State University, 1979

B.A., Geography, Portland State University, 1975

Selected Publications

- Meyer-Arendt, K.J., 2003, Human Alteration of the North Yucatán Coast, in a special volume on coastal issues in honor of H. Jesse Walker, (D. Davis, ed.), **Geoscience and Man**, vol. ?, Dept. of Geography & Anthropology, Louisiana State U., Baton Rouge, LA, pp. xx-xx.
- Meyer-Arendt, K.J., 2001, Recreational Urbanization and Shoreline Modification along the North Coast of Yucatán, **Tourism Geographies** 3(1): 87-104.
- Meyer-Arendt, K.J., 1999, Impacto Ambiental Provocado por el Cambio del Uso de Suelo en la Zona de Progreso, Yucatán, in **Atlas de Procesos Territoriales de Yucatán**, Universidad Autónoma de Yucatán, Mexico City, pp. 259-261.
- Schwartz, R. & Meyer-Arendt, K.J., 1999, Hurricanes and Casinos in Biloxi, Mississippi, **Journal of the American Society of Professional Emergency Planners** 6: 83-95.
- Meyer-Arendt, K.J., 1998, Casino Gaming on the Mississippi Gulf Coast, in **Marine Resources and History of the Mississippi Gulf Coast**, (D.M. McCaughan, ed.), Vol. 3, pp. 291-308, MS Department of Marine Resources, Biloxi, MS.
- Meyer-Arendt, K.J., S.M. Oivanki, & B. Yassin, 1998, Wetland Changes in Coastal Mississippi, 1950s to 1992, in Mississippi's Coastal Environment, Volume 2 of **Marine Resources and History of the Mississippi Gulf Coast**, (D.M. McCaughan, ed.), pp. 377-399, MS Department of Marine Resources, Biloxi, MS.
- Meyer-Arendt, K.J., 1995, **Beach and Nearshore Sediment Budget of Harrison County, Mississippi: A Historical Analysis**, Open-File Report 43, Office of Geology, MS Dept. of Environmental Quality, Jackson, MS, 65 pp.

- Meyer-Arendt, K.J., 1994, Human Settlement of the "Island of Belle Fontaine", Jackson County, Mississippi, in **Belle Fontaine, Jackson County, Mississippi: Human History, Geology, and Shoreline Erosion**, (S.M. Oivanki, ed.), Office of Geology, MS Dept. of Environmental Quality, Jackson, MS, Bulletin 130, pp. 7-19.
- Meyer-Arendt, K.J., 1993, Geomorphic Impacts of Resort Evolution along the Gulf of Mexico Coast: Applicability of Resort Cycle Models, in **Tourism vs. Environment: The Case for Coastal Areas**, (P.P. Wong, ed.), Geojournal Library Series vol. 26, Kluwer Academic Publishers, Dordrecht, Netherlands., pp. 125-138.
- Meyer-Arendt, K.J., 1993, Shoreline Changes along the North Yucatán Coast, in **Coastlines of the Gulf of Mexico** (S. Laska & A. Puffer, eds.), a vol. of *Coastlines of the World* series (O. Magoon, ed.), Amer. Soc. of Civil Engineers, NY. Proceedings of the 8th Symposium on Coastal and Ocean Management (Coastal Zone '93), July 19-23, New Orleans, 103-117.
- Meyer-Arendt, K.J., 1992, Human-Environment Relationships along the Mississippi Coast, **Mississippi Journal for the Social Studies** 3: 1-10.
- Meyer-Arendt, K.J., Sambrook, R., & B. Kermath, 1992, Seaside Resorts in the Dominican Republic: A Typology, **Journal of Geography** 91 (5): 219-225.
- Meyer-Arendt, K.J., 1991, Human Impacts on Coastal and Estuarine Environments in Mississippi, in **Coastal Depositional Systems in the Gulf of Mexico: Quaternary Framework and Environmental Issues**, Proceedings of the GCSSEPM Foundation 12th Annual Research Conference, Houston, TX, Dec. 8-11, pp. 141-148.
- Meyer-Arendt, K.J. & K.A. Kramer, 1991, Deterioration and Restoration of the Grande Batture Islands, Mississippi, **Mississippi Geology** 11 (4): 1-5.
- Meyer-Arendt, K.J., 1991, Hurricane Gilbert: Storm of the Century, **GeoJournal** 23 (4): 323-325.
- Meyer-Arendt, K.J., 1991, Tourism Development on the North Yucatán Coast: Human Response to Shoreline Erosion and Hurricanes, **GeoJournal** 23 (4): 327-336.
- Meyer-Arendt, K.J., 1990, Modeling Environmental Impacts of Tourism Development along the Gulf Coast, **The Compass** 67: 272-283.
- Meyer-Arendt, K.J., 1990, Patterns and Impacts of Coastal Recreation along the Gulf Coast of Mexico, in **Recreational Uses of Coastal Areas**, (P. Fabbri, ed.), Kluwer Academic Publishers, Dordrecht, Netherlands., pp. 133-148. [reprinted 1995 in **Golfo de México, Contaminación e Impacto Ambiental: Diagnóstico y Tendencias**, Jorge A. Benitez, ed., EPOMEX Serie Científica, Campeche, Mexico]

GRANTS & RESEARCH:

- Research Grant: A Universal Feature Classification Taxonomy for Future Mapping, Charting and Geodetic (MC&G) Systems. National Imagery & Mapping Agency, Department of Defense, \$677,623. September 2003-September 2008. (with Barry Bitters)
- Research Grant: GIS Technical Support for Gulf Islands National Seashore. U.S. National Park Service, \$14,700. October 2003-August 2004.
- Research Grant: Greenway Project. Economic Development Council, Okaloosa County, FL, \$250,000. May -December 2003. (with Dr. Chris Pierce, Haas Center)
- Research Grant: Northwest Florida Comprehensive Assessment. Economic Development Council, Okaloosa County, FL, \$75,000. February -April 2003. (with Dr. Chris Pierce)
- Support Grant: Partial sponsorship of multi-state field trip and publication costs associated with the Coasts Under Stress II international symposium, held in New Orleans March 4-11, 2003. Florida Sea Grant, \$2,500. July 2002-July 2003.
- Research Grant: GIS Technical Support for Gulf Islands National Seashore. U.S. National Park Service, \$15,000. July 2002-Sept. 2003.
- Research Grant: Valuation of Wetlands in Escambia County, Florida. Neighborhood and Environmental Services Department, Escambia County, \$7,040. October 2001-April 2002. (with Drs. Mel Droubay & Rick Harper)
- Research Grant: Monitoring Beach Nourishment Sands at Quietwater Beach, Pensacola, FL, Faculty Small Grant Award, Univ. of West Florida, \$2,000. April-September 2000.
- Teaching Grant: Coastal Environments: An Advanced Summer Geography Institute, MS Geography Education Fund, National Geographic Society, \$20,000, June-August 1998.

- Research Grant: Impacts of Hurricane Gilbert upon Shorefront Development along the North Yucatán Coast: Applications of Resort Cycle Models, Fulbright & García-Robles Foundations, Council for International Exchange of Scholars \$15,000, July-Nov. 1994.
- Research Grant: Wetlands Mapping of Coastal Mainland Mississippi, Office of Geology, MS Department of Environmental Quality (DEQ), \$5,661, January-June 1994.
- Research Grant: Mississippi Coastal Geology & Regional Marine Study (year 3): Beach and Nearshore Sediment Budget of Harrison County, Mississippi: A Historical Analysis & Geomorphic Mapping of Coastal Mainland Mississippi, Office of Geology, MS DEQ, \$11,457, January-September 1993.
- Research Grant: Mississippi Coastal Geology & Regional Marine Study (year 2): Wetland Changes in Mississippi and Human Impacts upon the Bellefontaine Headland, Mississippi, Office of Geology, MS DEQ and MS Bureau of Marine Resources, \$15,323, January-Sept. 1992.
- Research Grant: Shoreline Changes at Ocean Springs, Mississippi, MS/AL Sea Grant Consortium, \$7,950, November 1991-August 1992.
- Research Grant: Mississippi Coastal Geology & Regional Marine Study (year 1): Historical Human Modification of Mississippi's Mainland Shoreline, Office of Geology, MS DEQ, \$15,000, January-June 1991.
- Research Contract: Position Paper on Mechanisms of Wetland Loss: Impact of Sea Level Rise, prepared for World Resources Institute, Washington, D.C., \$1000, Summer 1990.
- Research Contract: Interpretation and Mapping of Aquatic Habitats of the Lower Mississippi River, Project conducted by the Mississippi State Remote Sensing Center for the U.S. Army Corps of Engineers, Vicksburg District, \$8,000, Summers 1989 & 1990.

CHRISTOPHER POMORY

Assistant Professor. Department of Biology, University of West Florida, Pensacola, Florida: 2000 - present.

Education

- Ph.D. Biology, 1997. University of South Florida, Tampa, Florida.
- M.S. Zoology, 1990. Texas A&M University, College Station, Texas.
- B.A. Biology, minor: Computer Science, 1985. Rollins College, Winter Park, Florida.

Publications

- Pomory, C.M. 2001. A guide to the shallow-water Echinodermata of the Texas coast. *Contributions to Marine Science* In Press.
- Pomory, C.M. & J.M. Lawrence 2001. Arm regeneration in the field in *Ophiocoma echinata* (Echinodermata: Ophiuroidea): Effects on body composition and its potential role in a reef food web. *Marine Biology* In Press.
- Pomory C.M. 2001. An escape response behaviour in the brittle star *Ophiopteris papillosa* (Echinodermata: Ophiuroidea). *Marine and Freshwater Behaviour and Physiology* In Press.
- Kane, K. & C.M. Pomory 2001. The effects of UV-B radiation on the reproduction and mortality of *Tigriopus californicus* (Copepoda: Harpacticoida). *Hydrobiologia* 444: 213-215.
- Pomory, C.M. & M.T. Lares 2000. Rate of regeneration of two arms in the field and its effect on body components in *Luidia clathrata* (Echinodermata: Asteroidea). *Journal of Experimental Marine Biology and Ecology* 254: 211-220.
- Shulman, P. & C.M. Pomory 2000. The effects of hydrocarbon pollution from a two-stroke outboard engine on the feeding behaviour of *Lythrypnus dalli* (Perciformes: Gobiidae). *Marine and Freshwater Behaviour and Physiology* 33: 213-220.
- Villasin, J. & C.M. Pomory 2000. Antibacterial activity of extracts from the body wall of *Parastichopus parvimensis* (Echinodermata: Holothuroidea). *Journal of Fish and Shellfish Immunology* 10: 465-467.
- Lawrence, J.M. & C.M. Pomory 1999. Eccentricity of the apical system and peristome of sand dollars (Echinodermata: Echinoidea: Clypeasteroidea: Scutellina). *Gulf of Mexico Science* 17: 35-39.
- Lawrence, J.M., & C.M. Pomory 1999. Anterior-posterior asymmetry in the Aristotle's lantern of sand dollars. pp 21-24 in Carnevali, M.D.C. & F. Bonasoro (eds), *Echinoderm Research 1998*. A.A. Balkema, Rotterdam.

- Pomory, C.M. & J.M. Lawrence 1999. Effect of arm regeneration on energy storage and gonad production in *Ophiocoma echinata* (Echinodermata: Ophiuroidea). *Marine Biology* 135: 57-64.
- Pomory, C.M. & J.M. Lawrence 1999. Energy content of *Ophiocoma echinata* (Echinodermata: Ophiuroidea) maintained at different feeding levels during arm regeneration. *Journal of Experimental Marine Biology and Ecology* 238: 139-150.
- Pomory, C.M. & M.T. Lares 1998. *Gonospora holoflora*: a new species of gregarine protozoan parasite (Apicomplexa) in *Holothuria floridana* (Echinodermata: Holothuroidea) from the Florida Keys. *Bulletin of Marine Science* 62: 213-218.
- Lares, M.T. & C.M. Pomory 1998. Use of body components during starvation in *Lytechinus variegatus* (Lamarck) (Echinodermata: Echinoidea). *Journal of Experimental Marine Biology and Ecology* 225: 99-106.
- Pomory, C.M., T.W. Foret, S. Hill & J.M. Lawrence 1998. Characteristics of a population of *Holothuria floridana* (Echinodermata: Holothuroidea) in Florida. pp 507-511 in Mooi, R. & M. Telford (eds), *Echinoderms: San Francisco*. A.A. Balkema, Rotterdam.
- Lawrence, J.M., C.M. Pomory, J. Sonnenholzner & C.-M. Chao 1998. Bilateral symmetry of the petals in *Mellita tenuis*, *Encope micropora*, and *Arachnoides placenta* (Echinodermata: Clypeasteroidea). *Invertebrate Biology* 117: 94-100.
- Pomory, C.M. 1997. Fluctuating asymmetry: biological relevance or statistical noise? *Animal Behaviour* 53(1): 225-227.
- Pomory, C.M., B.D. Robbins & M.T. Lares 1995. Sediment grain size preference by the sand dollar *Mellita tenuis* Clark, 1940 (Echinodermata: Echinoidea): A laboratory study. *Bulletin of Marine Science* 56(3): 778-783.
- Pomory, C.M. 1989. Range extensions for *Isostichopus badionotus* Selenka, 1867 and *Holothuria (Halodeima) grisea* Selenka, 1867 (Echinodermata: Holothuroidea). *The Texas Journal of Science* 41(3): 330-331.

HILDE SNOECKX

Coordinator, B.S. in Oceanography Program, University of West Florida, 2004-
 Adjunct instructor, Department of Environmental Studies, University of West Florida, 1996-present.
 Adjunct instructor, Department of Biology, University of West Florida, 1999-2001.

Education

- Ph.D. (Oceanography: Marine Geology and Geochemistry), University of Michigan, 1995.
 M.Sc. (Quaternary Geology), Vrije Universiteit Brussel, Belgium, 1984.
 B.Sc. (Geography), Vrije Universiteit Brussel, 1982.

Selected Publications

- Snoeckx**, H., F. Grousset, M. Revel, and A. Boelaert, 1999. European contribution of ice-rafted sand to Heinrich layers H3 and H4, *Marine Geology*, Volume 158, Pages 197-208
- Rea, D.K., H. **Snoeckx**, and L. H. Joseph, 1998. Late Cenozoic eolian deposition in the North Pacific: Asian drying, Tibetan uplift, and cooling of the Northern Hemisphere, *Paleoceanography*, 13, 215-224.
- Snoeckx**, H. and D.K. Rea, 1995. Eolian and Silica Deposition in the Central North Pacific: Results from Sites 885/886. *in*: Rea, D. K., Basov, I. A., Scholl, D. W., and Allan, J. F. (Eds.), *Proc. ODP. Scientific Results*, 145: College Station, TX (Ocean Drilling Program), 219-230.
- Snoeckx**, H. and D.K. Rea, 1995. CaCO₃ Content and Bulk Density of the Leg 138 Site Survey Piston Cores. *in*: Piasias, N. G., Mayer, L. A., Janecek, T. R., et al., *Proc. ODP. Scientific Results*, 138: College Station, TX (Ocean Drilling Program), 885-893.
- Rea, D.K. and H. **Snoeckx**, 1995. Sediment Fluxes in the Gulf of Alaska: Paleooceanographic Record from ODP Site 887 on the Patton-Murray Seamount Platform. *in*: Rea, D. K., Basov, I. A., Scholl, D. W., and Allan, J. F. (Eds.), *Proc. ODP. Scientific Results*, 145: College Station, TX (Ocean Drilling Program), 247-256.
- Dickens, G.R., H. **Snoeckx**, E. Arnold, J.J. Morley, R.M. Owen, D.K. Rea, B.L. Ingram, 1995. Composite Depth Scale and Stratigraphy for Sites 885/886. *in*: Rea, D. K., Basov, I. A., Scholl, D. W., and Allan, J. F. (Eds.), *Proc. ODP. Scientific Results*, 145: College Station, TX (Ocean Drilling Program), 205-217.
- Snoeckx**, H. and D.K. Rea, 1994. Late Quaternary CaCO₃ Stratigraphy of the Eastern Equatorial Pacific. *Paleoceanography*, 9:341-351.

Snoeckx, H. and D.K. Rea, 1994. Dry Bulk Density and CaCO₃ Relationships in Upper Quaternary Sediments of the Eastern Equatorial Pacific. *Marine Geology*, 120:327-333.

RICHARD SNYDER

Associate Professor, Center for Environmental Diagnostics and Bioremediation (CEDB) and Biology Department, University of West Florida, 2002-present.

Education

M.S., Ph.D. in Zoology, 1989

University of Maryland, College Park. Dissertation Title: *Chemosensory Mediated Reactions of a Suspension Feeding Ciliate Protist to Surface Compounds of its Bacterial Prey.*

Graduate Study in Oceanography & Salt Marsh Ecology, 1982-83

Virginia Institute of Marine Science, College of William & Mary, Gloucester Point, Virginia

B.S. Biology, 1980

College of Charleston, Charleston, South Carolina.

Publications

Snyder, R.A. 1985. Ciliate protists from the Western Atlantic barrier reef system, Carrie Bow Cay, Belize. *Fifth International Coral Reef Congress, Tahiti*. 5:215-220.

Corliss, J.O. & **Snyder**, R.A. 1985. Preliminary description of eight new ciliates from Antarctic sea ice, including *Cohnilembus grassii*. *Protistologica* 22:39-46.

Snyder, R.A. 1991. Chemoattraction of a bacterivorous ciliate to bacteria surface compounds. *Hydrobiologia* 215:205-213.

Ohman, M.D. & **Snyder**, R.A. 1991. Growth kinetics of the omnivorous oligotrich ciliate *Strombidium* sp. *Limnol. Oceanogr* 36:922-935.

Snyder, R.A. & Ohman, M.D. 1991. A new species of Strombidinopsidae (Ciliophora, Choreotrichida), *Strombidinopsis chesire* n.sp. *Trans. Am. Microsc. Soc.* 110:237-243.

Snyder, R.A. & Brownlee, D.C. 1991. *Nolaclusilis bicornis* n.g., n.sp. (Tintinnina: Tintinnidiidae): a Tintinnine ciliate with novel lorica and cell morphology from the Chesapeake Bay estuary. *J. Protozool.* 38:583-589.

Snyder, R.A., Robarts, R.D., & Caldwell, D.E. (1994). [methyl-³H]thymidine and ³H leucine incorporation in *Vibrio* spp. grown in nutrient limited continuous cultures. *Can. Journal Microbiol.* 40:375-381.

Winkler, J. Timmis, K., & **Snyder** R.A. (1994). Tracking response of *Burkholderia cepacia* G4 5223-PR1 in aquifer microcosms. *Appl. Environ. Microbiol.* 61:448-455

Hoch, M.P., **Snyder**, R.A., Cifuentes L., & Coffin, R.B. (1996). Stable isotope dynamics of nitrogen recycled during interactions among bacteria and protists. *Mar. Ecol. Prog. Ser.* 132:229-239.

Snyder, R.A. & M.P. Hoch. (1996). Consequences of protist-stimulated bacterial production for estimating protist growth efficiencies. *Hydrobiologia* 341:113-123.

Snyder, R.A. (1996). Response of Microorganisms to Chemical Gradients. pp 151-156 in: Druger, M. & Anderson, O.R., eds., *Explore the World Using Protozoa*. National Science Teachers Association & Society of Protozoologists.

Snyder, R.A. (1996). Predator-Prey Interactions. pp 142-150 in: Druger, M. & Anderson, O.R., eds., *Explore the World Using Protozoa*. National Science Teachers Association & Society of Protozoologists.

Lawrence, J.R. and R.A. **Snyder**. (1998). Feeding behavior and grazing impacts of a *Euplotes* sp. on attached bacteria. *Can. J. Microbiol.* 44:623-629.

Lores, E., **Snyder**, R.A., & Pennock, J. 1998. The effect of humic acid on uptake/adsorption of copper by a marine bacterium and two marine ciliates. *Chemosphere* 38:293-310.

Snyder, R.A., Millward, J. & Steffensen, W.S. (2000). Aquifer protist response and the potential for TCE bioremediation with *Burkholderia cepacia* G4 PR1. *Microbial Ecology* 40:189-199.

Snyder, R.A. & C.L. Boss. (2002). Recovery and Stability in Barrier Island Plant Communities. *Journal of Coastal Research* 18:530-536.

Research Grants

Biological Survey of FCT Project #96-034-P7A. Snyder, R.A. West Florida Planning Council, (2003). \$2400.

Assessing fisheries as vectors for toxic materials from the environment to humans. Snyder, R.A., Centers for Disease Control (Part of larger PERCH project; R. Rao, PI) \$397,098

Wet Prairie Habitat Restoration: Evaluation and Management Strategies. R.A. Snyder, Northwest Florida Water Management District (2003) \$7081.

Evaluation of Ciliate Protozoans as a First Food for Red Snapper *Lutjanus campechanus* Larvae. Snyder, R.A. and R.W. Phelps. National Marine Fisheries S-K program, NOAA (2003-2004) \$87,151

Importance of microalgal production on the northern Gulf of Mexico nearshore sand bottom: nutrient trapping and support of fisheries production. Snyder, R.A., CIAP-NOAA Escambia County, FL. (2003). \$24,000..

Wet Prairie Habitat Restoration: Evaluation and Management Strategies. R.A. Snyder, Northwest Florida Water Management District (2002) \$7081.

An Assessment of human sewage waste input into Coldwater and Pond Creeks. Snyder, R.A., Lepo, J.E., and Jeffrey, W. West Florida Regional Planning Council (BARC) (2002). \$18,998.

Analysis of Estuarine microzooplankton. Snyder R.A. US EPA. 2002. \$2400.

Biological Survey of FCT Project Century Boat Ramp. Snyder, R.A. West Florida Planning Council, (2001). \$1800.

Microbial Biofilms as indicators of estuarine ecosystem condition. J.E. Lepo & R.A. Snyder, U.S. EPA (2001-2005) \$1,563,111 (part of a consortium proposal, \$5,000,000 total).

Agricultural runoff impacts on total maximum daily loads and water quality. J.E. Lepo & R.A. Snyder, U.S. Dept. of Agriculture(2001). \$532,000

Wet Prairie Habitat Restoration: Evaluation and Management Strategies. R.A. Snyder, Northwest Florida Water Management District (2001) \$7081.

Water Quality Monitoring in Bayous Texar and Grande. M.S. Shields, J.E. Lepo, B. Genthner, & R.A. Snyder, Escambia County Department of Health (2000) \$63,802.

Wet Prairie Habitat Restoration: Evaluation and Management Strategies. R.A. Snyder, Northwest Florida Water Management District (2000) \$5000.

Impact of Fluoridation of the Municipal Drinking Water. J.E. Lepo & R.A. Snyder, Escambia County Utilities Authority (2000) \$29,876.

Biological Survey of FCT Project #96-035-P7A Holmes County Wrights Creek site. R.A. Snyder, West Florida Planning Council (1999) \$1805.

Microzooplankton Dynamics in Escambia Bay. R.A. Snyder, University of West Florida (1999-2000) \$2000.

Bacteria and Microzooplankton Analysis. R.A. Snyder, US EPA (1998) \$3,986.

An Internet Database of The Flora and Fauna of Northwest Florida. R.A. Snyder, University of West Florida (1998) \$2000., <http://www.uwf.edu/~rsnyder/ffnwf/page1.html>

An Internet Database of The Flora and Fauna of Northwest Florida. R.A. Snyder, University of West Florida (1997) \$2000. <http://www.uwf.edu/~rsnyder/ffnwf/page1.html>.

An analysis of plant succession in a post-storm surge barrier island environment. H.G. Stopp & R.A. Snyder, US Dept. Interior (1996-1998) \$15,830.

A limnological survey of enclosed water bodies located on the Fort Pickens area of the Gulf Islands National Seashore, Santa Rosa Island, Florida. R.A. Snyder, US Dept. Interior (1996-1997) \$11,887.

Augmentation Award for Science and Engineering Training (AASRT). R.A. Snyder & P.S. Morris, US Air Force (1995-98) \$224,335.

Effect of Trophic Interactions on the Fate and Mobility of Soil Contaminants. R.A. Snyder & P.S. Morris, US Air Force (1993-1996) \$398,954.

In situ Bioremediation of TCE and Biotechnology Risk Assessment for Aquifers. R.A. Snyder, PI, US EPA (1993-1997) \$571,800.

R/V BELLOWS Ship time Awards, Estuarine Ecology, Tropical Marine Ecology. Florida Institute of Oceanography: 1992 (\$8,000); 1993 (\$8,000); 1994 (\$8,000); 1995 (\$8,000); 2000 (\$12,000); 2001(\$4,000) 2002 (\$8000).

Microbial Ecology Research Program. W. Jeffrey & R.A. Snyder, US EPA, (1992-1994) \$564,244.

Chesapeake Bay Research Funds Award. R.A. Snyder, PI, University of Maryland Dept. Zoology. (1984, 1986, 1987, 1988).

SHIPTIME EXPERIENCE

Large Sailing Vessels

Schooner ARIADNE (123 ft)

Atlantic Crossing (21 days; 1979)

Brigantine PHOENIX (112 ft)

Baltic Sea, Scandinavia & Russia (4 months; 1979)

Topsail Schooner PRIDE OF BALTIMORE (120 ft)

EAST COAST US, BERMUDA, CARIBBEAN, VENEZUELA, GULF OF MEXICO (7 MONTHS; 1980)

CHESAPEAKE BAY LOG CANOE MYSTERY (30 FT), CHESAPEAKE BAY (DAY TRIPS; 1980-1989)

Research Vessels/Cruises

R/V RIDGLEY WARFIELD, John Hopkins University

Southern Chesapeake Bay 1981

Offshore Cape Charles 1981

Northern Chesapeake Bay Day Trips 1982-1989

R/V AQUARIUS, University of Maryland

Chesapeake Bay Day trips 1982-1989

R/V ORION, University of Maryland

Chesapeake Bay Day trips 1982-1989

R/V CAPE HATTERAS, University of North Carolina

Offshore Cape Hatteras 1984

**R/V CAPE FLORIDA, RSMAS, UNIVERSITY OF MIAMI
OUTER BAHAMAS ISLANDS 1986**

R/V COLUMBUS ISLEN, RSMAS, University of Miami

Outer Bahamas Islands 1987

R/V ANDERSON, U.S. Environmental Protection Agency

Gulf of Mexico Mississippi River Delta 1993, 1994

R/V GYRE, Texas A & M University

Western Gulf of Mexico and Mississippi River Delta 1995

R/V BELLOWS, Florida Institute of Oceanography (FIO)

Northern Gulf of Mexico Estuaries 1994, 1995,

Dry Tortugas 2000,

Pensacola Bay, 2000.

R/V SUNCOASTER, Florida Institute of Oceanography (FIO)

Gulf of Mexico, 2001, 2002

R/V NAUTILUS, University of West Florida

Pensacola Bay System, 2003

Owner/Operator 20ft Mako center console outboard

Small craft handling, sail and power.

Coastal and Celestial Navigation

Marine electronics operator (Radio, Loran, GPS, Depth Sounder, CTD)

PEGGY WINTER

Associate Professor, Department of Biology, University of West Florida, 1977-present.

Education:

1972

Ph.D. in Botany, University of Connecticut.

1969

NSF Fellowship, Organization for Tropical Studies, Panama and the U.S. Virgin Islands. Studied Marine Tropical Biology.

1967

NSF Fellowship, Friday Harbor Laboratories, University of Washington. Marine Algal Taxonomy and Ecology (Dr. Peter Dixon) and Algal Physiology (Dr. William Vidaver).

1966

B.S., Biology and French, Dickinson College.

Publications

- Winter, P.A. and P.J. Biebel. Conjugation in a Heterothallic Staurastrum. Proc. Penn. Acad. Sci. 40:76-79. 1967.
- Trainor, F.R., H.L. Rowland, J.C. Lylis, P.A. Winter and P.L. Bonanomi. Some Examples of polymorphism in Algae. Phycologia 10:113-119. 1971.
- Winter, P.A. Wall Formation in a Desmid Zygote. J. Phycol. Suppl. 9:10. 1973. (Abstract)
- Winter, P.A. Gamete Formation in the Desmid, Staurastrum gladiusum Turner. XII International Botanical Congress Abstracts. Leningrad. p. 47. 1975. (Abstract)
- Winter, P.A. Subcellular Structure of the Desmid Staurastrum gladiusum Turner. J. Phycol. Suppl. 12:36. 1976. (Abstract)
- Liebert, C.A., M.A. Hood, P.A. Winter, and F.L. Singleton. Observations on biofilm formation in industrial air cooling units. Develop. Indust. Microbiol. 24:509-517. 1983.
- Winter, P.A. Ultrastructure Studies of Conjugation in Staurastrum gladiusum. Second International Desmid Symposium Proceedings. Nova Hedwegia. 56:91-104. 1986.
- Hood, M.A., J. Harwood-Sears, and P.A. Winter. 1987. Prophage in environmental and clinical strains of Vibrio cholerae, serotype non-01. Annual Meeting of the American Society of Microbiologists. Abstract N-73.
- Hood, M.A. and P.A. Winter, 1997. Attachment of Vibrio cholerae under various environmental conditions and to selected substrates. FEMS Microbiology Ecology. 22:215-223.
- Winter, P.A. 1995. Plants in the Laboratory. A General Botany Laboratory Manual. Revised 1996, 2001. University of West Florida Bookstore. Pensacola, FL. 110 pp.

Reports

- Winter, P.A. et al. Baseline Study of Physical, Chemical, Biological and Socio-Economic Parameters of Navarre Beach, Site of a Proposed Seawater Canal. NSF Report. p. 1-156. 1974.
- Winter, P.A. Culture Studies of the Seagrasses Ruppia maritima and Halodule wrightii. Sea Grant Report. 31 pp. 1976.
- Winter, P.A. Culture and Transplant Studies of the Seagrass Ruppia maritima, Final Report Year 01. Submitted to Florida Sea Grant. 35 pp. 1978.
- Winter, P.A. Final Report. Some Problems Associated with Seagrass Transplant. Submitted to NSF URP Program. 25 pp. 1978.
- Winter, P.A. Survey of Seagrasses Found in Santa Rosa Sound, Florida. Submitted to Army Corps of Engineers. 26 pp. 1978.
- Winter, P.A. Culture and Transplant Studies of the Seagrass Ruppia maritima, Final Report Year 02. Submitted to Florida Sea Grant. 82 pp. 1979.
- Von Appen, Lassandra and P.A. Winter. 2000. A Review of Biological Monitoring in the Pensacola Bay System 1990 - 2000. Submitted to Northwest Florida Water Management District. 251 pp.

Research

- NSF Undergraduate Equipment Program Grant for an Electron Microscopy Laboratory. \$17,900. 1973-1975.
- Venture Fund (Ford Foundation). Electron Microscopy Accessories. \$11,340. 1973-1974.
- NSF Student Originated Studies Program. Baseline Study of Physical, Chemical, Biological and Socio-economic Parameters of Navarre Beach. \$13,250. Faculty Advisor. 1974.
- "Wall Formation in a Green Alga." University Research Grant. \$510. 1974-1975.
- "Culture and Transplant Studies of the Seagrass Ruppia maritima Linnaeus." URC Summer Fellowship. One half salary. 1976.
- "Culture Studies of the Seagrasses Ruppia maritima and Halodule wrightii." Florida Sea Grant Immediate Response Funds. \$5,000. 1976.
- "Culture and Transplant Studies of the Seagrass Ruppia maritima Linnaeus." Florida Sea Grant. \$23,054. 1977.
- "Transplant Studies of the Seagrass Ruppia maritima L." Florida Sea Grant. \$38,700. 1978.
- "Studies Associated with Seagrass Transplant." Undergraduate Research Participation Program. National Science Foundation. \$18,340. 1977-1978.
- "Transplant Studies of the Seagrass Ruppia maritima." Florida Sea Grant. \$34,500. 1979.

"Science Day." Venture Fund \$1,325. 1985-86.

"Subcellular Studies of the Seagrass Ruppia maritima." University Research Council. \$650. 1987-88.

"Anatomy & Subcellular Structure of Local Seagrasses." University Research Council. \$5000. 1993

"Learning How to Use Restriction Fragment Patterns (RFP) to Separate Species of the Green Algae, Chlorella. UWF Small Grants Award. \$2000. 1995.

"Learning How to Use Ultracentrifugation to Separate Nuclear, Chloroplast, and Mitochondrial DNA. UWF Small Grants Award. \$1350. 1996.

"Seaweed Guide for the Northern Gulf Coast, Initial Phase." UWF Small Grants Award. \$1376. 1997-98.

NSF Improvements in Laboratory Instruction Program "Molecular Experiences in Plant Science at the University of West Florida." \$45,751. 1998-2000.

"DNA Fingerprinting, A Method For Separating Chlorella Species." UWF Small Grant Award. \$1516. 1999-2000.

"Biological Monitoring of the Pensacola Bay System - A Review." NW Florida Water Management. \$9882. 1999-2000.

"Pathogenicity and Ancestry of a Colorless Alga, Prototheca." University Summer Research Award/Fellowship. \$7000. Summer, 2000.

"Marigold Transformation." UWF Small Grant Award. \$2000. 2000.

"Cell and Molecular Interactions between Human B- and T-Cells and Prototheca, A Colorless Algal Pathogen." University Summer Research Award/Fellowship. \$7000. 2001.

"Pathogenicity of the Colorless Alga, Prototheca." UWF Small Grant Award. \$2000. 2001.

"Enhancing Teaching and Learning with Technology in Marine Algae BOT 4990/5990." \$2500 and a laptop computer. 2001.

Sabbatical proposal submitted Fall 2000 and awarded for Spring 2002.

"Phylogeny of Chlorella and Prototheca Based on Chloroplast DNA Studies." UWF Small Grant. \$2000. 2002-2003.

"Detection of the Green Algal Ancestors for Colorless *Prototheca*" UWF Small Grant Award. \$2000. 2003-2004.

"Detection of the Green Algal Ancestors for Colorless *Prototheca*" UWF Summer Research Award. \$6250. Summer 2003.

Shiptime

Cruise to Dry Tortugas off Florida Coast with Biology of the Algae class BOT 5405. Investigated Algal Zonation, Flora of the Fort Jefferson Moat, Distribution of Phytoplankton with Increasing Depth, and Benthic Algae at a Depth of 70 feet. April 30 to May 6, 1978.

Research Cruise to Dry Tortugas to study: Algal Zonation and Primary Productivity of the Zones. June, 1979.

Shiptime awarded for Biology of the Algae BOT 5405. May, 1980.

Proposed New Programs - History: (This page is to be included at the end of the proposal document to display approvals at each level.)

Approved to Explore and Plan:

Dean _____	Date <u>4/10/03</u>
Faculty Senate _____	Date <u>5/9/03</u>
Provost _____	Date <u>5/13/03</u>
President _____	Date <u>5/14/03</u>
BOT A&SA Committee _____	Date <u>5/24/03</u>

Approved to Implement:

Dean _____	Date _____
Faculty Senate _____	Date _____
Provost _____	Date _____
President _____	Date _____
BOT A&SA Committee _____	Date _____
BOT _____	Date _____

FBOE Reporting and Approvals:

Bachelor's and Master's Programs Reported to the FBOE: _____

Specialist and Doctoral Programs Submitted to FBOG: _____ n.a.

Specialist and Doctoral Programs Approved by FBOG: _____ n.a.

Licensure Programs approved by Legislature: _____ n.a.

Implementation and Reporting:

Term Implemented: _____

One-Year Report Presented to Board of Trustees: _____

Three-Year Report Presented to Board of Trustees: _____

Five-Year Program Review Presented to Board of Trustees: _____

The University of West Florida
REQUEST TO OFFER A NEW DEGREE PROGRAM

College Requesting Program: Arts and Sciences

Department Requesting Program: Department of Environmental Studies

Academic Specialty or Field: Environmental Science

Name of Program Requested: Master of Science in Environmental Science

Proposed Implementation Date: Fall 2004

Proposed Classification of Instruction Program (CIP) Code: 03.0104

The submission of this proposal constitutes a commitment by the Division of Academic Affairs, the appropriate College, and the Department that, if the proposal is approved, the necessary financial commitment and the criteria for establishing new programs have been met prior to the initiation of the program.

Approved for Submission to the UWF Board of Trustees:

_____ Vice President for Academic Affairs, Date _____

_____ President, Date _____

Indicate the dollar amounts appearing as totals for the first and fifth years of implementation as shown in the appropriate summary columns in New Program Table Three. Provide headcount and FTE estimates of majors for years 1 through 5. Headcount and FTE estimates should be identical to those in New Program Table One.

	Projected Total Estimated Costs (from Table Three)	Student HDCT / FTE (from Table One)
First Year of Implementation	\$ <u>137,101</u>	<u>25</u> / <u>16.02</u>
Second Year of Implementation		<u>45</u> / <u>28.64</u>
Third Year of Implementation		<u>39</u> / <u>24.56</u>
Fourth Year of Implementation		<u>39</u> / <u>24.56</u>
Fifth Year of Implementation	\$ <u>154,036</u>	<u>40</u> / <u>25.24</u>

I. PROGRAM DESCRIPTION

Describe the degree program under consideration, including its level, and emphases (including tracks or specializations).

Environmental Science is an interdisciplinary field of study that applies principles of physical science (chemical, mechanical, and hydraulic, *inter alia*) to the study of the earth's atmospheric, biotic, geologic, geomorphic, and hydrologic resources and the solution of environmental problems. Because a master's degree is considered to be the preferred professional degree for environmental professionals in both the public as well as the private sector, the Department of Environmental Studies proposes to offer a program of study leading to the Master of Science in Environmental Science. The program provides advanced research and educational opportunities in the earth sciences and prepares students for solving contemporary environmental problems. Departmental areas of concentration include coastal studies, geographic information science, hydrogeology, Quaternary geology, and soils science, and hence anticipated tracks include contaminant hydrogeology, soil science, geographic information science (GIS), and coastal studies. The program includes a thesis and non-thesis option, both of which provide a foundation for employment in the private and public sectors of the environmental fields. In addition, the thesis option prepares students for advanced study leading to the doctoral degree.

An M.S. in Environmental Science is increasingly becoming the degree of choice for professional environmental positions in both the public as well as the private sectors. Although the vast majority of our B.S. graduates have been fortunate to secure employment in their fields of specialization, our departmental advisory board—comprised of environmental professionals—has advised us that northwest Florida is increasingly moving in the same direction as central and southern Florida in requiring M.S. degrees. Graduates are much better trained in research techniques as well as content knowledge of their specific subjects. Similarly, an external review team that examined our B.S. program in 2002 recommended the addition of a graduate degree as well as professional certification in Geology to allow our graduates to enter the job market in more than just an entry-level capacity. There is much demand for an M.S. program from both recent graduates as well as professionals who wish to expand their research skills. To enhance enrollments by individuals throughout the southeastern United States, we plan to apply to list the program as a specialty offering within the Academic Common Market.

Environmental expertise is in high demand in northwest Florida, as are skills in geographic information science (GIS), which is a field of study manipulating environmental and other data on a computerized spatial database. Our faculty have a strong track record of working with community, regional, and state groups on issues such as brownfields redevelopment, coastal management, contaminant flow into groundwater, soil and sediment pollution, and wetlands valuation. Department Chair Klaus Meyer-Arendt served as chair of the Technical Advisory Committee of the Bay Area Resources Council (BARC) and serves on several regional advisory boards, including the Northwest Florida Legislative Environmental Advisory Board. Dr. Mel Droubay has served on the Escambia County Citizens' Environmental Committee. Presently the Department is providing GIS expertise—with the Haas Center—to Eglin AFB on a "greenway" air corridor study. The department maintains strong links with Escambia County (especially Neighborhood and Environmental Services), Florida Department of Environmental Protection,

and Gulf Power Company, and many of our students and graduates have secured internships or employment there. The training of master's-level environmental professionals will not only enhance the role of the Department and UWF in the local area, but the availability of graduate students will also increase the research/grant potential of the University.

The field of Environmental Studies was recently identified in an undergraduate task force report as "a program area of distinction" at UWF. The Department of Environmental Studies is an integral component part of this arena of distinction. The department has had a large number of undergraduate majors over the past several years (averaging around 120). It has secured research grants totaling over \$1.5 million dollars (one 2003 grant from the Department of Defense's National Imagery and Mapping Agency [NIMA] will bring in \$677,000). The Department is presently working on establishing a Center for Environmental and Spatial Analysis and Research (CESAR) to both better manage the various research contracts and also to publicize its expertise and research capabilities more broadly. A graduate program is essential to the departmental mission to accomplish those goals. The Department is committed to ensuring the success of a graduate program. It will not attempt to offer all environmental specializations but rather those that are relevant to northwest Florida and for which faculty expertise exists. The program will be interdisciplinary in the sense that students will enroll in support courses from allied disciplines such as Biology, Chemistry, Maritime Studies, and Mathematics, *inter alia*.

The details of the program are described in Section V (Curriculum).

II. INSTITUTIONAL MISSION

Is the proposed program listed on the current List of Proposed New Degree Programs for Exploration, Planning, and Implementation? How do the goals of the proposed program relate to the UWF mission statement as contained in the Partnership Strategic Plan?

The proposed Master of Science in Environmental Science is on the current list of proposed programs for exploration, planning, and implementation. The Academic and Student Affairs Committee of the UWF Board of Trustees authorized exploration on June 19, 2003. The Program CCR is presently being routed through the University and the Academic Council. Approval by the Faculty Senate is anticipated on or before February 13, 2004.

Demand for an M.S. in Environmental Science is high among students, recent graduates, and working professionals. Expansion of our program from a B.S. level to an M.S. level is within the mission of the university. There is no competing program within a 200-mile radius with the exception of a distance-learning program offered by the University of Florida at Milton, and that program is very specialized toward horticulture. This request to implement an M.S. in Environmental Science program is based upon 1) the recommendations of external program reviewers in 2002, 2) a high level of inquiries by students, recent graduates, and working professionals, 3) the increasing use of M.S. graduates for professional positions, and 4) the identification of Environmental Science as an "area of distinction" in a recent report on undergraduate education at UWF. In the 1980s, students came to UWF from all over the United States and even the world to enroll in an interdisciplinary master's-level Coastal Zone Studies

program. It is anticipated that the M.S. in Environmental Science program will attain a similar high stature.

In 2002, the Department of Environmental Studies prepared a comprehensive mission statement (see below) that was in line with the UWF mission statement. One of UWF's Goals and Imperatives is to "Provide solutions to educational, cultural, economic, and **environmental** concerns", and this M.S. program is designed to do exactly that.

UWF Department of Environmental Studies Strategic Plan

1. Preamble

As the leading center of environmental studies and earth science at the University of West Florida and in northwest Florida, the Department of Environmental Studies is dedicated to teaching, research, and service within the realm of environmental knowledge and conservation. We are committed to quality education programs that promote scholarship and close work relationships among students, faculty, staff, peers, and community. We promote the advancement of knowledge and also the application and dissemination of knowledge relative to environmental studies and earth science.

2. Vision

The vision of the Department of Environmental Studies is:

- to be a center of intellectual vitality, research, and creative activity
- to provide our students an excellent education in the environmental/earth sciences that will be a foundation for their individual intellectual and professional goals
- to engage our students in the research and public service activity of the faculty
- to use our scholarly and creative activity to help understand and solve local and regional environmental problems and enhance the quality of life in northwest Florida
- to be a key player in supporting the protection of the natural environment

3. Mission

Our mission is to provide quality teaching, conduct basic and applied research, and to provide service to the university, the greater community, and the academic disciplines within which we work. Our efforts are to convey, create, apply, and disseminate knowledge and technical skills necessary for understanding and proper stewardship of our land, air, and water resources.

4. Strategic Goals

The Department of Environmental Studies achieves its mission by:

- A. creating a distinctive center of earth and environmental science in northwest Florida
 - B. providing quality field-and laboratory-based educational programs to ensure our graduates that the skills needed to succeed in the environmental arena are met
 - C. embracing multiculturalism and encouraging international professional exchanges
 - D. cooperating with community environmental professionals and maintaining communications between the department and the region
 - E. assisting in strengthening regional K-12 education initiatives in environmental and earth science
 - F. participating in and supporting the protection of natural resources in the region
-

III. PLANNING PROCESS AND TIMETABLE

Describe the planning process leading up to submission of this proposal. Include a chronology of activities, listing UWF personnel directly involved and any external individuals who participated in planning. Provide a timetable of events for the implementation of the proposed program.

Fall 1998: The concept of a graduate program began with the hiring of Klaus J. Meyer-Arendt as department chair in Fall 1998. Dr. Meyer-Arendt had taught for 11 years in a Geosciences department (at Mississippi State) that offered a master's program, and he had drafted the Graduate Guidelines for that department. Once at UWF, the then-Dean of the College of Science and Technology hinted that line-item departmental faculty would be increased to seven (from four) within a year or two, thus providing the critical mass necessary to ensure a successful graduate program.

Fall 1999: The university accepted a departmental enhancement fund proposal to establish a GIS (Geographic Information Systems) center on campus. A university-wide committee was formed, and in the end the Department of Environmental Studies was selected to be the home of GIS operations at UWF. The computer lab was enhanced with state-of-the-art equipment, and funds were freed up to hire a lab technician/GIS coordinator as well as an assistant professor specializing in GIS. This level of enhancement was to expand the research capabilities of various units at UWF, especially at the graduate level.

Fall 2000: Dr. Xiaojun Yang, the new assistant professor in GIS, began to develop the outline of a Certificate in GIS program. This 19-hour program was designed primarily for undergraduate students and community professionals, but several of the upper-level courses were dual-listed as graduate courses to appeal to students from other departments (including Biology and Computer Science).

Fall 2001: The Certificate program received its first enrollees as the importance of GIS became recognized on campus and in the community. Additional graduate-level courses were proposed by Dr. Yang to accommodate future demand. Also, Dr. Yang was awarded a \$600,000 grant from the U.S. Environmental Protection Agency to model "environmental indicators" of various estuarine systems. With no graduate students to help conduct the research, Dr. Yang hired post-doctoral researchers as well as some undergraduates to do the work.

Spring 2002: As part of the department's five-year review process, an external review team consisting of Dr. John Mylroie (Mississippi State), Judy Bense (UWF), and Rick Harper (UWF) made several suggestions, including 1) the addition of at least two new faculty to adequately support the undergraduate program, 2) the development of a master's program (which would not only meet the demand for master's-level environmental professionals but also free up faculty from teaching excessive laboratory sections), 3) further development of the GIS curriculum, and 4) additional space for the program. The Department of Environmental Studies advisory board supported the idea of a graduate program.

Summer 2002: Initial discussions of a graduate program among the departmental faculty began. Provost Parks Dimsdale recognized the need for additional space for Environmental Studies, and a 1400-ft² room was assigned to the department.

Fall 2002: The concept of a graduate program was more fully developed with input from departmental faculty (including Dr. Johan Liebens, who was on sabbatical in Belgium at the time). Articulation with community colleges took place, especially with Pensacola Junior College, where a newly revamped Environmental Science program (years 1 and 2) was proposed by Dr. Ed Stout to tie in directly to our program. Interim Dean of the UWF College of Arts and Sciences strongly supported our initiative, and the department prepared the Request to Explore.

Spring 2003: Prior to receiving approval by the UWF Board of Trustees, the Request to Explore (the M.S. Program in Environmental Science) was routed through all the proper channels on campus, including the College of Arts & Sciences (CAS) Council, the Academic Council, and the Faculty Senate. During the university budget planning process, the Department of Environmental Studies was approved for one new position to offset the chronic shortage in full-time faculty. This new faculty line will solve historic undergraduate teaching shortages and at the same time allow the department to reach that critical mass threshold that will permit the offering of a graduate program.

Fall 2003: The Department of Environmental Studies was actively engaged in the planning process of the proposed graduate program. Structuring of the curriculum, input from the departmental advisory board, and assessment of regional, state, and national demand were all investigated in detail. The program CCR and several course CCRs were submitted, and they were routed through the university system (CAS Council, Academic Council, etc.). In addition, facilities renovation—underway since Summer 2003—was creating two faculty offices, two teaching classrooms, and one hydrogeology teaching/research laboratory. The department also draw up plans for a Type 3 institute—a center of environmental research—to accommodate the anticipated upsurge in research contracts once the graduate program was in place.

Spring 2004: Once all approvals for the program are in place, the department will actively line up the first cohort of graduate students to begin their studies in Fall 2004. Several potential graduate students in the local area have been contacted and notified of a potential program, but not until BOT Approval to Implement is given will serious advertising begin. At that time, University Admissions will begin to admit students to the new program.

Fall 2004: A new Master of Science in Environmental Science program is in place. Perhaps 15-20 students are anticipated as the initial graduate cohort (Appendix A, page 35). Newly hired faculty will be in place to cover all requisite courses.

IV. ASSESSMENT OF NEED AND DEMAND

- C. What national, state, or local data support the need for more people to be prepared in this program at this level? (This may include national, state, or local plans or reports that support the need for this program; demand for the proposed program which has emanated from a perceived need by agencies or**

industries in Northwest Florida; and summaries of prospective student inquiries.) Indicate potential employment options for graduates of the program. If similar programs exist in the Northwest Florida region, provide data that support the need for an additional program.

The need for master's-level environmental professionals has never been more critical in northwest Florida nor anywhere else in the world. A poll taken by the Pensacola News-Journal in 2001 found that Escambia County residents rated the environment their number one concern, ahead of crime and employment. In 1999, a grand jury was convened in Escambia County to investigate potential environmental cover-ups. The need for qualified environmental scientists, environmental regulators, and environmental compliance officers has never been higher.

The growth in the demand for environmental professionals is directly correlated with passage of the National Environmental Policy Act of 1969. Subsequent federal, state, and local regulations created a great need for 1) scientists to understand the environmental problems, 2) environmental specialists to run the laboratories and analyze the data, 3) environmental regulators to enforce the various levels of legislation, 4) in-house environmental experts to guide industries in environmental compliance, and 5) consultants to assist public and private entities in complying with environmental regulations and preparing environmental impact statements and assessments.

At the University of West Florida, demand for an undergraduate major bloomed in the 1980s and has remained strong throughout the 1990s and early 2000s. As increasing numbers of bachelor's-level environmental professionals are filling job vacancies, the demand for master's-level professionals is increasing. The departmental advisory board (Appendix B, page 36), which supports the proposed M.S. program (Appendix C, page 37), feels that the Master's degree is increasingly the degree of choice for environmental agencies and private firms. This is already the case in peninsular Florida, and the Florida panhandle is rapidly catching up. This proposal is to keep UWF ahead of the curve.

In Florida, the growth in demand for environmental professionals began in the 1970s and continued to grow in the 1980s and 1990s. The growth rate for specialists in the geosciences and environmental sciences is projected to remain high at both the state and regional levels according to the Labor Market Statistics projected by the Florida Agency for Workforce Development (<http://www.labormarketinfo.com/>). According to projections for all of Florida, the year 2002 employment figure was 5189 employed under Occupation Code 192041, Environmental Scientists and Specialists. Average number of job openings through year 2010 are projected to be 257 per year. In addition, graduates may pursue jobs under other related occupational codes. (High-demand GIS specialists may be included in the computer technician category, for example.) Average salary for Occupational Code 192041 was \$18.98 per hour in our two county area, and the State average was \$21.03.

According to the Environmental Careers Organization (ECO), over 230,000 employees worked for federal environmental and conservation agencies in 1997 (<http://www.eco.org>). This is in addition to an estimated 459,000 environmental workers employed by the 50 state governments collectively. Local governments also employ an estimated 476,000 environmental

workers across 70,000 local government jurisdictions. The environmental industry itself supported 1,300,000 jobs in 1997. Other employers that offer career opportunities include regulated companies, law firms, and of course academia. The number and kinds of career opportunities in the environmental area is subject to many variables. However, there are currently many good opportunities in Florida and nationwide (ejobs/org/states/flcom.html and ecoemploy.com/posts).

The following, an excerpt from *The Complete Guide to Environmental Careers in the 21st Century*, by Kevin Doyle, Editor and Project Director of the Environmental Careers Organization, lists some of the most popular environmental careers.

POLLUTION PREVENTION (P2) SPECIALISTS

Most pollution prevention (P2) work is done by engineers, chemists, and other environmental scientists, but people from almost any profession can identify ways to reduce, reuse, and recycle. In addition, some of the most effective pollution prevention is achieved through education and training; that is, helping professionals understand what might be done in their industry through simple changes. To get a sense of the broad range of work being done by pollution prevention professionals, check out the National Pollution Prevention Roundtable's web site. For information about education for P2, contact the National Pollution Prevention Center for Higher Education.

GEOGRAPHIC INFORMATION SYSTEMS AND OTHER COMPUTER SPECIALISTS

The environmental community lives on data, especially data that can be shown visually and interactively by computer systems that demonstrate interaction between human activities and ecological systems. Geographic information systems (GIS) specialists are in demand at planning agencies, consulting firms, research centers, and throughout private industry. GIS, of course, relies on the existence of good data in the first place, which creates employment for sampling professionals and new technological developments in monitoring equipment and remote sensing from satellites. Finally, traditional database and information systems managers are also in demand. For more information about GIS careers and educational opportunities, visit <http://ulysses.unl.edu/calmit/gisrs.html>, which links to dozens of other related sites.

ENVIRONMENTAL COMMUNICATORS AND EDUCATORS

In recent years, the nation has seen a noticeable shift in environmental problem solving, away from a preference for secrecy, adversarial relationships, and litigation, and toward greater openness and a search for common ground. Regulators depend on education as much as they do on enforcement. Non-profit leaders meet with corporate executives. "Right-To-Know" laws require polluters to make available information that would have been carefully guarded just a few years ago. And institutions of all stripes seek to influence the hearts and minds of the general public. The freer flow of information, and the desire for more voluntary actions, creates opportunities for communicators and educators who can help translate scientific and technical issues for the general public, and for those who can create venues (e.g., meetings, conferences, public hearings, and community gathering) for an open exchange of opinions. Progressive land developers, for instance, now engage local governments and community residents in open dialogue long before approaching formal boards for permit approvals.

PLANNERS

Environmental management is looking for greater levels of integration. That's what "place-based" approaches, multimedia management, watershed planning, ecosystems management, and sustainable development are all about. Moreover, environmental problems call for a greater number of people whose professional background prepares them to combine human needs and ecological realities for the advancement of both within a framework of political and financial reality at the local level. Well-educated planners bring exactly this set of skills to the table, not only for jobs formally called "planner," but for a wide range of opportunities. Get in touch with the American Planning Association to learn more.

ENVIRONMENTAL TECHNICIANS

Environmental technicians are an immense part of the environmental career world, although they may go under different names. Technicians collect air, water, and soil samples. They carry out botanical and wildlife inventories. Technicians do the basic work at water and wastewater treatment plants, as well as at treatment, storage, and disposal sites. There are thousands of forestry, biological, range management, and remediation technicians. If it's true that many people become environmental professionals to work outdoors, technician work is a great place to start. It's often true that the technicians are the ones out in the fields, streams, and work sites, while other professionals are back in the office.

TEACHERS

The nation needs a new generation of teachers. Shortages in many school districts are already a serious problem, and a large wave of retirees is about to make it worse. From our point of view, all teachers are prospective environmental educators.

Talented educators use math, science, literature, theater, art, languages, government, and history to open the eyes of students to the natural world and environmental issues. Someone has probably figured out a way to use driver's education and gym class as well. And yet fewer people are entering the field.

DUAL TRACK ENVIRONMENTAL MANAGERS

Integration of different fields - science, engineering, politics, law, information technology, project management, business administration, marketing, communications, and economics - is at the heart of the emerging environmental professions. Among the most popular careers are hybrids that combine two or more professional tracks. The Master of Environmental Management program at Duke University's Nicholas School for the Environment is an example of an interdisciplinary program that weaves together different tracks to educate the environmental managers of tomorrow. Demand is also high for people who combine two traditional degrees. Engineers with an M.B.A., or scientists with a master's in public administration are two good examples.

We have had inquiries about a graduate program for many years. Appendix A (page 35) lists some of the students who have expressed serious desire to enter such a program. With the university support the department received in the form of one new faculty line to assist in the undergraduate program, we are in an excellent position to offer the graduate program. There is no equivalent environmental science program within a 250-mile radius of Pensacola. (Florida State offers an Environmental Studies undergraduate program, but not a graduate program.) Florida State as well as University of South Alabama graduates are considered prime candidates for our master's program.

- D. Use UWF Table One A (baccalaureate) or UWF Table One B (graduate) to indicate the number of students (headcount and FTE) you expect to major in the proposed program during each of the first 5 years of implementation, categorizing them according to their primary sources.**

Table One B is presented on Page 31 for reference to the narrative below.

In the narrative following Table One, the rationale for enrollment projections should be provided and the estimated headcount to FTE ratio explained. If, initially, students within the institution are expected to change majors to enroll in the proposed program, describe the shifts from disciplines that will likely occur.

Individuals drawn from agencies/industries in your service area (e.g., older returning students)

There are many industries (Solutia, International Paper, etc.), private and public utilities (Gulf Power, ECUA), government agencies (Department of Environmental Protection, Escambia County Neighborhood & Environmental Services), and private environmental consulting firms (Energy & Environment, CH2M Hill, Law Environmental, SAIF, etc.) with employees who presently have bachelor's degrees but would like to upgrade to a master's degree. Our advisory board has indicated that this would be quite likely. Conservatively, it is estimated that two such students would enter the program per year, mostly on a part-time basis.

Students who transfer from other graduate programs within the university

We don't anticipate "cannibalizing" students from other programs at UWF. However, there are one or two students who graduated from our program and entered the Environmental Biology track within the M.S. in Biology program. They have expressed a desire to enter our program once it becomes available. Hence, we estimate 2 such students entering in the first year, and perhaps one per year thereafter.

Individuals who have recently graduated from preceding degree programs at this university

Most of the demand for a graduate program is from our graduates who are place-bound by choice. First, they appreciated their undergraduate experience at UWF, and second, they are unwilling to move for graduate education. They are also unwilling to step into a bachelor's-level, entry-level position for low wages. Hence, we estimate an initial cohort of 15 students for Year 1 (although 25 or so have expressed serious interest—see Appendix A). There may be slightly less the second year (an estimated 8), and we then expect stabilization at about 6 per year. The average course load is estimated at 21 credits per year (per student), an FTE of 0.68.

Individuals who graduated from preceding degree programs at other SUS university

This is a group of students we wish to attract in forthcoming years. There are several decent undergraduate programs in environmental science in Florida, but few high-quality graduate ones. For 2004-05, there may be insufficient marketing time to recruit many Florida SUS-grad students (perhaps 1), but in subsequent years we anticipate that this number will rise to 3 or 4 per year minimum.

Individuals who graduated from preceding degree programs at non-SUS Florida colleges and universities

This is another group of students we wish to attract in forthcoming years. However, there are few undergraduate programs in environmental science in Florida non-SUS schools. Stetson University is a notable exception, but the numbers are relatively low. We plan to target these schools once the program is approved. In terms of numbers, we conservatively anticipate 1 student per year minimum.

Additional in-state residents

Perhaps 1 student per year will enter from this cohort, which included early retirees or persons wishing to make career changes. They may only attend on a part-time basis.

Additional out-of-state residents

This group is expected to comprise a significant portion of our graduate students, especially from neighboring Alabama. Although starting slowly at first (2 or 3 per year), we anticipate stabilization at 4 or so per year thereafter. The number could, however, be significantly higher if sufficient assistantships and/or tuition waivers were made available.

Additional foreign residents

The Environmental Science program strongly endorses internationalization and international fieldwork. Several faculty have active research programs in Latin America and the Caribbean, and we have had several undergraduate foreign students. In spite of problems with funding, we anticipate receiving at least 1 foreign student per year in the graduate program.

C. For all programs, indicate what steps will be taken to recruit and achieve a diverse student body in this program.

- As noted above, the Environmental Science program strongly endorses internationalization. Several faculty are fluent in Spanish and have spent many years in Latin America. Hence, we will encourage Latin American graduate student enrollment via our contacts there.
- Much environmental science research addresses issues tangential to environmental justice. We would point out—at job fairs—the roles of minority students in the environmental sciences as well as the excellent job market.
- We plan to recruit at universities and regional professional meetings, and we will encourage a diverse and multi-cultural student body
- Our Web pages will reflect our commitment in these regards.

V. CURRICULUM

A. For all programs, provide expected specific learning outcomes, a sequenced course of study, and list the total number of credit hours for the degree. Degree programs in the science and technology disciplines must discuss how industry-driven competencies were identified and incorporated into the curriculum. For bachelor's programs, also indicate the number of credit hours for the major coursework, the number of credit hours required as prerequisites to the major (if applicable), and the number of hours available for electives.

Specific learning outcomes:

1. Mastery of a broad base of knowledge in the Environmental Sciences (geosciences, GIS, coastal sciences), with greater depth of knowledge in a specific subfield.
2. Ability to conceptualize a problem or issue and identify appropriate methods of scientific inquiry with which to address it.
3. Ability to design, implement, analyze, and discuss a lab- or field-based environmental research project.
4. Reading, writing, and oral language proficiency in English.

Sequenced course of study:

ADMISSION TO PROGRAM

Applicants seeking admission to the graduate program in Environmental Science must submit the following to the UWF Admissions Office:

1. A graduate admission application, along with official transcripts of all college work.
2. A formal letter of interest, background, and professional goals.
3. Three letters of recommendation by individuals in professionally relevant fields.
4. Official scores on the Graduate Record Examination. A minimum score of 1000 (verbal and quantitative combined) is required by the department.

Students seeking admission to the M.S. program must hold a bachelor's degree from an accredited college or university (or its foreign equivalent). The bachelor's degree may be in any environmental discipline, and a GPA of 3.0 or higher is desirable.

The completed application will be reviewed by the graduate program committee, and an advisor will be assigned upon admission. Conditional admission may require the student to complete the appropriate foundation courses with grades of B or better.

FOUNDATIONAL PROFICIENCIES

Students entering the M.S. program from other bachelor's programs should have the equivalents of the courses listed below. Students not having all of the foundational proficiencies may be admitted to the M.S. program on a conditional basis, and the requisite courses will need to be completed during the first year of graduate study.

GEO 4131/L Photo Interpretation & Remote Sensing/Lab (4 sh)
GEO 4151/L Geographic Information Systems/Lab (3 sh)
STA 4173 Biostatistics (3 sh)

Two of the following:

BSC 4303 Biogeography (3 sh)
GEO 3210/L Geomorphology/Lab (4 sh)
GEO 3250/L Weather and Climate (4 sh)
GEO 3260/L Geography of Soils/Lab (4 sh)

DEGREE REQUIREMENTS

Students accepted into the M.S. program should select, ideally by the end of their first semester, their graduate advisor and graduate committee members. At least two committee members must be Environmental Studies faculty. Students also need to select the thesis or non-thesis option following consultation with their graduate advisor and committee. Detailed graduate guidelines will be provided to the students by the department.

The thesis track entails 30 semester hours (sh), of which 15 must be at the 6000 level and may include up to 6 sh of thesis. The remaining hours must be 5000 level or higher. (Appendix D on page 40 lists UWF guidelines for appropriate curriculum hours.)

The non-thesis track entails 36 sh, of which 15 must be at the 6000 level and may include up to 3 sh of internship. The remaining hours must be 5000 level or higher.

As many as three courses may be from outside the department, including two from outside the university. The detailed program of study will be determined by the student's graduate advisor in consultation with the student and the student's graduate committee.

CORE COURSES (minimum of 15 sh required)

EVR 6930 Special Topics in Environmental Sciences (3 sh)

GEO 6936 Graduate Seminar (3 sh)

Choose one:

EVR 6xxx Sampling and Analysis in Environmental Sciences (3 sh)

GEO 6xxx Advanced Topics in Geographic Information Science (3 sh)

Choose from A or B:

A. Thesis track (minimum of 6 sh required):

EVR 6971 Thesis (1-6 sh)

6000-level electives (0-5 sh)

B. Non-Thesis track (minimum of 6 sh required):

GEO 6xx1 Research Design (3 sh)

Choose 3 sh from the following:

EVR 6xx1 Internship (1-3 sh)

GEO 6905 Directed Study (1-3 sh)

ELECTIVE COURSES (minimum of 15 sh required for thesis-track students and 21 sh required for non-thesis-track students)

NOTE: ONLY DEPARTMENTAL COURSES ARE LISTED IN SECTION C BELOW, ADDITIONAL 5000- AND 6000-LEVEL COURSES ARE AVAILABLE IN OTHER DEPARTMENTS SUCH AS BIOLOGY

B. For bachelor's programs, if the total number of credit hours exceeds 120, provide a justification for an exception to the FBOE policy of a 120 maximum.

Not applicable.

C. Provide a one or two sentence description of each required or elective course.

EVR 5xxx Environmental Field Research 3(F,S,SS)

Environmental and geographic sciences field study. Students work with scientists collecting discrete samples and conducting field surveys, use GIS/MIS technology, and analyze results. Fieldwork will be coordinated with non-university research agencies. Permission is required.

EVR 5413 Environmental Aspects of Urban Growth 3(S)

The purpose is to examine urban areas as they have sprawled out over green landscapes during the past century and left behind a legacy of environmentally distressed properties and broken communities. Emphasis is upon community-based action to deal with local situations, using as a base the experiences of communities throughout the United States. Offered concurrently with EVR 4412; graduate students will be assigned additional work. Graduate status is required.

EVR 6xxx Sampling and Analysis in Environmental Sciences 3(F)

Theory and techniques of modern field and laboratory methods used for physical and chemical analysis of soil, sediment, and water samples. Procedures include exploratory data analysis and interpretation. Emphasis will be upon the collection of samples and their subsequent analysis. Written reports and oral presentations are required.

EVR 6xx1 Internship 3(F,S,SS)

Supervised and structured participation in environmental work experience in the private, government, or educational sectors. Permission is required.

EVR 6930 Special Topics in Environmental Sciences 3(S)

Covers various advanced subjects in the environmental sciences, depending on the specialization of the instructor. Topics include environmental pedology, coastal meteorology, groundwater modeling, etc. Graduate-level standing is required.

EVR 6971 Thesis 1-6(F,S,SS)

Preparation of Master's Thesis which includes problem identification, literature review, research design, data collection, data analysis, and results. Graded on satisfactory/unsatisfactory basis only. Permission is required.

GEA 5214 Geography of North America 3(F)

Prerequisite: GEA 2000.

A regional survey of the United States and Canada with emphasis upon place-names, physical landscapes, historical settlement patterns, culture regions, cultural diversity, and environmental issues. Offered concurrently with GEA 4210; graduate students will be assigned additional work.

GEA 5408 Geography of Latin America 3(CALL DEPT)

Prerequisite: GEA 2000.

A regional survey of Latin America and the Caribbean with emphasis upon place-names, physical environments, cultural-historical landscapes, and geopolitical and environmental issues. Offered concurrently with GEA 4400; graduate students will be assigned additional work.

GEO 5139 Applications in Remote Sensing 3(F)

Prerequisite: GEO 4131 and GEO 4131L.

The purpose is to make students familiar with digital image processing methods and techniques as applied in solving environmental and urban problems. The course is

divided into four basic components: introduction of the generic process of remote sensing applications, introduction of some advanced digital image processing techniques and methods, case studies illustrating this process, and student projects using this process. Offered concurrently with GEO 4133; graduate students will be assigned additional work. Material and supply fees will be assessed. Permission is required.

GEO 5157 Applications in Geographic Information Systems 3(F)

Prerequisite: GEO 4151, GEO 4151L.

The application of GIS methods and techniques in solving practical problems. A generic process for applying GIS techniques in problem solving is introduced, and several case studies of GIS applications in environmental and social domains will be analyzed. Offered concurrently with GEO 4152; graduate students will be assigned additional work. Permission is required. Material and supply fee will be assessed.

GEO 5177 Special Topics in Geographic Information Science 3(S)

Prerequisite: GEO 4151, GEO 4131, GEO 4131L.

Focuses on various topics and cutting-edge techniques in Geographic Information Science (GIS), both in theory and in practice. Offered concurrently with GEO 4174; graduate students will be assigned additional work. Permission is required. Material and supply fee will be assessed.

GEO 5225 Coastal Morphology and Processes 3(S)

Prerequisite: GEO 1200 or GLY 2010, GLY 2010L.

Corequisite: GEO 5225L.

An introduction to the world's coastal land forms, with emphasis upon dominant processes (especially waves, tides, and currents), geographical variations, human impacts and policies, and environmental concerns. Offered concurrently with GEO 4890; graduate students will be assigned additional work.

GEO 5225L Coastal Morphology and Processes Laboratory 1(S)

Corequisite: GEO 5225.

Laboratory correlating with GEO 5225. Offered concurrently with GEO 4890L; graduate students will be assigned additional work. Material and supply fee will be assessed.

GEO 5945 GIS Internship 1-3(F,S,SS)

Prerequisite: GEO 4151.

Supervised application of Geographic Information Science (GIS) in business, government, non-profit, educational or other environmental organizations. Offered concurrently with GEO 4944; graduate students will be assigned additional work. Permission is required.

GEO 6xxx Advanced Topics in Geographic Information Science 3(S)

Relational Database Management Systems (RDBMS) and their function within Geographic Information Systems (GIS). Students will integrate RDBMS, Desktop GIS and the World Wide Web to produce an interactive spatial database served over the internet. Permission is required.

GEO 6xx1 Research Design 3(F)

Introduces non-thesis-track Master's students to the essentials of designing and executing a research project in the environmental sciences using the scientific method. Students will design and complete a research project.

GEO 6936 Graduate Seminar 3(F)

An overview of the disciplinary evolution of the geosciences, the prevailing paradigms and methodologies, and current and future directions in the field. The scientific method, grant proposals, and research publications will be examined in detail.

- E. For bachelor's programs, list any prerequisites, and provide assurance that they are the same as the standardized prerequisites for other such degree programs within the FBOE. If they are not, provide a rationale for a request for exception to the policy of standardized prerequisites.**

Not applicable

- E. For bachelor's programs, if the Department intends to seek formal Limited Access status for the proposed program, provide a rationale which includes an analysis of diversity issues with respect to such a designation.**

Not applicable

VI. UWF CAPABILITY

- C. How does the proposed program specifically relate to existing UWF strengths such as programs of distinction, other academic programs, and/or institutes and centers?**

A recent report on undergraduate education at UWF, which was submitted to President Cavanaugh, proposed "environmental programs" as programs of distinction at UWF. The B.S. in Environmental Science program has been popular, and it is perceived as demanding yet fulfilling. Students have received good training, and area employers have remarked on that to departmental faculty. The proposed M.S. program aims to expand upon that foundation of excellence by providing master's-level training in specific areas of the environmental sciences.

We see the following relationships particularly useful for the proposed M.S. program:

6. The existing curricular strengths within the department. These include the study of soils, hydrology and water resources, geographic information science, remote sensing, coastal processes, and marine environments, and environmental policy and management issues.
7. The GeoData Center. The node of GIS operations at UWF, this computing center is a tremendous resource in conducting basic and applied research.
8. The Center for Environmental and Spatial Analysis and Research (CESAR). This newly established Type-3 center at UWF exists to coordinate community- and region-wide

research projects, such as the Greenways project that involves Okaloosa County and Eglin Air Force Base. We expect that research contracts will rely heavily upon graduate students to conduct much of the work.

9. The Department of Biology. Environmental science straddles the disciplinary boundary between the “geo” sciences and the “bio” sciences, and many of our graduate students plan to be truly interdisciplinary. We anticipate that many will take the graduate-level courses offered by the Department of Biology.
10. The Statistics Center. We are requiring Biostatistics as a foundational requisite, thereby reinforcing our commitment to quantitative methods. The Statistics Center will serve as an invaluable resource, and the Mathematics Department is looking forward to working closely with our students.
11. The B.S. in Oceanography program. This proposed distance-learning program will 1) play into the strength of the department, and 2) rely upon graduate students to correspond via email with students signed up for the oceanography courses.
12. The UWF properties. The UWF properties—main campus, downtown, and the beach—can serve as excellent laboratories to conduct field studies at the graduate level, and we intend to make good use of this resource.

D. If there have been program reviews, accreditation visits, or internal reviews in the discipline pertinent to the proposed program, or related disciplines, provide all the recommendations and summarize progress toward implementing the recommendations.

In Spring 2002, the Department of Environmental Studies underwent a five-year review. In addition to a thorough self-study produced by the department, there was an report produced by an external review team in June 2002. This report—authored by Dr. John Mylroie (Mississippi State University), Dr. Judy Bense (UWF), and Dr. Rick Harper (UWF)—made several observations about and several recommendations for the department. According to the review team, the strengths included:

- 1) Discussions with faculty and students indicates a Department with a professional attitude and a very collegial atmosphere. Faculty feel they have capable, motivated students, and students feel they have experienced, rigorous but compassionate instruction. The Department’s high student retention rate and high faculty productivity support the anecdotal comments made to the Committee.
- 2) There is significant involvement with the community, both lay and professional. In particular, the Department has created an Advisory Board made up of professionals from the Pensacola region that includes private business; local, state and federal agencies; and other educational institutions. This board is extremely interested in the Department, especially in the teaching and career preparation of students, and in professional interaction with the faculty.
- 3) The Department is forward-looking and aggressive in its approach to teaching. The curriculum has been recently revised and a new minor in Geography added. Plans to

develop a MSc degree with Biology have been initiated. The new GIS facility has created new career opportunities for students both in the Department and across campus.

- 4) The Department's recent development of a GIS lab with concurrent GIS instruction and research is a major benefit to the University and the local community. While only in existence a short time, links have been made with other units in the College of Arts and Sciences, and to other colleges, making the GIS lab an active and important University resource. The expenditures to buy equipment, allocate space, and staff the lab with a faculty member and a technician was an extremely productive move by the Department and the University.
- 5) The Department is active in research. Extramural funding is appreciable, and the publication record is very good. Given the high teaching loads, no graduate program, and inadequate space, the research productivity is exemplary.
- 6) The Department has solid support through the Dean and the Upper Administration. Other units on campus, both within Arts and Sciences and in the other colleges, interact well with the Department.
- 7) The Department Chair, Dr. Klaus Meyer-Arendt, has shown outstanding leadership and creativity. He has been aggressive in building the Department but also effective in building links within the UWF community and to the outside community. He has the support of faculty, students, and the administration.

The following numbered points below paraphrase the recommendations made by the external review team and summarize progress made to date in terms of implementing those recommendations.

1. The department is understaffed. It should add at least two faculty lines.

PROGRESS TO DATE: The university administration recognized the understaffing problem. A new faculty line was awarded to the department for the 2003-04 year during the budget hearings in Spring 2003. The search to fill this faculty line is currently under way.

2. There is over-reliance upon adjunct instructors. Perhaps some adjunct positions could be converted to instructor lines.

PROGRESS TO DATE: One adjunct instructor—Dr. Wil Hugli—who taught multiple courses was upgraded to a full-time instructor. This added stability to the department in that Dr. Hugli spent more time in the department and was available for advising as well as assisting on research projects

3. The department is woefully short on space.

PROGRESS TO DATE: As a result of two separate studies by the facilities-use teams at UWF, improvements to departmental space have been made. First, a 1400-ft² room on our floor (2nd floor, Building 13) was reassigned to our department, increasing our space from 4400 ft² to 5800 ft². The space was

converted to a large classroom plus a 500-ft² hydrogeology lab (to be used for both research and teaching purposes. Other renovations include creating two new offices (one for the new faculty member, one for new research personnel) and one teaching/research lab—stocked with six state-of-the-art computers—to be used for upper-level GIS courses and research projects.

4. The department should investigate offering coursework necessary to train Registered Professional Geologists (RPGs), perhaps via the offering of a Minor in Geology.

PROGRESS TO DATE: We have contacted the state agency responsible for licensing professional geologists, but it has been extremely negligent in responding to us in a timely manner. Nonetheless, to offer additional geology courses or to offer a minor will require more expertise. We are waiting to see who will be hired for the three positions we presently have vacant.

5. The department should offer a master's degree. There is a demand for this professional degree. Also, graduate students would be available to teach the various lab sections, thereby freeing up faculty time as well as dollars spent on adjunct instructors.

PROGRESS TO DATE: In terms of importance, this point was number one. Since the recommendation was made, we have had numerous faculty discussions on this topic. The present document is an outcome of those discussions as well as a response to the external reviewers' recommendations.

6. At the undergraduate level, the department should investigate greater flexibility among required courses, thus allowing students to focus upon specific academic subfields (e.g., geology, GIS, geography, coastal studies) as well as electives in other fields.

PROGRESS TO DATE: The department is waiting until Fall 2004, when new faculty are in place, to discuss making modifications to the undergraduate curriculum. We anticipate that some changes allowing for greater flexibility will be made.

- C. **Describe briefly the anticipated delivery system for the proposed program as it may relate to resources e.g., traditional delivery on main campus; traditional delivery at branches or centers; or nontraditional instruction such as instructional technology (distance learning), self-paced instruction, and external degrees. Include an analysis of the feasibility of providing all or a portion of the proposed program through distance learning technologies. Include an assessment of the UWF's technological capabilities as well as the potential for delivery of the proposed program through collaboration with other universities or community colleges. Cite specific queries made of other institutions with respect to the feasibility of utilizing distance learning technologies for this degree program.**

At the onset, this M.S. program is envisioned to be a traditional science master's program. Instruction will be mostly face-to-face, and there will be a strong emphasis upon

laboratory and field work. With the recent improvements made to undergraduate education within the department, there will be no additional resources required to conduct a successful graduate program.

The department is beginning to explore distance learning, especially in conjunction with a proposed B.S. in Oceanography degree (jointly administered with the Department of Biology). The first distance-learning courses are being developed in Spring 2004 as support courses for the Maritime Studies program. If these courses prove to be successful, we will consider offering one or more graduate-level courses via the same means.

Our research to date has shown that most graduate-level environmental science programs offered over the World Wide Web are academically weak. One such program is offered through the University of Florida. Most prospective students for our program prefer the emphasis on hands-on research and fieldwork.

As our graduate program gets underway, we will seriously evaluate means of improving. Perhaps the role of distance learning can be expanded at some point in the future.

D. Assessment of Current and Anticipated Faculty

- 1. Use UWF Table Two to provide information about each existing faculty member who is expected to participate in the proposed program by the fifth year. If the proposal is for a graduate degree, append to the table the number of master's theses directed, number of doctoral dissertations directed, and the number and type of professional publications for each faculty member.**

Table Two is on page 32.

- 3. Also, use UWF Table Two to indicate whether additional faculty will be needed to initiate the program, their faculty code (i.e., one of five unofficial budget classifications as explained on the table), their areas of specialization, their proposed ranks, and when they would be hired. Provide in narrative the rationale for this plan; if there is no need for additional faculty, explain.**

This narrative follows Table Two on page 32.

- 3. Use UWF Table Two to estimate each existing and additional faculty member's workload (in percent person-years) that would be devoted to the proposed program by the 5th year of implementation, assuming that the program is approved. (Note: this total will carry over to UWF Table Three's fifth year summary of faculty positions.)**

Table Two is on page 32.

E. Assessment of Current and Anticipated Resources

1. In narrative form, assess current facilities and resources available for the proposed program in the following categories:

b. Library volumes (Provide the total number of volumes available in this discipline and related fields.)

The John C. Pace Library has an excellent collection of books in the field of environ-

Pace Library holdings in LC class areas related to proposed MS in Environmental Studies program

Call number area	Subject area	1	2	3	DN	12/11/03
		# Physical titles owned (1995-date)	(All pub dates)	# Electronic titles (netLibrary)		TOTAL COUNT (2 + 3)
G	Geography, GIS, remote sensing, etc.	365	1,361		36	1,397
GA	Cartography	25	184		0	184
GB	Physical geography, geomorphology, water	101	553		23	576
GC	Oceanography	55	523		15	538
GF	Human ecology, anthropogeography	81	388		15	403
QC801 - QC999	Geophysics, meteorology, climatology	102	509		36	545
QE	Geology	222	1,040		40	1,080
QH	Natural history, biology	706	4,275		118	4,393
QK	Botany	149	1,692		26	1,718
QP501 - QP801	Animal biochemistry	65	725		18	743
QR	Microbiology	101	888		12	900
S	Agriculture, soil science, conservation	69	611		46	657
SB481 - SB991	Parks, public reservations, etc.	29	200		39	239
SD	Forestry	44	194		14	208
SK	Wildlife management	16	126		3	129
TC203 - TC345	Coastal engineering & protection	11	28		0	28
TD	Environmental technology, bioremediation, etc.	119	971		79	1,050
TOTAL		2,260	14,268		520	14,788

mental science and the geosciences (geography and geology). The holdings, listed on the table on page 21, are more than sufficient to support an incipient master's program. (Thanks are extended to Mr. Dan North for supplying the data on the table.)

In addition to the total number of volumes, it is important to point out that Environmental Studies was a recipient of special Collection Development Project funds (\$9,500) in 1999-2000 (information courtesy of Ms. Helen Wigersma). Collection Development Project funding is one-time funding which allows a discipline to significantly enhance its library collection and purchase book and media materials which support current and planned programs. As a result, the book collection in Environmental Studies is especially current and capable of supporting the Master of Science program.

b. Serials (Provide the total number available in this discipline and related fields, and list those major journals which are available at UWF.)

The University of West Florida Libraries subscribe to over 5,000 serials including 2,100 in print format, 1,292 in print format with online access, and 1,735 in electronic format. In addition, the library has access to many more full-text serials through aggregator indexes provided by companies such as FirstSearch and Gale.

The following summary sheet provides serials information related to Environmental Studies, as follows:

- The total number of journal subscriptions currently received by UWF whether in print or electronic format
- A listing by title of major journals available at UWF
- The primary indexing/abstracting services available and whether they provide full-text journal access
- A sample of titles for which UWF does not have a print or electronic subscription, but for which full-text access is available

**Master of Science - Environmental Studies
UWF Journals
December, 2003**

Number of Serial Subscriptions	
In Environmental Studies	78
In Biology (with Environmental Studies emphasis)	30
In Chemistry (with Environmental Studies emphasis)	5
TOTAL	113

Major Titles	Format
Applied and Environmental Microbiology	Print
Aquatic Ecology	Electronic
Biodiversity and Conservation	Electronic
The Ecologist	Print
Environment International	Electronic
Environmental Ethics	Print
Environmental Management	Print

Environmental Pollution	Electronic
Ethics and the Environment	Electronic
Forest Ecology and Management	Electronic
Global Environmental Change	Electronic
Global Environmental Politics	Electronic
Journal of Applied Ecology	Print/Online
Journal of Coastal Research	Print
Journal of Ecology	Print
Journal of Environmental Economics and Management	Electronic
Marine Environmental Research	Electronic
Remote Sensing of Environment	Electronic
Urban Ecosystems	Electronic
Water Resources Research	Print
Wetlands Ecology and Management	Electronic
Wildlife Society Bulletin	Print

Abstracting and Indexing Services	Full-Text Articles Available?
Agricola	No
Agricultural and Environmental Biotechnology Abstracts	No
Biological and Agricultural Index	Yes
Ecology Abstracts	No
Environmental Sciences and Pollution Management	No
EnvironLine (DIALOG)	No
InfoTrac One File	Yes
Oceanic Abstracts	No
Pollution Abstracts	No
Water Resources Abstracts	No
Wilson Select	Yes

Sample Titles for which UWF has Electronic Full-Text Journal Access
Environment Bulletin
Environmental & Planning Law Journal
Environmental technology
Journal of Climate
Journal of Environmental Quality
Pollution Engineering
Water Quality Research Journal of Canada
World Watch

There is also available (but not included in this Request to Implement) a more complete summary of Environmental Studies listings which shows the price paid for each UWF subscription for a three-year period. Those titles which do not have costs associated with them are part of a bundled package (Elsevier, Kluwer, Oxford University Press). UWF receives those titles as electronic subscriptions through a consortium purchase with other Florida state university libraries.

As the M.S. program grows, however, it will be important to assist the library in securing funds to maintain adequate levels of serials and book holdings.

c. Describe classroom, teaching laboratory, research laboratory, office, and any other type of space that is necessary and currently available for the proposed program.

The space available for the proposed M.S. program includes:

- Three dedicated laboratory classrooms (the cartography/physical geography lab, capacity: 49, room 13/221; the soils/physical geology lab, capacity: 24, room 13/214; and the advanced GIS/remote sensing lab, capacity: 20, room 13/222)
- Two research laboratories (the hydrogeology lab, room 13/221a; the sediments lab, room 13/213)
- One GIS computer lab (GeoData Center) (capacity: 20, room 13/216)
- Faculty offices (8) and reception area (all in Bldg. 13)
- One conference/seminar room, which includes a map repository (13/202)
- Weather station and storage shed (roof of Bldg. 13)
- Plenty of field space, including the UWF property on Santa Rosa Island

The only space shortage is in the realm of office space for graduate students.

d. Equipment

The Department of Environmental Studies is relatively well equipped in terms of computers, analytical equipment, and field equipment. The two research labs have much analytical equipment (including fume hoods and a gas chromatograph), and the two GIS labs have 26 computers between them. The current faculty have sufficient field equipment, and it is anticipated that the new faculty will use their start-up funds to acquire their necessary research equipment in Fall 2004.

e. Fellowships, scholarships, and graduate assistantships (List the number and amount allocated to the academic unit in question for the past year.)

The department has not had a graduate program, and thus there are no fellowships, graduate scholarships, or graduate assistantships at the present time. (One current research grant, however, has funds available to fund two partial assistantships—at \$6000/year plus tuition waiver—once a graduate program is approved.)

f. Internship sites

The department has placed undergraduate interns in a variety of employment sectors in the Pensacola area, and it is likely that these arrangements will be expanded to include graduate students. These employers include: Escambia County (Neighborhood and Environmental Services, GIS Services), Florida Department of Environmental Protection, Gulf Power Company, U.S. Army Corps of Engineers (Pensacola field office), and the U.S. Environmental Protection Agency lab at Gulf Breeze. There are also occasional internships available with the various private environmental consulting firms in the region.

- 2. Describe additional facilities and resources required for the initiation of the proposed program (e.g., library volumes, serials, space, assistantships, specialized equipment, other expenses, OPS time, etc.). If a new capital expenditure for instructional or research space is required, indicate where this item appears on UWF's capital outlay priority list. The provision of new resources will need to be reflected in the budget table (UWF Table Three), and the source of funding indicated. UWF Table Three requires the display of Instruction and Research (I&R) costs only, unless expected enrollment in the new program is high enough to impact non I&R costs, such as library staffing, university support, and student services.**

No additional facilities will be required for the implementation of the M.S. in Environmental Science program. No capital expenditures for instruction or research space is foreseen at this time. Space for graduate students, particularly those on assistantships, would be desirable at some point in the future, however.

The following summarizes needs in terms of resources:

Other Personal Services (OPS)

The department requests—from the university—two graduate assistantships for the 2004-05 academic year at \$6000/student/year (or the equivalent thereof). By the fifth year (2008-09), we would like to have a minimum of four such graduate assistantships. One major research grant (NIMA) can fund two assistantships when the graduate program starts, and we anticipate continuing to fund at least two assistantships per year under additional research contracts.

Expenses

A graduate program requires miscellaneous expenses, which we estimate at \$3000 per year. Our existing budget can cover \$2000, whereas we would request \$1000 in new monies.

Equipment

A graduate program requires additional equipment expenses, especially in terms of maintenance. We estimate such expenses at \$3000 per year, of which existing revenues could cover half of the expenses. Additional equipment needs (perhaps \$5000/year) will be supplied by grants and contracts.

Technology

A graduate program requires additional technology expenses, especially in terms of software and computer maintenance. We estimate such expenses at \$1500 per year, of which we would request \$1000 in new monies.

Learning Resources

A graduate program requires additional learning resources (including books for the library), which we estimate at \$1000 per year. Our existing budget can cover \$500, whereas we would request \$500 in new monies.

VII. ASSESSMENT OF IMPACT ON PROGRAMS CURRENTLY OFFERED

A. Budget

1. **Assuming no special appropriation or UWF allocation for initiation of the program, how would resources within the College and Department be shifted to support the new program?**

The Department of Environmental Studies will cover some of the added costs through its normal operating budget. The College of Arts & Sciences will cover some OPS and other expenses through its allocation of graduate assistance in the form of out-of-state tuition waivers, etc. A permanent faculty line was added to assist with the undergraduate program, and this line will be filled by Fall 2004. Two existing lines are presently empty, and they too have been approved for filling by Fall 2004.

2. **Use UWF Table Three to display dollar estimates of both current and new resources for the proposed program for the first through the fifth years of the program. In narrative form, identify the source of both current and any new resources to be devoted to the proposed program.**

Table 3 is presented on page 34. Under the Instruction & Research section, items listed under “current” will be funded out of existing departmental general funds (or overhead funds generated from research grants). New funds will be covered by a college supplement to the department budget. Two assistantship lines (or their equivalents) are requested from the university (via the college). Departmental research grants will be able to cover the costs of two additional assistantships.

3. **Describe what steps have been taken to obtain information regarding resources available outside the institution (businesses, industrial organizations, governmental entities, etc.). Delineate the external resources that appear to be available to support the proposed program.**

Outside resources consist primarily of 1) outside graduate student support in terms of employment, internships, and research support as well as 2) resources generated by research contracts. In terms of outside graduate student support, agencies such as DEP offer opportunities in terms of employment and also research venues such as Project Greenshores (in which our department was heavily involved) and other shoreline stabilization projects. In terms of research contracts, our departmental staff have been quite successful in generating research funds (see Appendix E on page 42 for a comprehensive listing.)

- B. **Describe any other projected impacts on related programs, such as prerequisites, required courses in other departments, etc.**

Students enrolled in the M.S. in Environmental Science graduate program may elect to enroll in graduate-level courses from a variety of disciplines. The largest enrollments are expected to be in Mathematics & Statistics (especially in Biostatistics courses) and in Biology. Articulation with those two departments has been quite positive and is included in Appendix F (page 45).

VIII. COMMUNITY COLLEGE ARTICULATION

For undergraduate programs, describe in detail plans for articulation with area community colleges.

At the undergraduate level, the Department of Environmental Studies has articulated especially with OWCC and with PJC. PJC recently restructured its AA in Environmental Science so that students can now easily transition from the lower division to the upper division. This proposed M.S. program will allow students to progress into graduate education quite seamlessly.

IX. ASSESSMENT OF APPLICABLE ACCREDITATION STANDARDS

List the accreditation agencies and learned societies that would be concerned with the proposed program. Does the department or program anticipate seeking accreditation from any of these agencies? If so, indicate when accreditation will be sought. If the proposed program is at the graduate level, and a corresponding undergraduate program is already in existence, is the undergraduate program accredited? If not, why?

There is no discipline-specific accreditation process for programs in Environmental Science, Geology, or Geography at any level.

XII. PRODUCTIVITY

Provide evidence that the academic unit(s) associated with this new degree have been productive in teaching, research, and service. Such evidence may include trends over time for average course-load, FTE productivity, student headcounts in major or service courses, degrees granted, external funding attracted; as well as qualitative indicators of excellence.

1. Teaching

There are many ways to measure the success of a program, and enrollment and graduation trends are but some of those ways. The number of majors, the number of graduates, and enrollments in departmental course offerings--measured in semester credit hours (sch) or full-time equivalents (FTEs) are three of the most common ways is showing trends.

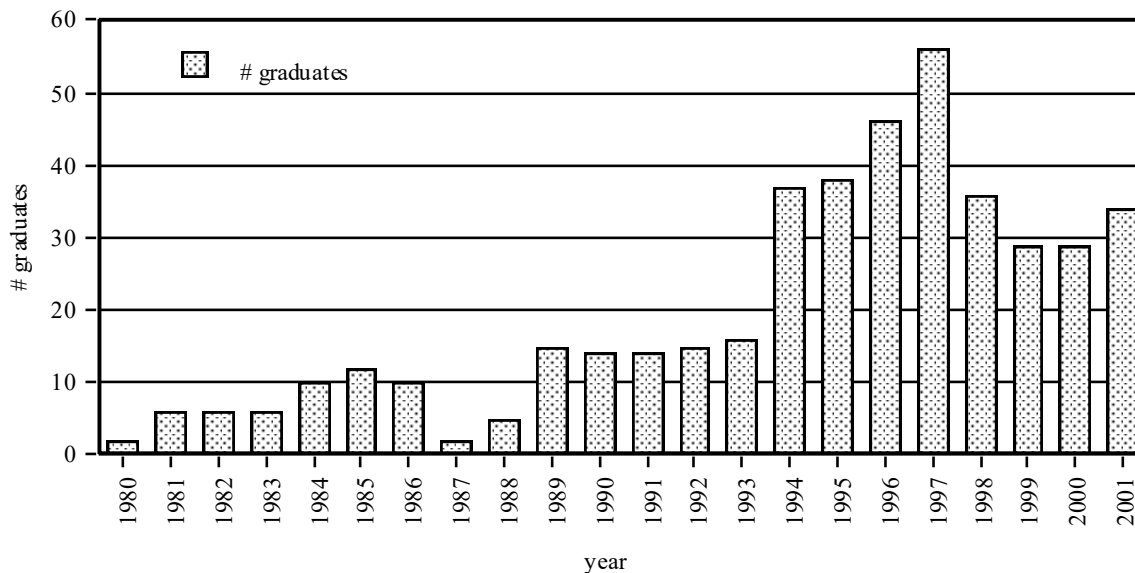
In terms of number of majors (and 'special students'), there have been around 150/year since the B.S. in Environmental Science (referred to as Environmental Studies) program was established in 1995. The table on the following page presents enrollment data from the Fall semester of the respective year. EVR—General refers to students admitted to the program but

who have not yet declared a track. EVR—Unclassified: Spec. refers to students taking courses in the department who have not yet declared a major. (Many of these go on to declare a major, and thus they are counted here.) Since the last remaining students in the ERMP track graduated in 1998, the Environmental Policy track has been most favored by majors—at a 2:1 ratio over the Natural Science track. A third track—Geography—was added in 2003, and so far about 12 students are enrolled in that track.

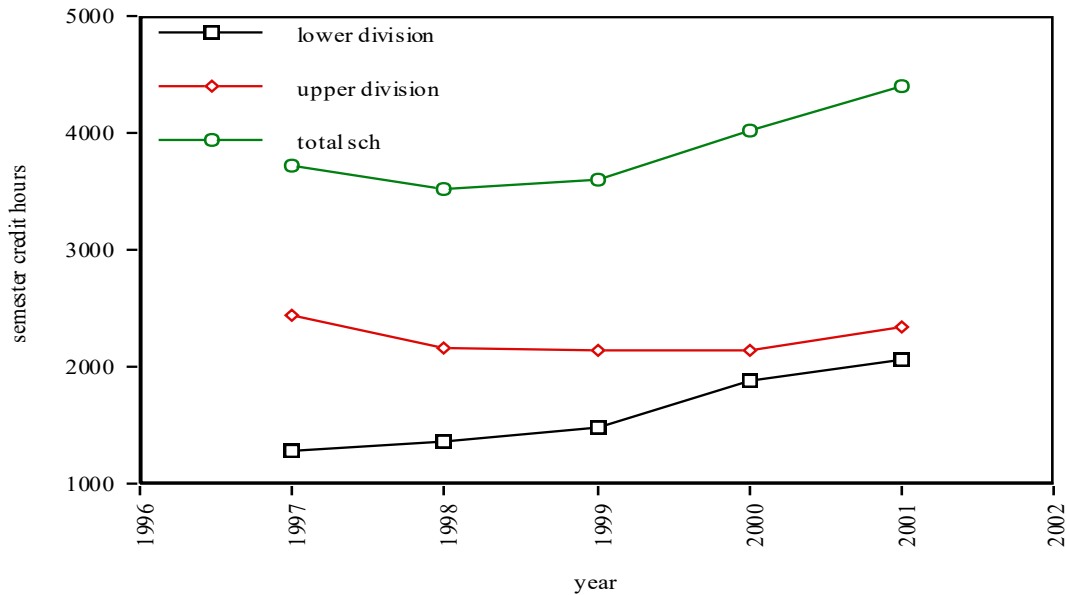
	1989*	1990*	1991*	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
EVR--General							59	80	24	29	24	20	13
EVR--Natural Science							2	9	21	36	36	37	35
EVR--Environ. Policy							11	36	85	67	73	81	76
EVR Res. Mgmt. (ERMP)	49	61	77	93	104	119	66	14	4	2			
EVR Unclassified: spec.	4	0	10	10	8	4	11	4	10	12	20	13	6
TOTAL	53	61	87	103	112	123	149	143	144	146	153	151	130

* lower division not included

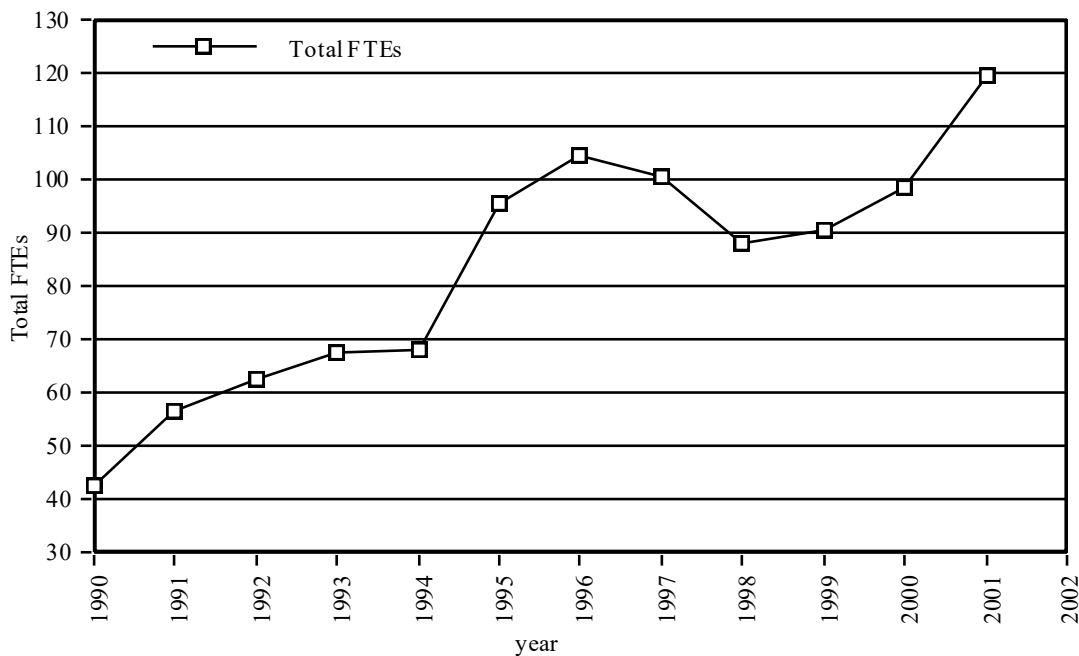
The number of departmental graduates also shows a rapid increase in the mid-1990s. In recent years, the number of graduates has leveled off at about 30/year (for example, 2001 = Summer and Fall 2001 + Spring 2002).



In terms of course enrollments, there has been a steady rise in numbers since Fall 1998 (perhaps not coincidentally, also the semester the chair began his tenure at UWF). Based upon data kept by the department, the graph on the following page shows semester credit hour (sch) production for a five-year period (1997 = Fall 1997 + Spring and Summer 1998, for example). Enrollment growth rates have exceeded 10%/year over the past two years. Although much of this growth has taken place in the lower-division service courses, upper-division enrollments have also become to climb—over 10% during the last academic year. The data on the graph actually underestimate enrollments because Directed Study or Honors courses are not included.



Official enrollment statistics kept by the UWF Office of Institutional Research (graph below) show trends that are somewhat similar to those shown by departmental data (here 1997 = Summer and Fall 1997 + Spring 1998). The longer-term perspective also shows the recent growth has exceeded the peak enrollments of the mid-1990s.



The student retention rates within the department also exceed university averages, according to data provided by the Office of Institutional Research and Planning. For 1991-95, of

entering students FTIC (first time in college), UWF only retained 45%, whereas EVR retained 86%. For students transferring with Associate's degree (1992-1996 data), the comparable figures are 69% for UWF and 72% for EVR. While the transfer students show no significant difference, it is apparent that the department does a good job in retaining those students that initially come to UWF.

2. Research

The department has been especially productive in terms of research. This can be measured in success in attracting external funding (Appendix E, page 42) as well as in terms of publications, professional presentations, and the like. Appendix G on page 47 lists some of the research accomplishments of departmental faculty.

Also, the department has applied to establish a Type 3 research center to demonstrate our commitment to applied regional research. See Appendix H on page 52 for details.

3. Service

The department has an excellent record of service, especially in the local area. Appendix I on page 55 lists some of the service accomplishments of departmental faculty.

XIII. HISTORY

Provide a history page at the end of the proposal document to display approvals at each level (see page 59 at the end of this document).

UWF TABLE ONE B

NUMBER OF ANTICIPATED MAJORS FROM POTENTIAL SOURCES

GRADUATE DEGREE PROGRAM

NAME OF PROGRAM: M.S. Environmental Science

CIP CODE: 3.0104

ACADEMIC YEAR	YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5	
	04	05	05	06	06	07	07	08	08	09

Source of Students (Non-Duplicative Count in Any Given Year)	YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5	
	HC	FTE	HC	FTE	HC	FTE	HC	FTE	HC	FTE
Individuals drawn from agencies/ industries in your service area (e.g., older returning students)	2	0.56	4	1.12	4	1.12	4	1.12	4	1.12
Students who transfer from other graduate programs within the university	2	1.36	3	2.04	2	1.36	2	1.36	2	1.36
Individuals who have recently graduated from preceding degree programs at this university	15	10.2	23	15.64	14	9.52	12	8.16	12	8.16
Individuals who graduated from preceding degree programs at other SUS universities	1	0.68	4	2.72	6	4.08	7	4.76	8	5.44
Individuals who graduated from preceding degree programs at non-SUS Florida colleges and universities	1	0.68	2	1.36	2	1.36	2	1.36	2	1.36
Additional in-state residents	1	0.5	2	1.0	2	1.0	2	1.0	2	1.0
Additional out-of-state residents	2	1.36	5	3.4	7	4.76	8	5.44	8	5.44
Additional foreign residents	1	0.68	2	1.36	2	1.36	2	1.36	2	1.36
Other (Explain)										
TOTAL	25	16.02	45	28.64	39	24.56	39	24.56	40	25.24

Note: HC = Headcount of students in this major. FTE = Annualized Full-Time-Equivalent students taking courses offered by this major. Annualized FTE's are calculated at 32 credit hours for graduate courses. The data also assume that graduate students will receive their M.S. degrees within two years of entering the program.

UWF TABLE TWO

FACULTY PARTICIPATION IN PROPOSED DEGREE PROGRAM BY FIFTH YEAR

Faculty CODE (see below)	Faculty Name or "New Hire"	Academic Discipline/ Specialty	Rank	(For Existing Faculty Only)		Initial Date for Participation in Proposed Program	5th Year Workload in Proposed Program (portion of Person-year)
				Contract Status (tenure?)	Highest Degree Granted		
A	Meyer-Arendt	EVR	Professor	Tenured	Ph.D.	2004	0.2 FTE
A	Liebens	EVR	Associate Professor	Tenured	Ph.D.	2004	0.2
A	Droubay	EVR	Permanent Lecturer	Non-tenured	Ph.D.	2004	0.1
B	New hire	GIS	Assistant Professor	Tenure-track	Ph.D.	2004	0.2
B	New hire	EVR	Assistant Professor	Tenure-track	Ph.D.	2004	0.2
B	New hire	EVR	Assistant Professor	Tenure-track	Ph.D.	2004	0.2
D	Bitters	GIS	Research Scientist	Non-tenured	Ph.D.*	2006	0.1
					*by 2005		

Faculty CODE	Corresponding Faculty Position Category in TABLE 3 for the Fifth Year	Proposed Source of Funding for Faculty	TOTAL 5th Year Workload by Budget Classification
--------------	---	--	--

A	Current General Revenue	Existing Faculty -- Regular Line	0.5 FTE
B	Current General Revenue	New Faculty -- To Be Hired on Existing Vacant Line	0.6 FTE

C	New General Revenue	New Faculty -- To Be Hired on a New Line	
---	---------------------	--	--

D	Contracts & Grants	Existing Faculty -- Funded on Contracts & Grants	0.1 FTE
E	Contracts & Grants	New Faculty -- To Be Hired on Contracts & Grants	

Overall Total for 5th Year			1.2 FTE
-----------------------------------	--	--	---------

Narrative (based in part on questions listed on page 20):

1) We plan to start the graduate program with full capacity. Six full-time faculty hold the Ph.D. degree (including three who are presently being hired), and all six will be involved in offering graduate courses and supervising graduate student in Year 1 of the program. The program is designed to reach a sustainable level (twenty new graduate students added per year),

so that the faculty workload will be approximately the same in Year 5 as in Year 1. One of our research scientists—Barry Bitters—will have his Ph.D. by 2005, and we plan to use his expertise beginning in 2006. He is a contract employee, so no university funds will be required to offer a class that Mr. (Dr.) Bitters will teach.

In terms of graduate experience, the faculty are fully capable of coordinating and conducting a top-notch M.S. program. Dr. Klaus Meyer-Arendt spent eleven years as faculty member in Mississippi State University's Department of Geosciences, a master's program with similar emphases as UWF. There, he directed six master's students (of which half are gainfully employed in Florida!). His publication record is quite extensive, as can be seen in Appendix G. Dr. Johan Liebens, a meticulous researcher, came to UWF in 1996 from the University of Tennessee at Knoxville. The Department of Geography there is a Ph.D.-granting department. Dr. Liebens, too, has a respectable publication record (listed in Appendix G). Dr. Melvin Droubay, lecturer, has concentrated more on teaching and service activities (as well as numerous small research contracts), and his experience with publications and thesis direction is minimal. However, Dr. Droubay has been most instrumental in finding employment and internship positions for our majors and graduates, and he is expected to play a great role in supervising non-thesis M.S. students. For the three new assistant professors, we do not yet have the data (in terms of publications and number of theses directed). (However, the pool of finalists for the positions contains considerable expertise in both categories!)

2) There is no need for any new faculty to begin a graduate program. Because of past understaffing, the university assigned a new faculty line to the department to help cover undergraduate instruction. This new faculty line provides the department the minimum critical-mass threshold to offer a graduate program without straining existing resources and personnel assignments. The new line, coupled with two vacancies created by departing faculty members, leaves three positions currently unfilled within the department. Interviews with candidates for these positions are scheduled for January and February 2004, and we are particularly looking at their qualifications in terms of becoming part of a graduate program in Environmental Science.

UWF TABLE 3
***COSTS FOR PRO-
 POSED PROGRAM***

	FIRST YEAR				FIFTH YEAR			
	GENERAL REVENUE		CONTRACTS & GRANTS	SUMMARY	GENERAL REVENUE		CONTRACTS & GRANTS	SUMMARY
	CURRENT	NEW			CURRENT	NEW		
<i>INSTRUCTION & RESEARCH</i>								
POSITIONS (FTE)								
FACULTY	1.1			1.1	1.1		0.1	1.2
A&P								
USPS								
TOTAL	1.1			1.1	1.1		0.1	1.2
SALARY RATE								
FACULTY	74,662			74,662	74,662		7,000	81,662
A&P								
USPS								
TOTAL	74,662			74,662	74,662		7,000	81,662
<i>I&R</i>								
SALARIES & BENEFITS	97,061			97,061	97,061		2,100	99,161
OTHER PERSONAL SERVICES		12,000	12,000	24,000	24,000		12,000	36,000
EXPENSES	2,000	1,000		3,000	3,000			3,000
EQUIPMENT	1,500	1,500	5,000	8,000	3,000		5,000	8,000
TECHNOLOGY	500	1000		1,500	1,500			1,500
LEARNING RESOURCES	500	500		1,000	1,000			1,000
SPECIAL								
TOTAL I&R	100,661	16,000	17,000	133,661	129,561		19,100	148,661
<i>NON-I&R</i>								
<i>OTHER ACTIVITIES</i>								
LIBRARY STAFFING		640		640	1,000			1,000
UNIV SUPPORT		1,600		1,600	2,500			2,500
FINANCIAL AID		400		400	625			625
STUDENT SVCS		800		800	1,250			1,250
TOTAL OTHER ACTIVITIES		3,440		3,440	5,375			5,375
SUMMARY	100,661	19,440	17,000	137,101	134,936		19,100	154,036

APPENDIX A. Students Who Have Expressed Serious Interest in Beginning a Graduate Program in Environmental Science in Fall 2004.

Bane, Brad

Bartlett, Miranda

Bradley, Kevin

Coleman, Stephanie

Ehlers, Ryan

Eisele, Kimberly

Flanders, Kristal

Forst, Peter

Fosselman, Mackenzie

Gillham, Jennifer

Gorman, Sunshine

Kellenbeck, Jolene

Koch, Kortney

Koch, Nicole

LeBourgeois, Levi

Lee, Kathryn

Lutz, Dakota

Mauldin, Chris

Medlock, Meredith

Michelle, Todd

Nation, Michael

Padgett, Erin

Prier, Tom

Reed, Jeffrey

Rollman, Drew

Stromas, Clyde

APPENDIX B. The Department of Environmental Studies Advisory Board

Mr. Riley Hoggard
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**APPENDIX C. Letters of Support Provided by Department of Environmental Studies
Advisory Board Members.**

1. Mr. Ken Collar, District Conservationist, USDA-Natural Resources Conservation Service

From: "Ken Collar" <Ken.Collar@fl.usda.gov>
To: "'Klaus J. Meyer-Arendt'" <kjma@uwf.edu>
Subject: RE: grad program
Date: Thu, 18 Sep 2003 10:58:59 -0500
Organization: USDA-NRCS
X-Priority: 3 (Normal)
Importance: Normal
X-OriginalArrivalTime: 18 Sep 2003 16:03:12.0407 (UTC)
FILETIME=[5C87BA70:01C37DFE]

Klaus,

An average of 1 or 2 consultants per week visit my office to view our older airphotos and gather soils data in the preparation of phase one environmental assessments. The great majority of these consultants are from out of state, flying in from Atlanta, Ohio, Pennsylvania, or wherever, and they all seem to have M.S. degrees. I would think it more cost-effective to use local consultants, but apparently a shortage exists of qualified local talent. An M.S. program in Environmental Sciences at UWF would remedy that shortage and facilitate keeping those consultant fees in our local economy.

I also see a need in the local area for persons with the necessary skills to plan and successfully implement wetland mitigation projects. I've seen many projects fail to produce the intended results, even though the hydrology was properly engineered, because proper consideration was not given to the soils. A prime current example lies south of the Foodworld on the west side of Pine Forest Road just south of I-10. The berms have been cut by stormflows, resulting in severe erosion and sedimentation. M.S. Environmental Sciences graduates with an understanding of soils would have recognized what soils were not suitable for constructing berms, what compaction would be necessary to construct berms with suitable material, and how to control erosion on the surrounding bare soils. Your proposed program could produce graduates with such expertise.

Please feel free to quote me in my official capacity as District Conservationist, USDA-Natural Resources Conservation Service if you like.

Ken

2. Mr. Paul Thorpe, Northwest Florida Water Management District

Subject: RE: grad program

Date: Wed, 17 Sep 2003 11:13:43 -0400

Thread-Topic: grad program

Thread-Index: AcN9H6AVEC/gCgRoQle8P4Q+5rxsRwACWAwQ

From: "Paul Thorpe" <paul.thorpe@nfwfmd.state.fl.us>

To: "Klaus J. Meyer-Arendt" <kjma@uwf.edu>

X-OriginalArrivalTime: 17 Sep 2003 15:14:53.0605 (UTC) FILETIME=[724BE550:01C37D2E]

Dr. Meyer-Arendt,

Myself and a couple of others at the NFWFMD have reviewed the attachment and appreciate the opportunity to offer comments on the proposed program. While our overall staff levels in any particular field are relatively low, our agency does employ an interdisciplinary staff in resource management, resource regulation, hydrology, planning, GIS, land management, public information, engineering, information technology, and administration.

Many of the professional staff hired in the past have been geologists, wetland scientists, biologists, planners, hydrologists, foresters, geographers, engineers, etc. Applicants with Environmental Science degrees, however, can be quite competitive and have been hired in a variety of positions. Course work in such areas as GIS, hydrology, soil science, wetland ecology, and hydrogeology have proven to be particularly useful.

I would also note that there are some areas in which training and experience are proving to be increasingly valuable. These include field botany or, even better, some sort of training in ecological functional assessments (WRAP, FUMAM, HGM, etc.). Also, knowledge of and experience in grant writing, technical project design, wetland restoration/preservation techniques, and water quality are always valuable.

Yes, the consensus I'm hearing is that a Master's is typically expected. There are a few exceptions -- some hired for field (monitoring, etc.) positions have B.S. degrees, and you do actually see quite a few people with PhDs. Most people hired (and I think most that apply), however, do have a Master's.

Thanks again for the opportunity to provide these comments. If we can offer additional assistance, please do not hesitate to contact me.

Paul Thorpe

Paul Thorpe
Northwest Florida Water Management District
81 Water Management Drive
Havana, FL 32333

(850) 539-5999; fax (850) 539-2778
SUNCOM: 793-5999; fax 793-2778
Paul.Thorpe@nwfwmf.state.fl.us

3. Mr. Keith Wilkins, Head, Escambia County Neighborhood and Environmental Services

Date: Wed, 17 Sep 2003 14:23:52 -0500
From: "Keith Wilkins" <keith_wilkins@co.escambia.fl.us>
Organization: Escambia County, Florida
X-Accept-Language: en
To: "Klaus J. Meyer-Arendt" <kjma@uwf.edu>
Subject: Re: grad program
X-OriginalArrivalTime: 17 Sep 2003 19:26:54.0625 (UTC) FILETIME=[A7207110:01C37D51]

I think the proposal and program look good. I'd be interested in seeing the non-core courses and the alternatives available to the students. As for employment, the skill sets we utilize are ecosystem sciences, land use, policy, education and outreach and grant management. The disciplines are typically associated with soil science, biological sciences, physical geography/geology, hydrology, hydrogeology, atmospheric sciences, public policy and management.

4. Mr. Clif Payne, U.S. Army Corps of Engineers, Pensacola field office

From: "Payne, Lyal C SAJ" <Lyal.C.Payne@saj02.usace.army.mil>
To: "Klaus J. Meyer-Arendt" <kjma@uwf.edu>
Cc: "Payne, Lyal C SAJ" <Lyal.C.Payne@saj02.usace.army.mil>
Subject: RE: grad program
Date: Wed, 1 Oct 2003 00:26:18 -0500
X-OriginalArrivalTime: 01 Oct 2003 05:29:10.0683 (UTC)
FILETIME=[F1440EB0:01C387DC]

I've reviewed the proposed graduate program and it looks fine. I'm please the department is pursuing this program and will support in whatever method I can.

Thanks
Clif

APPENDIX D. Master's Degree Requirements of the University of West Florida (from university catalog).

Academic Credit

Academic credit toward the degree shall not be given for courses which are designed to fulfill prerequisites for admission.

Academic Requirements

The following are the general minimum requirements for completion of graduate programs. The colleges and departments may have graduation requirements which exceed these minima. Consult the individual program descriptions in this Catalog. Completion of the program should require one to two years of full-time study or its equivalent beyond the bachelor's degree.

All master's programs require a minimum of 30 semester hours of approved course work. Students whose master's program consists of 30 to 36 semester hours may have a maximum of six semester hours or two courses (whichever is greater in credit) of graduate work at another university accepted toward their program requirements at UWF. The department chairperson's permission is required. Students whose master's program consists of more than 36 semester hours may have a maximum of 10 semester hours of graduate work from another university accepted toward their program requirements at UWF. Graduate credit may be transferred from other institutions when a grade of "B" or higher was earned.

At least 15 semester hours must be in courses at the 6000 level or above.

A graduate program may include a maximum six semester hours (or two courses, whichever is greater in credit) of undergraduate level course work, and a maximum of six semester (or two courses, whichever is greater) of directed studies.

Undergraduate courses must be upper division (3000-4000) level and meet one of the following criteria:

- A. Upper-division undergraduate courses not annotated for graduate credit (included in graduate program without additional work for graduate credit);
- B. Upper-division undergraduate courses annotated for graduate credit (included in graduate program and student does additional work to receive graduate credit.)

Directed studies must be at the graduate level.

Advancement to Candidacy

Advancement to candidacy may be required by some departments. This is a separate step from admission to graduate studies. Students are responsible for determining the requirements in each area of study by consulting with the department chairperson.

Comprehensive or General Examination

Most departments require a written and/or oral general examination. The examination may be an initial diagnostic or a final comprehensive examination over the student's fields of study. Students must pass any examination required by the department to be recommended for a graduate degree.

Credit by Proficiency Examination

At the request of a department and with the approval of the college dean, a student may be permitted to take six semester hours or two courses (whichever is greater in credit) of graduate-level credit by examination. Additional requirements are the same as those for undergraduates.

GPA Requirements

A student must satisfy the UWF GPA requirement of 3.0 based upon grades for all courses included in the initial and approved degree plan and grades for all courses included in subsequent revisions. No grade for a course taken as part of an approved graduate degree program may be deleted from the GPA. Individual programs may set more stringent GPA requirements.

The UWF academic transcript, the student academic record, and grade report do not reflect the degree program GPA. These records indicate a GPA of all UWF graduate level courses with the exception of those included in a UWF baccalaureate degree.

APPENDIX E. Research Grants Generated in the Department of Environmental Studies.

Principal Investigator/Project Title	Year	Amount	Source
Mr. Barry Bitters			
Universal Classification Schema for Mapping	2003	\$677,000	Department of Defense
Dr. Melvin Droubay			
Perdido Key Growth, Development and Habitat Project	2001	\$3,500	Escambia County NESD
Santa Rosa County Environmental Mapping Project	2001	\$5,000	Santa Rosa County
Contamination of Sediments in Street Sweepings + Storm Water (with Dr. Liebens)	1999	\$52,000	Florida Center for Solid and Hazardous Waste Management
Panama City Urbanized Area Brownfields Investigation	1999	\$14,364	Panama City Metropolitan Planning Organization + West FL Regional Planning Council
EPA Brownfields Demonstration Pilot Mapping Project	1999	\$23,800	Escambia County
Northwest Florida Brownfields Information Center	1999	\$14,000	US Dept. Of Commerce
Escambia County Brownfields Redevelopment	1998	\$47,258	Escambia County
Franchise Fees in Commercial Solid Waste in Florida	1998	\$30,582	Florida Center for Solid and Hazardous Waste Management
Brownfields Data Base and Mapping Project	1998	\$26,401	Pensacola Metropolitan Planning Organization w/FL Regional Planning Council
Southwest Escambia County Wetlands Survey	1998	\$14,905	Escambia County
Slide Show: Hurricanes and Endangered Species on NW FL's Coast (with J. Liebens)	1997	\$10,000	US Fish and Wildlife Service
Dr. Johan Liebens			
Mapping and Analysis of CATE Project Data	2002	\$10,000	Escambia County, FL, Health Department:
Effects of gully erosion on nutrient loading to estuaries along the Gulf of Mexico	2002	\$74,376	U.S. Department of Agriculture, National Research Initiative Competitive Grants Program
Effects of land use in low-order watersheds on sediment and nutrient input into Escambia Bay, FL	2001	\$7,500	University of West Florida, University Research Award
Human effects and physical	2000	\$10,000	University of West Florida, College of Arts

processes in the Great Smoky Mountains National Park: A field experience (with Dr. Stephen Thorne)			and Sciences, Awards for Summer Research & Curriculum Development.
Paleoenvironmental reconstruction of Santa Rosa Island, FL	1999	\$1,990	University of West Florida, Small Grants Program
Contamination of sediments in street sweepings and storm water systems: Pollutant composition and sediment reuse options (with Dr. Melvin Droubay)	1999	\$77,000	Florida Center for Solid and Hazardous Waste Management
Distance learning program in oceanography: Request for core faculty	1998	\$17,150	University of West Florida, Office of the Provost
Dr. Klaus Meyer-Arendt			
GIS Technical Support for Gulf Islands National Seashore	2003	\$14,700	U.S. National Park Service
Greenway Project (with Dr. Chris Pierce)	2003	\$250,000	Economic Development Council, Okaloosa County, FL
NW Florida Comprehensive Assessment (with C. Pierce)	2003	\$75,000	Economic Development Council, Okaloosa County, FL
Partial sponsorship of Coasts Under Stress II international symposium	2002	\$2,500	Florida Sea Grant
GIS Technical Support for Gulf Islands Nat'l Seashore	2002	\$15,000	U.S. National Park Service
Wetlands Valuation in Escambia County, FL (with Dr. Droubay and Dr. Harper)	2001	\$7,040	Neighborhood and Environmental Services Dept. Escambia County
Monitoring Beach Nourishment Sands at Quietwater Beach, Pensacola, FL	2000	\$2,000	University of West Florida Faculty Small Grant Award
Dr. Xiaojun Yang			
Consortium for Estuarine Ecoindicator Research - Gulf of Mexico (CEER-GOM). GIS and remote sensing component	2001	\$ 581,482	US Environmental Protection Agency
Dynamics of Landscape Changes in Atlanta Metropolitan Area: An	2001	\$7,500	University of West Florida

Analysis of Socio-Economic and Biophysical Driving Forces			
Remote Sensing of Landscape Structure and Pattern in the Pensacola Metropolitan Region.	2001	\$2,000	University of West Florida
Enhancing GIS Teaching and Learning With Electric Media	2001	\$5,000 (including computer facility)	University of West Florida

APPENDIX F. Articulation Provided by the Departments of Mathematics & Statistics and also Biology.

Mathematics and Statistics as well as Biology are two departments that will play key supporting roles by offering courses for students entering and enrolling in this M.S. program. Below is correspondence of articulation with the chairs of those respective departments:

From: "Kuiyuan Li" To: "Klaus J. Meyer-Arendt" Subject: RE: EVR grad program
Date: Thu, 14 Aug 2003 09:39:23 -0500

Dear Klaus:

Thanks for your email. Your modification is excellent. We will do everything we can to support it.

Thanks.
Kuiyuan

Kuiyuan Li, Ph.D.
Professor and Chair
Department of Mathematics and Statistics

-----Original Message-----

From: Klaus J. Meyer-Arendt [mailto:kjma@uwf.edu]
Sent: Thursday, August 14, 2003 9:30 AM
To: kli@uwf.edu
Cc: ramin@uwf.edu
Subject: EVR grad program

Kuiyuan--

Our department is preparing to seek approval to implement a graduate program in Environmental Science. We would like to list STA 4173 Biostatistics as a "foundational proficiency" for this program. Perhaps one-third of potential grad students will have already had the course, but the remainder will need to take it. I have spoken with Dr. Raid Amin, who normally teaches this course, and he supports the potential additional enrollments. By means of a return email, if you could articulate your support of our requiring this course, I would greatly appreciate it. thank you.
Klaus

From: "George L Stewart" To: "Klaus J. Meyer-Arendt" Subject: RE: EVR grad program
Date: Thu, 14 Aug 2003 10:45:56 -0500

Klaus: This sounds like a plan to me. We will definitely appreciate the added graduate enrollment. Consider us articulated. George

-----Original Message-----

From: Klaus J. Meyer-Arendt [mailto:kjma@uwf.edu]
Sent: Thursday, August 14, 2003 9:37 AM
To: gstewart@uwf.edu
Subject: EVR grad program

-----Original Message-----

From: Klaus J. Meyer-Arendt [mailto:kjma@uwf.edu]
Sent: Thursday, August 14, 2003 9:37 AM
To: gstewart@uwf.edu
Subject: EVR grad program George--

Our department is preparing to seek approval to implement a graduate program in Environmental Science. This program will be geared toward recent graduates of our program, environmental professionals in northwest Florida, and graduates of similar programs in other states or countries. I strongly suspect we will encourage many, if not most, of these potential graduate students to enroll in courses in your department, including Biogeography and Wetlands Ecology. There will probably also be students who will want to carve out some kind of graduate program that overlaps our two departments. While I don't think you will object to increased enrollments in your courses, I would appreciate if you could articulate your support.
Thank you.
Klaus

APPENDIX G. Publications and Presentations Generated by Department of Environmental Studies Faculty, 1990-2003.

MELVIN DROUBAY

Publications

The Use of Franchise Fees in Commercial Solid Waste Management in Florida, Florida Center for Solid and Hazardous Waste Management, Gainesville, Florida. 2000

Review of deBlij and Muller, Geography: Realms, Regions and Concepts 2000, 9th. Edition for Wiley Publishing Company.

Review of Cunningham and Cunningham, Principles of Environmental Science, 1st. Edition for McGraw-Hill Higher Education.

Presentations

“Brownfield Remediation and Universities: A Natural Partnership,” paper presented at the Florida Brownfields Conference 2002

“Mapping Environmental Problems”: Conference Session at the Southeast Journalism Conference, February 21-23, 2003 at the University of West Florida.

“Regulators and the Media” Panel Discussion Chair at the Southeast Journalism Conference, February 21-23, 2003 at the University of West Florida.

JOHAN LIEBENS

Publications

2003 Liebens, J. and Van Molle, M. Effect of estimation procedure on soil organic carbon stock assessments in Flanders, Belgium. *Soil Use and Management*, in.

2003 Liebens, J. Map and database construction for a historic cemetery: Methods and applications. *Historical Archaeology*, 37(4):56-68.

2001 Liebens, J. Heavy metal contamination of sediments in stormwater management systems: The effect of land use, particle size, and age. *Environmental Geology*, 41:341-351.

2001 Liebens, J. Spreadsheet macro to determine USDA soil textural subclasses. *Communications in Soil Science and Plant Analysis*, 32(1&2):255-265.

2000 Schaetzl, R.J., Krist, F.J., Rindfleisch, P.R., Liebens, J., and Williams, T.E. Post-glacial landscape evolution of Northeastern lower Michigan, interpreted from geomorphology, soils and sediments. *Annals of the Association of American Geographers*, 90(3):443-466.

2000 Liebens, J. A simple method to evaluate the impact of tropical cyclones on coastlines: Hurricane Georges and the Gulf Coast. *Shore & Beach*, 68(1):17-24.

1999 Liebens, J. Characteristics of soils on debris aprons in the Southern Blue Ridge, North Carolina. *Physical Geography*, 20(1):27-52.

1997 Liebens, J. and Schaetzl, R.J. Relative age relationships of debris flow deposits in the Southern Blue Ridge, North Carolina. *Geomorphology*, 21(1):53-67.

1995 Barrett, L.R., Liebens, J., Brown, D.G., Schaetzl, R.J., Zuwerink, P., Hunkler, R.G., Cate, T.W. and Nolan, D.S. Relationships between soils and presettlement vegetation in Baraga County, Michigan. *American Midlands Naturalist*, 134(2):264-285.

1991 Liebens, J. The development of Quaternary geology in SE Asia in the framework of CCOP. Bangkok, *CCOP technical publications-25th anniversary volume*, pp 47-56.

Reports and Proceedings

2003 Flanders, K. and Liebens, J. Mapping a Florida trail. *GPS User*, Fall, 47-51.

2000 Liebens, J. Contamination of sediments in street sweepings and storm water systems: Pollutant composition and sediment reuse options. *Florida Center for Solid and Hazardous Waste Management*, 70 p.

1998 Liebens, J. (project leader) Environmental suitability assessment of the University of West Florida's Santa Rosa Island property for the construction of a long-distance hiking trail. *Department of Environmental Studies, University of West Florida*, 20 p.

1997 Stone, G. W. and Liebens, J. Continuation of biophysical monitoring at Bayou Texar: Bathymetric, sedimentological and macroinvertebrate evaluation at twelve outfalls. *Institute for Coastal and Estuarine Research, University of West Florida*, 103 p.

- 1990 Liebens, J. and Reedman, A. J. Final report of the workshop on global environmental change: The role of the geoscientist - Past, present and future sea-level changes. *Committee for Coordination of Joint Prospecting for Mineral Resources in Asian Offshore Areas (CCOP)*, 59 p.

Papers Presented at Professional Meetings

- 2003 "Influence of pedologic and environmental factors on regional soil organic carbon stock." (M. Van Molle as second author) Annual Meeting of the Soil Science Society of America, Denver.
- 2003 "Regional soil organic carbon stock estimates are influenced by assessment procedure." (M. Van Molle as 2nd author) International Quaternary Association Conference, Reno.
- 2003 "Agricultural Runoff Impacts on Total Maximum Daily Loads and Water Quality: Field and Watershed Scale Studies and Science-Teacher Education." (J. Lepo as first author) USDA Water Quality Coordinators Conference, Tucson.
- 2002 "Mapping and managing a historic cemetery with the help of a geographic information system." 35th Conference on Historical and Underwater Archaeology, Society for Historical Archaeology, Mobile.
- 2001 "The use of geographical techniques in support of historical archeology research." Southeastern Archaeological Conference, Chattanooga.
- 2001 "It's on your map." (Tyler Merritt as co-author) Southern Regional Honors Council Conference, Nashville.
- 2001 "Contamination and potential reuse of street sweepings and roadside swale sediments." Annual Meeting of the Association of American Geographers, New York.
- 2000 "Detailed mapping of a historic cemetery: Methods and applications." The 23rd Annual Applied Geography Conference, Tampa.
- 2000 "Contamination of sediments in storm water retention ponds: The influence of land use." Annual Meeting of the Association of American Geographers, Pittsburgh.
- 1999 "A spreadsheet macro to determine USDA soil textural classes." Annual Meeting of the Southeastern Division of the Association of American Geographers, Tampa.
- 1999 "Soil parent materials on debris aprons in the Southern Blue Ridge." Annual Meeting of the Association of American Geographers, Hawaii.
- 1996 "Pedogenic imprinting on colluvium in the Southern Appalachians." Annual Meeting of the Association of American Geographers, Charlotte.
- 1996 "Morphology of bisequal soils (Typic Eutroboralfs)." (R.J. Schaetzl as first author) Annual Meeting of the Association of American Geographers, Charlotte.
- 1995 "Age relationships of debris flows in the Southern Blue Ridge, North Carolina." Annual Meeting of the Southeastern Division of the Association of American Geographers, Knoxville.
- 1995 "Soils on debris flow deposits in the Southern Blue Ridge." (R.J. Schaetzl as second author) Annual Meeting of the Association of American Geographers, Chicago.**
- 1994 "Tiger file based address matching and boundary map generation: applications to health care and economics." Annual Meeting of the Association of American Geographers, San Francisco.
- 1993 "Error and uncertainty in the integration of digital soil survey data and General Land Office survey notes." (L.R. Barrett as first author) Annual Meeting of the Soil Science Society of America, Cincinnati.
- 1993 "A possible eolian deposit in Michigan's Upper Peninsula." (R.J. Schaetzl as first author) Third International Geomorphology Conference, Hamilton, Ontario, Canada.
- 1992 "Spatial analysis of eolian sediments in the Peshekee Highlands, Marquette and Baraga Counties, Michigan." (R.J. Schaetzl as first author). Annual Meeting of the Michigan Academy of Science, Arts and Letters, Mt. Pleasant, Michigan.
- 1991 "Soil stratigraphy and its applications in Quaternary geology." Research Institute of Geology and Mineral Resources, Hanoi, Vietnam.
- 1990 "Quaternary stratigraphy of SE Asia and its relevance for the activities of the Committee for Co-ordination of Joint Prospecting for Mineral Resources in Asian Offshore Areas." International Symposium on Quaternary Stratigraphy and Events in Eurasia and the Pacific Region. INQUA - USSR Academy of Sciences, Yakutia, USSR.
- 1990 "Quaternary stratigraphy in the coastal zones of SE Asia: Contributions by the Committee for Co-ordination of Joint Prospecting for Mineral Resources in Asian Offshore Areas." Annual Meeting of the International Geological Correlation Program # 296. UNESCO-IGCP, Khon Kaen, Thailand.

KLAUS J. MEYER-ARENDT

- Meyer-Arendt, K.J., 2003, Tourism and the Natural Environment, in **A Companion to Tourism**, (A. Lew, A. Williams, & M. Hall, eds.), Blackwell Publishers, Oxford. (in press)
- Meyer-Arendt, K.J., 2003, Human Alteration of the North Yucatán Coast, in a special volume on coastal issues in honor of H. Jesse Walker, (D. Davis, ed.), **Geoscience and Man**, vol. ?, Dept. of Geography & Anthropology, Louisiana State U., Baton Rouge, LA, pp. xx-xx. (in press)
- Meyer-Arendt, K.J. & C. Justice, 2002, Tourism as the Subject of North American Doctoral Dissertations, 1987-2000, **Annals of Tourism Research** 29(4): 1173-1176.
- Meyer-Arendt, K.J., 2002, Geographical Research on Tourism in Mexico, **Tourism Geographies** 4(3):255-260.
- Meyer-Arendt, K.J., 2001, Recreational Urbanization and Shoreline Modification along the North Coast of Yucatán, **Tourism Geographies** 3(1): 87-104.
- Meyer-Arendt, K.J., 1999, Impacto Ambiental Provocado por el Cambio del Uso de Suelo en la Zona de Progreso, Yucatán, in **Atlas de Procesos Territoriales de Yucatán**, Universidad Autónoma de Yucatán, Mexico City, pp. 259-261.
- Schwartz, R. & Meyer-Arendt, K.J., 1999, Hurricanes and Casinos in Biloxi, Mississippi, **Journal of the American Society of Professional Emergency Planners** 6: 83-95.
- Meyer-Arendt, K.J., 1998, Casino Gaming on the Mississippi Gulf Coast, in **Marine Resources and History of the Mississippi Gulf Coast**, (D.M. McCaughan, ed.), Vol. 3, pp. 291-308, MS Department of Marine Resources, Biloxi, MS.
- Meyer-Arendt, K.J., S.M. Oivanki, & B. Yassin, 1998, Wetland Changes in Coastal Mississippi, 1950s to 1992, in Mississippi's Coastal Environment, Volume 2 of **Marine Resources and History of the Mississippi Gulf Coast**, (D.M. McCaughan, ed.), pp. 377-399, MS Department of Marine Resources, Biloxi, MS.
- Meyer-Arendt, K.J., 1998, From the River to the Sea: Casino Gambling in Mississippi, Chapter 13 in **Casino Gambling in America: Origins, Patterns, and Impacts**, (K.J. Meyer-Arendt and R. Hartmann, eds.), Cognizant Communication Corp., Elmsford, NY, pp. 151-167.
- Meyer-Arendt, K.J., 1997, Mississippi Casinos and Geographic Concepts, **Mississippi Journal for the Social Studies** 8: 1-12.
- Meyer-Arendt, K.J., 1997, What's a Legal Casino Site in Mississippi?, **Casino Gaming Law** 1: 55-63.
- Meyer-Arendt, K.J., 1995, Casino Gaming in Mississippi: Location, Location, Location, **Economic Development Review** 13(4): 27-33.
- Oivanki, S.M., K.J. Meyer-Arendt, & B. Yassin, 1995, Analysis of Land Use and Land Cover Changes on the Mississippi Coast: 1950s-1992, **Transactions, Gulf Coast Association of Geological Societies** 45: 467-473.
- Meyer-Arendt, K.J., 1995, **Beach and Nearshore Sediment Budget of Harrison County, Mississippi: A Historical Analysis**, Open-File Report 43, Office of Geology, MS Dept. of Environmental Quality, Jackson, MS, 65 pp.
- Meyer-Arendt, K.J., 1994, Human Settlement of the "Island of Belle Fontaine", Jackson County, Mississippi, in **Belle Fontaine, Jackson County, Mississippi: Human History, Geology, and Shoreline Erosion**, (S.M. Oivanki, ed.), Office of Geology, MS Dept. of Environmental Quality, Jackson, MS, Bulletin 130, pp. 7-19.
- Meyer-Arendt, K.J. & A.A. Abusalih, 1994, Casino Gambling on the Mississippi Coast: Landscape Change and Coastal Management Issues, in **The Coast: Organizing for the Future**, Conference Proceedings, The Coastal Society, 14th International Conference, April 17-21, Charleston, SC, pp. 209-213.
- Meyer-Arendt, K.J., 1993, Morphologic Patterns of Resort Evolution along the Gulf of Mexico, in **Culture, Place and Form: Essays in Cultural and Historical Geography**, (K. Mathewson, ed.), Geoscience and Man, vol. 32, Dept. of Geography & Anthropology, Louisiana State University, Baton Rouge, pp. 311-323.
- Meyer-Arendt, K.J., 1993, Geomorphic Impacts of Resort Evolution along the Gulf of Mexico Coast: Applicability of Resort Cycle Models, in **Tourism vs. Environment: The Case for Coastal Areas**, (P.P. Wong, ed.), Geojournal Library Series vol. 26, Kluwer Academic Publishers, Dordrecht, Netherlands., pp. 125-138.
- Meyer-Arendt, K.J., 1993, Shoreline Changes along the North Yucatán Coast, in **Coastlines of the Gulf of Mexico** (S. Laska & A. Puffer, eds.), a vol. of *Coastlines of the World* series (O. Magoon, ed.), Amer. Soc. of Civil Engineers, NY. Proceedings of the 8th Symposium on Coastal and Ocean Management (Coastal Zone '93), July 19-23, New Orleans, 103-117.
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- Meyer-Arendt, K.J., Sambrook, R., & B. Kermath, 1992, Seaside Resorts in the Dominican Republic: A Typology, **Journal of Geography** 91 (5): 219-225.
- Meyer-Arendt, K.J., 1992, Geographic Research on Tourism in Latin America, 1980-1990, in **Benchmark 1990** (T. Martinson, ed.), special volume of the **Yearbook, Conference of Latin Americanist Geographers** 17-18: 199-207.
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- Meyer-Arendt, K.J., 1991, Human Impacts on Coastal and Estuarine Environments in Mississippi, in **Coastal Depositional Systems in the Gulf of Mexico: Quaternary Framework and Environmental Issues**, Proceedings of the GCSSEPM Foundation 12th Annual Research Conference, Houston, TX, Dec. 8-11, pp. 141-148.
- Meyer-Arendt, K.J. & K.A. Kramer, 1991, Deterioration and Restoration of the Grande Batture Islands, Mississippi, **Mississippi Geology** 11 (4): 1-5.
- Meyer-Arendt, K.J., 1991, Hurricane Gilbert: Storm of the Century, **GeoJournal** 23 (4): 323-325.
- Meyer-Arendt, K.J., 1991, Tourism Development on the North Yucatán Coast: Human Response to Shoreline Erosion and Hurricanes, **GeoJournal** 23 (4): 327-336.
- Meyer-Arendt, K.J., 1990, Modeling Environmental Impacts of Tourism Development along the Gulf Coast, **The Compass** 67: 272-283.
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Presentations

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Appendix H. Department of Environmental Studies Proposal to Establish a New Type III Center: The Center for Environmental Studies and Research (CESAR).

Background and rationale

The environment of Northwest Florida is under pressure from economic development and rapid population increase. Environmental problems have been identified in the region by national and state agencies. The City of Pensacola, for instance, has three Superfund sites, more than any other city its size. Two more Superfund sites are located in Escambia County. Various industries in the region have been accused of having a detrimental impact on the environment. Citizens have an acute interest in the environmental wellbeing of the region. Five years ago the people of Escambia and Santa Rosa County participated in a community vision process as part of a strategic social and economic planning effort for the area. They identified the environment as one of their primary concerns, together with education.

Faculty of the Department of Environmental Studies at UWF have been studying fundamental and applied environmental issues, locally and elsewhere, for a number of years. They have been heavily involved in formal and informal environmental education, and have participated in numerous service activities related to local and regional environmental issues. A brief summary of their most relevant activities is provided in the personnel section of this document.

Although various agencies and organizations are examining the environment in Northwest Florida this is an opportune time to unite the skills and experience of the faculty in the Department of Environmental Studies and related disciplines. The reasons are that there is a strong interest in the health of the environment in the region, that a myriad of real, perceived and potential environmental problems exist in the area, that relevant expertise is present at UWF, and that UWF has a unique neutral position and untarnished reputation that other entities involved in environmental work are often perceived to lack. We therefore propose to establish an environmental research center associated with the Department of Environmental Studies. The institute will be called the Center for Environmental Studies and Research (CESAR). We anticipate that a separate environmental research center will be a focal point for the external community. Even though there is no disciplinary difference, the external community will relate better to a research center than to an academic department.

Because the research emphasis of the new center will be on the basic physical components of the environment (landforms, water, soil, rock, air) and on spatial data as they relate to the environment, there will be no overlap with existing centers or institutes at UWF. In fact, there is a unique niche for a center like CESAR in Northwest Florida. The organizations and agencies that are involved in environmental research do not have the focus, breadth, and academic expertise that CESAR will have. It is generally agreed upon by environmental professionals in the region that there is a need for an institute that serves as a one-stop shopping place for information on the environment in Northwest Florida. Over time, CESAR will fulfill exactly that role.

Mission

The mission of the Center for Environmental Studies and Research (CESAR) is to support and enhance UWF's environmental research capability, teaching endeavors, and outreach efforts. CESAR strives to generate, analyze, and disseminate scientifically sound environmental information on Northwest Florida. The center's focus is on spatial geodata as they relate to contemporaneous environmental issues in the region. The center advises, assists, and collaborates with on and off campus entities in their quest for scientifically well-grounded environmental knowledge for Northwest Florida.

Purpose and fit

The purpose of the proposed center is to centralize and coordinate environmental data and research to facilitate the creation of knowledge and the transfer of information to students and the public at large. Even though individual expertise is already present in the Department of Environmental Studies and related units, UWF will benefit from bringing together that expertise in a coherent team of environmental scientists with common goals. The external community, especially non-academics and local and regional organizations, businesses, and individuals will relate better to an environmental research unit than to an academic department. Even funding agencies will look more favorably at grant proposals from a formal unit that has disciplinary breadth, an administrative structure, and grant and contract management experience than at proposals from a few loosely associated individuals.

Establishment of CESAR is directly in line with five of UWF's seven core values, and is consistent with the other two:

1. Integrity (doing the right thing for the right reason): CESAR will support environmental research and education, and can do so from an unbiased academic position because its members are genuinely and uncompromisingly interested in the environmental health of the region.

2. Quality (dedication to uncompromising excellence): Establishment of CESAR will lead to enhanced research, education and service at UWF because the whole (the center) is stronger than the sum of its parts (the individual faculty).
3. Innovation (dedication to exploring and expanding the boundaries of knowledge): One of CESAR's objectives is to promote environmental research, and thus the center will help push back the boundaries of knowledge.
4. Teamwork (working together to achieve shared goals): This is what CESAR is about, bringing faculty together in a center where they can work towards common goals with shared resources.
5. Stewardship (managing and protecting our resources): This is exactly what CESAR is about, generating an understanding of the environment that will help manage and protect the natural environment in our region and beyond.

Objectives

The overall goal of CESAR is to provide UWF faculty that engage in environmental research and teaching with a framework to formally combine their efforts, and thus to strengthen and expand their capabilities in order to better serve UWF, its students, and its hinterland.

The specific goals of the center are:

- to promote cooperation between UWF faculty working in the environmental field
- to encourage fundamental and applied environmental research
- to stimulate cooperation with local/regional environmental agencies and organizations
- to provide enriching experiences for faculty that lead to enhanced teaching
- to provide opportunities for students to get involved in scientific research
- to offer graduate students opportunities for research-funded assistantships and potential thesis topics
- to advance the state of the knowledge of the environment in Northwest Florida

Activities

The activities of CESAR will include:

- pursuing external grants for research and equipment
- seeking local and regional contracts for applied studies
- carrying out fundamental and applied environmental research
- organizing workshops in land and marine surveys for environmental applications
- organizing workshops on digital processing of environmental spatial data
- cooperating with local/regional agencies and organizations to resolve environmental problems
- involving UWF students in "real life" studies to bolster their educational experience
- supporting UWF's teaching efforts by providing faculty opportunities for professional enrichment
- informing the public of the center's activities and findings

Benefits

- Increased potential to generate external funding because a solid administrative structure with a primary focus on research that has assessment procedures in place will make for a more attractive partner for funding agencies
- Increased potential to generate external funding because the center as a whole will have both scientific breadth and depth, and thus it will be more obvious to funding agencies that a scientific backing for individual center members is available (this is especially important for relative small departments and schools such as ours)
- Strengthening and expansion of research capability because individual expertise will be brought together and coordinated (unity provides strength)
- Increased exposure in the community because primary focus will be on local and regional environmental issues (but national or international projects are not excluded)
- Increased exposure in the community simply because of the existence at a local university of an institute dedicated to environmental research

- Ability to undertake large projects that can not be carried out by one or two individuals alone
- More opportunities for students to engage in "real life" studies (This is especially important for the Department of Environmental Studies because a new Master's program is being proposed for implementation in Fall 2004. Additionally, the department has a good track record of involving undergraduates in research)
- More local/regional examples of environmental problems and solutions that students relate to for faculty to use in their classes
- More opportunities for students for internships and co-ops because of increased local/regional networking of faculty
- Better teaching by CESAR members because of increased and updated knowledge

Outcomes and assessment

It is anticipated that the establishment of the proposed environmental research center will lead to:

- more cooperation between faculty involved in environmental research
- more external grants for faculty associated with the center
- more local/regional contracts for the faculty
- better environmental education for UWF students by more knowledgeable faculty
- better informed public in the region
- better knowledge of the state of the environment in Northwest Florida
- more exposure and a better public image for UWF

These outcomes will be assessed annually by a five person committee and the center's director. The committee will consist of 2 members from UWF and 3 external members. Initially, the committee will draft annual evaluation criteria. In subsequent years the committee will apply the criteria to assess the center's performance and, if required, will formulate recommendations to help the center meet its goals. It is anticipated that this committee will also make recommendations to adjust the center's goals and activities to changes on the environmental scene. The Department of Environmental Studies has a very effective review board, composed primarily of external members. We will draw upon that experience to establish CESAR's assessment committee.

APPENDIX I. Service Activities by Department of Environmental Studies Faculty, 1995-2003.

MELVIN DROUBAY

- 2003 Member and Chair, Campus Conservation and Beautification Committee
- 2002: University Parking Committee
- 2002: Representative on the Regional Growth and Development Sub-committee, University Planning Council.
- 2001: University of West Florida, University Planning Council. College of Arts and Sciences
- 2001: Florida Council on Sustainable Standards: named judge for Florida Clean Industry contestants for 2001 awards.
- 2001: Advisory Committee, Brownfield Site Rehabilitation Committee (specific property)
- 2000: Organizing Chair: WaterKeepers National Alliance, National Conference for 2001, held at the University of West Florida in June of 2001.
- 2000: Chair, Escambia County Citizens Environmental Committee, with responsibility of drafting new tree ordinance for Escambia County
- 1999: Chair of Technical Committee, Palafox Corridor EPA Brownfields Pilot Demonstration Project
- 1998: First President, Northwest Florida Chapter, Florida Association of Environmental Professionals: 1999-2000 Director
- 1998: Escambia County Selection Committee for Engineering Services to the County Solid Waste Division
- 1998 - 1999: Chair, Escambia County Brownfields Committee
- 1997: Florida Environmental Expo - Reviewer of Student Papers
- 1997, 1998, 1999: Organizing Committee Member, Northwest Florida Pollution Prevention Week and Conference (including TV shows on UWF TV)
- 1997 - Organizer, First Focus Group, Governor's Council on Sustainable Florida Standards, held at UWF
- 1997 - 2000: Director and Chairman of Board, Unity Church of Pensacola
- 1997 - 1998: Board of Directors of World Centers of Compassion for Children
- 1996 - Current: Member, International Task Force, Pensacola Area Chamber of Commerce
- 1996 - 2001: Member, Escambia County Citizen's Advisory Committee on the Environment (Appointed by a County Commissioner), charged with investigation of electronics industry for Pensacola. 1997: Solid Waste Issues. 1998: Investigation of Superfund Sites in Pensacola. 2000: President of Committee and charged with drafting a new tree ordinance for Escambia County. 2001: Review of new Wetlands Ordinance proposals.
- 1994 - 1996: Consultant to the Lewis Bear Company to develop markets in Mexico and Central America
- 1994 - 1995: Member, Northwest Florida Trade Missions to Mexico
- 1994 - 1996: Member, later Director of the World Trade Council of Northwest Florida

JOHAN LIEBENS

- 2003 Chairperson, Academic Search Committee, Department of Environmental Studies, University of West Florida.
- 2002 Chairperson, Academic Search Committee, Department of Environmental Studies, University of West Florida.
- 2001 Member, GIS Technician Search Committee, Department of Environmental Studies, University of West Florida.
- 2000 Chairperson, Academic Search Committee, Department of Environmental Studies, University of West Florida.
- 1999 Member, Academic Search Committee, Department of Biology, University of West Florida.
- 1998 Member, Teaching Incentive Program Appeals Committee, University of West Florida.
- 1997 Chairperson, Academic Search Committee, Department of Environmental Studies, University of West Florida.
- 1997 Member, Academic Search Committee, Department of Environmental Studies, University of West Florida.

- 1998 - 1999 Member, Information Technology Committee, University Planning Council, University of West Florida.
- 1998 - 1999 Chairperson, Governance and Policies Subcommittee, College Council, College of Science and Technology, University of West Florida.
- 1999 - 2001 Member, Distance Learning Policy and Issues Committee, University of West Florida.
- 1999 - 2002 Member, Advisory Board, Natural Resource Conservation Degree Program, University of Florida - Milton campus.
- 1997 - 2000 Member, Academic Standards Committee, College of Science and Technology, University of West Florida.
- 1997 - 2000 Member, and 1998 - 1999: vice chair, College Council, College of Science and Technology, University of West Florida.
- 2003 Member (2x), Academic Search Committee, Department of Environmental Studies, University of West Florida.
- 2000 - present Member, Recycling Committee, University of West Florida.
- 2000 - present Member, International Affairs Committee, University of West Florida.
- 2000 - present Member, Campus Security and Safety Committee, University of West Florida.
- 1998 Member (2x), Counselor/Advisor Search Committee, University of West Florida.
- 1997 - present Co-op adviser, Department of Environmental Studies, University of West Florida.

KLAUS J. MEYER-ARENDT

MEMBERSHIPS & OFFICES HELD:

NATIONAL LEVEL

- Air & Waste Management Association (AWMA), Coastal Plains Chapter, 2000-present.
 - Member, Board of Directors, 2000-present.
- American Geographical Society (AGS), 1982-present.
- Association of American Geographers (AAG), 1975-present.
 - Chair, Coastal and Marine (COMA) specialty group, 2001-2003.
 - Member, Program Committee, 2002-2003
 - Chair, Recreation, Tourism, and Sport (RTS) specialty group, 1993-1995.
- Conference of Latin Americanist Geographers (CLAG), 1984-present.
 - Member, Board of Directors, 1989-1992.
- Florida Association of Environmental Professionals (FAEP), NW FL chapter, 1998-present.
 - Member, Scholarship Committee, 2002-present.
- Florida Society of Geographers, 1999-present.
 - President, 2003-2004.
- Mississippi Academy of Sciences (MAS), 1988-1998.
 - Chair, Geology & Geography Division, 1990.
- National Council for Geographic Education (NCGE), 1995-1998.
- Southeastern Division, Association of American Geographers (SEDAAG), 1987-present.
 - Member of Geography Bowl Committee, 1997-2000.
 - Member of Honors Committee, 1996-1997.
 - State Representative (elected) & Member of Steering Committee, 1990-1994.
- The Coastal Society (TCS), 1984-present.

REGIONAL USA LEVEL

- Member, Coastal and Shoreline Erosion Committee, EPA Gulf of Mexico Program, 1990-1998.

STATE LEVEL

- Member, North Florida Chapter, Fulbright Association, 2003-present.
- Trustee, UWF Board of Trustees, 2003.
- Ex officio member, UWF Board of Trustees, 2002-2003.
- Member, Advisory Council of Faculty Senates (ACFS), 2001-2003.
- Substitute Board Member, Florida Center for Environmental Studies (FAU), 1998.

COMMUNITY LEVEL

- Member, Advisory Board for UF/Milton Natural Resource Conservation program, 2002-.
- Member, Steering Committee for Project Greenshores (coastal restoration), 2001-present.
- Member, Scenic Highway Corridor Planning Committee, 2000-present.
- Member, NW Florida Legislative Natural Resources Advisory Committee, 2000-2002.

Member, Pensacola Beach Environmental Quality Advisory Board, 1999-2002.
Chair, Technical Advisory Committee, Bay Area Resource Council (BARC), 1999-2001

UNIVERSITY LEVEL

Chair, SACS Task Force on Graduate Education, 2003-present.
President, UWF Faculty Senate, 2001-2003.
Member, Provost Search Committee, 2003.
Member, Presidential Inaugural Committee, 2002-2003.
Member, UWF Branding Committee, 2002.
Member, Presidential Search Advisory Committee, 2002.
Member, Transition Committee for the New Era, 2001-2002.
Senator, UWF Faculty Senate, 2000-2001.
Member, Academic Council, 2000-2001.
Member, Property Survey Committee, 2000-2001.
Member, Community Liaison Committee to Update the UWF Strategic Plan, 1999-2000.
Member, Facilities Planning Committee to Reduce Energy Consumption, 1999-present.
Member, Social Science Interdisciplinary (SSI) Committee, 1998-2000.

COLLEGE LEVEL

Member, CAS Dean's Advisory Committee, 2000-2003.
Member, Dept. of Sociology & Anthropology Program Review Team, 2001.
Member, Dept. of Government Program Review Team, 2001.
Chair, Teaching Incentive Program (TIP) Selection Committee, 1999-2000.
Member, Teaching Incentive Program (TIP) Selection Committee, 1998-1999.
Member, Search Committee for Physics position, 2000.
Member, Search Committee for Sociology position, 1999-2000.
Faculty advisor, Green Earth Alliance (student environmental club), 2001-present.
Faculty advisor, Saving Earth's Water & Air Resources (student environmental club), 2000-2001.

RECENT SERVICE ACTIVITIES (TO GEOGRAPHY & ENVIRONMENTAL STUDIES):

- 2003 Speaker, Value of Greenways Research, at 1000 Friends of Florida meeting in Panama City, FL, Sept. 25, 2003.
- 2003 Organizer of nine special sessions (under the heading of Coasts Under Stress II), sponsored by the Coastal/Marine specialty group, AAG meetings, New Orleans, March 5-8, 2003.
- 2003 Co-leader of the IGU Coastal Commission field trip from Grand Isle, LA to Pensacola Beach, FL (in conjunction with AAG meetings, New Orleans), March 9-13, 2003.
- 2002 Attended the Florida Society of Geographers meetings, Gainesville, FL, Jan. 18-20. (Made final commitment to hold the 2004 FSG meeting in Pensacola.)
- 2002 Attended a planning meeting of the Association of American Geographers (to organize the 2003 New Orleans meeting), New Orleans, October 18-20.
- 2001 Participated in live televised Open Forum panel discussion on beach erosion, PBS, Pensacola, FL, 8-9 pm, Feb. 2.
- 2001 Organizer of three special sessions (Coastal Geomorphology, Coastal Weather & Shoreline Changes, & Student Paper Session), sponsored by the Coastal/Marine specialty group, AAG meetings, Los Angeles, March 19-23, 2002.
- 2001 Interviewed on national broadcast of National Public Radio's 'Savvy Traveler' program (topic: enclave tourism), October 27, 2001.
- 2001 Co-organized and moderated "Air Quality and Pensacola Bay: An Environmental Quality Forum" sponsored by the Bay Area Resources Council (BARC), Gulf Breeze, FL, May 16.
- 2001 Attended the Florida Society of Geographers meetings, Tallahassee, FL, Feb. 2-4. (Made preliminary preparations to hold the 2004 FSG meeting in Pensacola.)
- 2000 Prepared questions for the annual "World Geography Bowl" at the Southeastern Division, Assoc. of American Geographers meetings, Chapel Hill, NC, Nov. 18-21.
- 2000 Moderator, Panel Discussion on Environmental Impacts of Proposed Portofino Development at Pensacola Beach, Santa Rosa Sound Coalition, Gulf Breeze, FL, Jan. 20.
- 1999 Prepared questions for the annual "World Geography Bowl" at the Southeastern Division, Association of American Geographers meetings, Tampa, FL, Nov. 21-23.
- 1999 Moderator, Panel Discussion on Notification Procedures in Events of Beach and Waterway Closures, Bay Area Resources Council, Gulf Breeze, FL, Nov. 16.

- 1999 Interviewee for an audio documentary on the Impacts of Gambling Upon Tunica County, Mississippi, Mars Hill Audio, Charlottesville, VA, June 21.
- 1998 Speaker at Earth Day colloquium series (“Environmental Impacts of Casino Gambling in Coastal Mississippi”), Mississippi State University Union, April 23.
- 1998 Prepared questions for the annual “World Geography Bowl” at the Southeastern Division, Assoc. of American Geographers meetings, Memphis, TN, Nov. 22-24.
- 1998 Panelist in session “Sustainable Tourism”, sponsored by the Recreation/Tourism/Sport specialty group, AAG meetings, Boston, March 25-28.
- 1998 Organizer and director of the MS Geographic Alliance Advanced Summer Geography Institute on “Coastal Environments”, AL/MS/LA/TX Gulf Coast, July 12-24.
- 1998 Organizer and director of the Mississippi Geographic Alliance Summer Geography Institute, Mississippi State University, June 14-26.
- 1998 Organizer (and participant) of three special sessions on “Coastal Geography” held at the MCSS/Mississippi Geographic Alliance joint annual meeting, Long Beach, MS, Oct. 22-24.
- 1998 Co-leader of field trip “The Delta, Blues Highway, Cotton, and Casinos” at the Southeastern Division, Association of American Geographers meetings, Memphis, TN, Nov. 22.
- 1997 Organizer and director of the Mississippi Geographic Alliance Summer Geography Institute, Mississippi State University, June 15-27.
- 1997 Nominated member of the World Geography Bowl Committee of SEDAAG (Southeastern Division, Association of American Geographers); prepared questions for the annual bowl at the SEDAAG meetings, Birmingham, AL, Nov. 23-25.
- 1997 Co-convenor and co-organizer of the Mississippi Council for Social Studies/ Mississippi Geographic Alliance joint annual meeting, Jackson, MS, Oct. 24-25.
- 1996 Resource contact person for Mississippi, National Science Foundation project on Southeast Maps (John Wagner, Clemson University, principal investigator).
- 1996 Organizer and director of the Mississippi Geographic Alliance Advanced Summer Geography Institute on “Technology & Mississippi Geography”, MSU, July 21-31.
- 1996 Organizer and director of the Mississippi Geographic Alliance Summer Geography Institute, Mississippi State University, June 16-28.
- 1996 Elected member of the Honors Committee of SEDAAG (Southeastern Division, Association of American Geographers).
- 1995 Panelist in session (Implementing the National Standards: A Progress Report) at the SEDAAG meetings held in Knoxville, TN, Nov. 20.
- 1995 Organizer of three special sessions sponsored by the RTS specialty group, Association of American Geographers (AAG) meetings, Chicago, March 14-18.
- 1995 Guest on the TV program “Open Air”, a Mississippi ETV production dedicated to Geography Awareness Week and the importance of Geography in Mississippi schools, Nov. 19.

Proposed New Programs - History: (This page is to be included at the end of the proposal document to display approvals at each level.)

Approved to Explore and Plan:

Dean _____	Date <u>4/10/03</u>
Faculty Senate _____	Date <u>5/9/03</u>
Provost _____	Date <u>5/13/03</u>
President _____	Date <u>5/14/03</u>
BOT A&SA Committee _____	Date <u>5/24/03</u>

Approved to Implement:

Dean _____ Date _____
Faculty Senate _____ Date _____
Provost _____ Date _____
President _____ Date _____
BOT A&SA Committee _____ **Date** _____
BOT _____ **Date** _____

FBOE Reporting and Approvals:

Bachelor's and Master's Programs Reported to the FBOE: _____

Specialist and Doctoral Programs Submitted to FBOG: _____ n.a.

Specialist and Doctoral Programs Approved by FBOG: _____ n.a.

Licensure Programs approved by Legislature: _____ n.a.

Implementation and Reporting:

Term Implemented: _____

One-Year Report Presented to Board of Trustees: _____

Three-Year Report Presented to Board of Trustees: _____

Five-Year Program Review Presented to Board of Trustees: _____

Request Format and Template – Proposals for New Programs

The University of West Florida
REQUEST TO OFFER A NEW DEGREE PROGRAM
Bachelor's and Master's Degrees*
(Cover Page)

College Requesting Program: College of Professional Studies
Department Requesting Program: Division of Administrative Studies
Academic Specialty or Field: Administration
Name of Program Requested: Master's of Science in Administration
Proposed Implementation Date: Fall 2004

Proposed Classification of Instruction Program (CIP) Code: 30.9999

The submission of this proposal constitutes a commitment by the Division of Academic Affairs, the appropriate College, and the Department that, if the proposal is approved, the necessary financial commitment and the criteria for establishing new programs have been met prior to the initiation of the program.

Approved for Submission to the UWF Board of Trustees:

_____ Vice President for Academic Affairs, Date _____
_____ President, Date _____

Indicate the dollar amounts appearing as totals for the first and fifth years of implementation as shown in the appropriate summary columns in New Program Table Three. Provide headcount and FTE estimates of majors for years 1 through 5. Headcount and FTE estimates should be identical to those in New Program Table One.

	Projected Total Estimated Costs (from Table Three)	Student HDCT / FTE (from Table One)
First Year of Implementation	\$957,962	126 / 70.9
Second Year of Implementation		173 / 97.3
Third Year of Implementation		215 / 120.9
Fourth Year of Implementation		254 / 142.9
Fifth Year of Implementation	\$1,272,746	300 / 168.8

Table of Contents

Request to Offer a New Program

I.	Program Description.....	4
II.	Institutional Mission.	4
III.	Planning Process and Timetable.....	4
IV.	Assessment of Need and Demand	5
	Table One B Summary of Anticipated Majors from Potential Sources	8
	Explanation of sources of students	
	Explanation of headcount to FTE ratio	
	Enrollment shifts	
V.	Curriculum	13
VI.	UWF Capability	22
	Table Two	27
	Summary of Faculty Participation in Proposed Program by Fifth Year	
	Library resources.....	29
	Books charts 1, 2,3,4,5	
	Serials charts 1, 2,3,4,5	
VII.	Assessment of Impact on Programs Currently Offered.....	44
VIII.	Community College Articulation	47
IX.	Assessment of Applicable Accreditation Standards.	47
X.	Productivity	48
XI.	History.....	51
Appendix A	Specialization Information	52
	Business core	
	Table One B Source of students	
	Table Two Faculty participation by fifth year	
	Table Three Costs	
	Criminal Justice	
	Table One B Source of students	
	Table Two Faculty participation by fifth year	
	Table Three Costs	

Health Care Administration

Table One B Source of students

Table Two Faculty participation by fifth year

Table Three Costs

Public Administration

Table One B Source of students

Table Two Faculty participation by fifth year

Table Three Costs

Educational Leadership

Table One B Source of students

Table Two Faculty participation by fifth year

Table Three Costs

Human Performance Technology

Table One B Source of students

Table Two Faculty participation by fifth year

Table Three Costs

Appendix B Abbreviated Resumes of Participating Faculty 70

Note: This outline and the questions pertaining to each section must be reproduced within the body of the proposal in order to ensure that all sections have been satisfactorily addressed.

I. PROGRAM DESCRIPTION

Describe the degree program under consideration, including its level, and emphases (including tracks or specializations).

Currently, the College of Professional Studies has several administration-focused programs that prepare personnel for mid-level administrative positions in health care agencies, criminal justice administration, human performance technology, and educational leadership positions. With the exception of criminal justice administration, these programs are currently housed in their "home" departments as specializations in existing degree programs and would be better served if brought together in an identifiable organized unit and consolidated into a web-based interdisciplinary degree, the Master of Science in Administration (MSA). The MSA degree will serve as an "umbrella" for these specializations that will be strengthened with the addition of a business core of courses for all specializations. The MSA is considered an interdisciplinary program and other specializations may be added in the future as appropriate. Another important factor supporting the rationale for establishing the MSA program is the low enrollment and high cost of the Master of Public Administration (MPS) program. The plan folds the MPA into a specialization within this newly proposed Master of Science in Administration. The creation of the MSA degree will lift the included specializations from their obscure locations in the university catalog to the forefront in a separate and identifiable entity, the Master of Science in Administration (MSA). Once established, the MSA will facilitate the creation and addition of new specializations from other departments and divisions throughout the university. To recap, five specializations built upon a common core of administration-related coursework are proposed:

- **Criminal Justice Administration (new specialization)**
- **Educational Leadership (existing specialization in another program)**
- **Health Care Agency Administration (existing specialization in another program)**
- **Human Performance and Technology Administration (existing specialization in another program)**
- **Public Administration (existing program, separate degree to be eliminated)**

II. INSTITUTIONAL MISSION

Is the proposed program listed on the current List of Proposed New Degree Programs for Exploration, Planning, and Implementation? How do the goals of the proposed program relate to the UWF mission statement as contained in the Partnership Strategic Plan?

The proposed Master of Science in Administration (MSA) degree is on the current list of proposed programs for exploration, planning, and implementation. The Academic and Student Affairs Committee of the Board of Trustees approved the request for exploration of the program on November 7, 2003. The proposal is of high priority and was approved by the Chair, the Dean, Faculty Senate, the Provost and the President (10-22-03).

The MSA degree program will "...empower each individual we serve with knowledge and opportunity to contribute responsibly and creatively to a complex world" as stated in the University Strategic Planning document. The program will also increase the "... percentage of course delivery using technology." The delivery of one or more programs on line that will reach a larger and distance population of students is a goal of the College of Professional Studies.

III. PLANNING PROCESS AND TIMETABLE

Describe the planning process leading up to submission of this proposal. Include a chronology of activities, listing UWF personnel directly involved and any external individuals who participated in planning. Provide a timetable of events for the implementation of the proposed program.

Chronology of the planning process

Fall 2002: Dean Pilcher initiated conversations with chairs regarding program reviews and potential cost saving measures. Low enrolled programs and efficient program delivery were topics discussed.

Spring 2003: Dean Pilcher held conversations with the College of Business Dean pertaining to the creation of an interdisciplinary graduate degree in administration and discussed the idea with Provost Little. The three administrators agreed to the idea and indicated approval to begin the planning process for the creation of a Master's of Science in Administration (MSA).

Summer 2003: A series of meetings and conversations were held with the COPS chairs involved in the MSA planning, COB Dean Ranelli, COPS Dean Pilcher, MBA Director Dr. Tim O'Keefe, Provost Little.

Once agreement was reached between the parties involved on the curriculum, a Curriculum Change Request (CCR) for the program was prepared and reviewed by Mr. Robert Shaw (Director of the Student Academic Support System).

Fall 2003: A Request to Explore/Plan the MSA proposal was created and approved by the Faculty Senate, the Provost, and the President.

Fall 2003: Permission to explore the MSA proposal was granted by the Academic and Student Affairs Committee of the Board of Trustees (11-7-03).

Proposed Timetable for implementation (2004)

February -----Catalog copy finalized and entered into 2004/2005 UWF catalog
February/March-----Development of brochure and mailing lists
March-----Announce on UWF web site
March/April-----Develop fall 2004 schedule
April-----Media release
April-----Mail out brochure
April/May-----Begin advisement to potential students
July-----Student advisement and registration
August-----Classes begin

IV. ASSESSMENT OF NEED AND DEMAND

- A. What national, state, or local data support the need for more people to be prepared in this program at this level? (This may include national, state, or local plans or reports that support the need for this program; demand for the proposed program which has emanated from a perceived need by agencies or industries in Northwest Florida; and summaries of prospective student inquiries.) Indicate potential employment options for graduates of the program. If similar programs exist in the Northwest Florida region, provide data that support the need for an additional program.**

Criminal Justice

National, state, local data. Post 911 era has contributed to increased demand for security at all levels of government. In addition, local, state, and federal law enforcement requires an increasingly educated work force to deal with the complexities associated with law enforcement in the 21st century. Along with the need to increase the educational preparation of rank and file employees, there is increased need to educate supervisors and administrators at all levels of government. Administrative personnel must deal with policy evaluation, policy implementation, resource allocation, conflict management, and human resource management among other things. The MSA will prepare administrators for these tasks. Currently there is no Master's Degree in Criminal Justice in Northwest Florida. Since 1995, numerous law enforcement officials have asked for a master's degree in criminal justice including Daniel M. Ward, the training officer at the Santa Rosa

Sheriff's Office (SRSO). We currently have a partnership with PJC and SRSO to provide the AA to BA for law enforcement in the county. The Sheriff has set the goal for all officers to attain a BA. As this goal is achieved, there will be an increasing need for supervisory employers to obtain an education beyond the BA. We expect that this pattern will follow in other law enforcement agencies in the region. A sophisticated, trained law enforcement workforce goes hand and hand with local economic development. We cannot attract a sophisticated educated work force without good schools and the perception that law enforcement is competent, knowledgeable, and fair. Finally, our 1993 program review identified Northwest Florida as a community where there is a strong interest among young people in criminal justice careers. Students cannot hope to advance in their field without an advanced degree. In addition to law enforcement there is a strong need for trained personnel in the juvenile justice arena. Northwest Florida has a high rate of delinquency in comparison to other regions of the state when population is held constant.

Health Care Administration

The existing Health Care Administration that is currently a specialization within the MPA program will become a specialization within the MSA program. The Health Care Administration has as its mission the strengthening and advancement of managerial and analytical skills of individuals who are either interested in pursuing or who are presently pursuing, a career in public and private health care agencies. The interdisciplinary MSA will require the business core of twelve hours that will provide students with a stronger business background than they receive in the current structure. The need to prepare students for middle management roles in the health care field continues to exist as health care programs are changing to meet customer's needs and to deliver responsible and efficient programs within the economic environment of our society.

Other universities offer health care administration/management programs but these programs are not available locally. Recently Troy State University, an out of state university, initiated a graduate program in Health Care Management that is offered at one of the local health care institutions. The proposed MSA with a specialization in Health Care Administration offered by UWF will serve the needs of the local community while offering an option to distance learners.

Public Administration

The existing master's program in public administration has as its mission the strengthening and advancement of managerial and analytical skills of individuals who are either interested in pursuing or who are presently pursuing, a career in government and nonprofit organizations. While the current program is accredited, it does not enjoy significant enrollments relative to the resources utilized by the program. Therefore, as explained earlier in this document, the inherent need for the existing program will be met by the public administration specialization within the proposed Master of Science in Administration. The interdisciplinary MSA will require the business core of 12 semester hours which will provide students a stronger business background than the current program and will also include course that represent the sub-fields of public administration. The need to prepare students for leadership roles in government and private agencies continue to exist. The need will continue to be met through the MSA degree with a specialization in public administration.

Educational Leadership

National, state, and local projections indicate that there will be an administrative crisis in K12 education over the next five years paralleling the current teacher crisis. Retirements and fewer candidates interested in being site-based administrator will create the demand and need.

The state of Florida has created an opportunity for local school districts to create alternative pathways to certification for school administrators.

Diversity in administrative candidates is a need of school districts so it will be imperative that the university works with school districts to identify and recruit and retain good candidates.

Human Performance Technology

UWF has developed a Human Performance Technology (HPT) certificate program in response to a broad-based need for trained HPT professionals who can extend traditional instructional technology solutions to facilitate performance-based organizational systems. Applications of HPT related-processes have been shown to be a value-added contribution within organizations. For example, the US Navy has created a new job class, Performance Consultant, and is working with UWF to provide training and education to incumbents to develop requisite competencies. Many corporations and social service organizations are transitioning to an HPT focus.

As organizations transition to this focus on human performance improvement, incumbents are seeking professional development opportunities that will provide them with skills to keep them marketable. HPT is an emerging field in which the two main professional organizations: the American Society for Training and Development (ASTD) and the International Society for Performance Improvement (ISPI) have played a leading role in training and certification of HPT professionals. The two organizations have collaborated to grant a professional credential as a Certified Performance Technologist. A graduate student in our program recently was awarded her CPT. ASTD offers a five course certification program online and in 10 locations around the US and in Asia. Three community colleges in Florida offer programs in a face-to-face format. ISPI offers a three day "institute" online and in a face-to-face format. Additionally, universities are responding to the need to provide advanced degrees in HPT or Instructional Technology (IT) with coursework in HPT. For example, Boise State University offers an online program and the University of Southern California blends HPT with IT coursework. Florida State is currently developing an online version of an HPT specialization in its MBA program.

There is an opportunity to provide advanced degrees/certificates in HPT to this large audience. Professionals throughout the region and the nation are currently in the process of developing HPT competencies. Our program would be another option for them. Prospective students would find it extremely attractive because of the online delivery format. It would be only the second program of its kind.

Another area of need is for HPT professionals to have a grounding in business "fundamentals". Many existing programs do not require any coursework in management, organization development, and finance, for example. Our program will be unique in providing a business focus.

B. Use UWF Table One A (baccalaureate) or UWF Table One B (graduate) to indicate the number of students (headcount and FTE) you expect to major in the proposed program during each of the first 5 years of implementation, categorizing them according to their primary sources. In the narrative following Table One, the rationale for enrollment projections should be provided and the estimated headcount to FTE ratio explained. If, initially, students within the institution are expected to change majors to enroll in the proposed program, describe the shifts from disciplines that will likely occur.

SUMMARY UWF TABLE ONE

NUMBER OF ANTICIPATED MAJORS FROM POTENTIAL SOURCES

GRADUATE DEGREE PROGRAM

NAME OF PROGRAM: Summary

CIP CODE: 30.9999

ACADEMIC YEAR	YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5	
	04	05	05	06	06	07	07	08	08	09

Source of Students (Non-Duplicative Count in Any Given Year)	HC *	FTE **	HC *	FTE **	HC *	FTE **	HC *	FTE **	HC *	FTE **
Individuals drawn from agencies/ industries in your service area (e.g., older returning students)	35	19.7	53	29.8	64	36.0	76	42.8	88	49.5
Students who transfer from other graduate programs within the university	45	25.3	34	19.1	27	15.2	27	15.2	29	16.3
Individuals who have recently graduated from preceding degree programs at this university	22	12.4	27	15.2	40	22.5	43	24.2	48	27.0
Individuals who graduated from preceding degree programs at other SUS universities	11	6.2	19	10.7	20	11.3	24	13.5	27	15.2
Individuals who graduated from preceding degree programs at non-SUS Florida colleges and universities	6	3.4	16	9.0	14	7.9	19	10.7	20	11.3
Additional in-state residents	4	2.3	12	6.8	21	11.8	27	15.2	38	21.4
Additional out-of-state residents	0	0	9	5.1	23	12.9	27	15.2	37	20.8
Additional foreign residents	3	1.7	3	1.7	6	3.4	11	6.2	13	7.3
Other (Explain)	0	0	0	0	0	0	0	0	0	0
TOTAL	126	70.9	173	97.3	215	120.9	254	142.9	300	168.8

Note: HC = Headcount of students in this major FTE = Annualized Full-Time-Equivalent students taking courses offered by this major. Annualized FTE's are calculated at 32 credit hours for graduate courses.

*Does not include headcount for Business Core. **Does include FTE from Business Core.

Explanation of Sources of Students

(See Appendix A for specialization specific data)

Individuals drawn from agencies/industries in service area

Criminal Justice

Individuals drawn from agencies in our service area will increase as more and more law enforcement personnel obtain their BAs. Currently the Criminal Justice Program at UWF has a partnership with PJC and SRSO with the goal of providing all members of the Sheriff's department the opportunity to obtain the BA. Graduate education on line will be highly attractive to those who eventually obtain the BA. Currently both PJC and UWF are providing courses in the training room at SRSO as well as on-line courses to facilitate education for deputies working full time.

Potential agencies from which students will be drawn

- Escambia County Sheriff's Department
- Santa Rosa County Sheriff's Department
- Florida Department of Corrections
- Florida Department of Law Enforcement
- Pensacola Junior College
- Chipola University
- Alabama State Department of Corrections
- Mobile County Sheriff's Department
- Baldwin County Sheriff's Department
- Escambia County (Alabama) Sheriff's Department
- Private Investigation Agencies
- State social service agencies
- Naval Air Station Pensacola
- Eglin Air Force Base

Health Care Administration

Health care agencies, both public and private, are in a growth stage as the population in UWF's service area increases. Prior to joining the College of Professional Studies, the Division of Health, Leisure, and Exercise Science offered a management specialization within the M.S. degree in Health Education. This specialization was dissolved and the Health Care Administration specialization within the MPA was created as a replacement. The program will now be positioned as a stand-alone specialization within the proposed MSA and will be strengthened by the addition of the business core of 12 semester hours. This marks a significant improvement and will better prepare students seeking positions in middle management in the many facets of the health care industry. The online offerings will be especially attractive to the many people already working irregular hours and times in the field whether they are distant to the university or not.

Agencies from which potential students could be drawn

- Escambia County Health Department
- Santa Rosa County Health Department
- Baldwin County Health Department
- Mobile County Health Department
- Okaloosa County Health Department
- American Lung Association
- American Cancer Society
- Florida Blue Cross Blue Shield

- Health Maintenance Organizations
- West Florida Hospital
- Sacred Heart Hospital
- Baptist Hospital

Public Administration

There continues to be a need for a program training personnel for positions in city and county governments in the local area and distance locations.

Agencies from which potential students could be drawn

- Escambia County
- Santa Rosa County
- Okaloosa County
- Mobile County
- Baldwin County
- Communications and fire services
- Active military

Educational Leadership

The State of Florida has created an opportunity for local school districts to create alternative pathways to certification for school administrators. It is expected that a significant number of professional in the field of education will utilize this opportunity and will seek certification in educational leadership by enrolling in the proposed MSA specialization as outlined. The online mode of program offerings will be very attractive to the school professionals who find it difficult to attend classes in a traditional setting. This is especially true for professionals who are remote to institutions of higher learning who are offering such programs.

Agencies from which potential students could be drawn

- Escambia County School District
- Santa Rosa School District
- Okaloosa County School District
- Walton County School District
- Bay County School District
- Pensacola Christian College (and sister institutions)
- School Districts throughout the State of Florida

Human Performance Technology

Several universities across the country are responding to the need to provide advanced degrees in HPT or Instructional Technology (IT) with course work in HPT. UWF is responding by offering an on line program which will be only the second of its kind in the country. This will be an extremely attractive program to potential students who otherwise would not be able to attend classes taught in a traditional setting.

Agencies from which potential students could be drawn

- United States Navy
- Military organizations
- Naval Education and Training Command
- Naval Education and Training Professional Development and Technology Center
- Military contractors
- Business firms
- Industrial firms

Students who transfer from other graduate programs within the university

Criminal Justice will draw students from the MPA program as that program is dissolved and because some students currently in the MPA program find a graduate program with a Criminal Justice specialization more attractive.

Health Care Administration is currently housed in the MPA program. As the MPA is dissolved over the next two years, students will transition into the freestanding specialization in Health Care Administration in the MSA.

The **Master's of Public Administration degree program** will cease to exist as a freestanding master's program December 2005. Some of these students have indicated that they might not complete the degree by that time and will shift to the MSA public administration specialization. Meanwhile, there are no new students being accepted into the MPA. Students who desire to pursue a public administration graduate degree will enroll in the proposed MSA public administration specialization fall semester 2004.

Educational Leadership has an existing significant student enrollment. Some will choose to migrate into the new MSA specialization in the same area. Once the proposed MSA is approved, students will enroll in the online program.

The **Human Performance Technology** program has a significant enrollment presently and most of these students will migrate into the proposed MSA program once it is approved.

Individuals who have recently graduated from preceding degree programs at this university

Criminal Justice will experience significant enrollments of students who graduate from the undergraduate program in criminal justice. The undergraduate program in criminal justice is one of the largest in the college and it is expected that a significant number of students will choose to begin a graduate degree in their field.

Health Care Administration will attract several students from the undergraduates in health education. These students most likely will be professionals already in the field who have recently completed their bachelor's degree. There most likely will be several students with a business background and several with a nursing background who will enroll in the program.

Public Administration is an attractive graduate program for students in programs such as political science and environmental studies.

Educational Leadership students usually come from teacher education programs. Usually, several years experience are required for someone to enter into a program leading to certification as an administrator (principal) which precludes students enrolling into the graduate educational leadership program immediately upon completion of the undergraduate degree. Therefore, it is unlikely that there will be a significant number of enrollees who have just recently graduated.

Human Performance Technology will attract students from other programs such as Instructional Technology, Engineering Technology, Computer Science, Management, Psychology, and eLearning Support.

Individuals who graduated from preceding degree programs at other SUS universities

Criminal Justice will attract several students from other SUS universities who will be interested in an online program.

Health Care Administration will attract several students throughout the state who will be interested in an online program.

Public Administration will attract several students through out the state who will be interested in an online program.

Educational Leadership will attract several students from other state universities who are working in school settings that are remote to graduate education programs.

Human Performance Technology will be one of the few online programs of its kind in the country and will attract students from other programs such as Instructional technology, engineering technology, computer science, management, psychology, and eLearning support.

From preceding degree programs at non SUS

There will be a small number of students from non-SUS schools who will enroll in the program. Military personnel locally and throughout the state will be interested in the program, especially the HPT program. Pensacola Christian College personnel have already expressed interest in the Educational Leadership program as well as the other specializations. (Note: Pensacola Christian College and its related institutions are not accredited colleges. UWF does have a policy in place that will enable their graduates to pursue a master's degree at UWF provided that the criteria of the division or department offering the requested program is met.)

Additional in state residents

There will be a significant number of additional in state residents who will enroll in these programs because of the attractiveness of online offerings. As previously mentioned in several places in this document, military personnel will be especially attracted to the program because specific scheduling constraints.

Additional out of state residents

The exact cost of online programs for out of state residents has not been determined. However, the objective is to offer these online courses at a competitive level.

Additional foreign students

Currently, immigration regulations limit the number of online courses a resident foreign student may take in a given semester, however, the online program can be delivered to foreign students in their native country.

Explanation of headcount to FTE ratio

Past history of enrollments in professional programs such as the ones offered in the proposed MSA indicate that most of the students take two three-hour courses each semester. Therefore the calculated FTEs projected in Table One B assume 18 semester hours per person per year as contrasted with the definition of full-time graduate student as one who takes 24 semesters per year.

Enrollment shifts from disciplines to proposed MSA

As indicated previously in this document, all of the proposed programs except Criminal Justice are currently in existence. There will be some enrollment shifts from the current programs into the proposed online courses as the program is implemented and developed fully. Some face-to-face courses will continue to be

offered where feasible in the local area. Some of the anticipated shifts are indicated below.

MPA program to Criminal Justice (new offering)
MPA/Health Care Administration to MSA/Health Care Administration
MPA program to MSA/Public Administration
Educational Leadership program to MSA/Educational Leadership
HPT program to MSA/HPT

C. For all programs, indicate what steps will be taken to recruit and achieve a diverse student body in this program.

Once the MSA program is approved, recruitment activities will involve the following:

Distribution of high visibility flyers pertaining to the program

Posting a new program announcement on the UWF Internet site

Announcements in the news media

Active recruitment at professional meetings with distribution of literature

Mail outs to targeted populations specific to the field of study in the MSA

Announcements on available list serve on the Internet.

Recruitment activities will begin immediately in spring 2004 pending approval of the program.

V. CURRICULUM

A. For all programs, provide expected specific learning outcomes, a sequenced course of study, and list the total number of credit hours for the degree. Degree programs in the science and technology disciplines must discuss how industry-driven competencies were identified and incorporated into the curriculum. For bachelor's programs, also indicate the number of credit hours for the major coursework, the number of credit hours required as prerequisites to the major (if applicable), and the number of hours available for electives.

Semester hours required: 33

Course of study:

Each of the disciplines will offer a minimum of two required course each semester coupled with courses from the core requirements. The majority of the targeted population for the MSA will most likely be employed professionals who will pace their academic pursuits relative to their individual situation. Students who desire to take a full academic load (9 semester hours for fall and spring and 6 semester hours for summer) will be able to complete the degree within two years.

Admission requirements:

Applicants to the MSA degree program must possess a baccalaureate degree from an accredited college or university. In addition to general university minimum standards of admissions to graduate study, some departments/specializations have additional requirements. International students must take the TOEFL and submit passing scores according to university standards.

The Public Administration, Health Care Administration, and the Human Performance Technology specializations require a letter of intent, three letters of professional reference, and GRE scores no later than the initial semester of enrollment as a degree-seeking student.

The Educational Leadership specialization requires a GRE score prior to admission, a letter of intent, and three letters of professional references.

The Criminal Justice Administration specialization requires an undergraduate degree from an accredited institution in a related field, submission of scores on the GRE prior to admission, a letter of intent and three letters of reference including one from an employer and one from a former college professor.

CORE REQUIREMENTS (12 hours of business related courses)

EME 6xx1	Evaluation for MSA Professionals	1.5
GEB 5870	MBA Foundations: E-Business Systems	1.5
GEB 5871	MBA Foundations: Managerial Economics	1.5
GEB 5872	MBA Foundations: Financial Management I	1.5
GEB 5875	MBA Foundations: Management Skills and Applications	1.5
GEB 5876	MBA Foundations: Marketing Management	1.5
MAN 6156	Management and Organizational Behavior	3.0

SPECIALIZATIONS – Select One

CRIMINAL JUSTICE ADMINISTRATION (21 hours)

CCJ 5xxx	Criminal Justice Organization Administration	3.0
CCJ 5xx2	Critical Analysis of Justice Administration	3.0
CCJ 6xxx	Seminar: Special Topics in Criminal Justice	3.0
CCJ 6xx1	Criminal Justice Research Methods and Data Analysis	3.0
CCJ 6xx2	Applied Research Project (pre-req: CJ Res Meth & Data Analysis)	3.0
PAD 6417	Human Resource Management	3.0
PAD 6227	Public Budgeting	3.0

HEALTH CARE ADMINISTRATION (21 hours)

HSC 6206	Community Health Delivery System	3.0
HAS 6106	Critical Analysis of Health	3.0
HSC 6667	Social Marketing	3.0
HSC 6666	Interactive Technology	3.0
HSC 5585	Health Promotion and Planning	3.0
PAD 6227	Public Budgeting	3.0
PAD 6417	Human Resource Management	3.0

PUBLIC ADMINISTRATION (21 hours)

PAD 5107	Modern Organization Theory	3.0
PAD 6053	Public Administrations Professional	3.0
PAD 6227	Public Budgeting	3.0
PAD 6275	Political Economy of Public Administration	3.0
PAD 6706	Research Methods in Public Administration	3.0
PAD 6701	Quantitative Applications in Public Administration	3.0
PAD 6417	Human Resources Management	3.0

EDUCATIONAL LEADERSHIP (21 hours)

EDA 5xx1	Community Partnerships	1.0
EDA 6222	Administration of School Personnel	2.0
EDA 6232	Law and Education	3.0
EDA 6240	Introduction to School Finance	3.0
EDA 6105	The Principalship	3.0
EDG 5250	Principles of Curriculum Development	3.0
EDG 6344C	Instructional Management and Technology	3.0
EDG 6xx9	Data Driven Decisions in an Educational Setting	1.5
EME 6xx2	Tools for HPT Evaluation	1.5

HUMAN PERFORMANCE TECHNOLOGY (21 hours)

HPT Certificate (12 sh)

EME 6429	Human Performance Improvement	3.0
EME 6426	HPT Interventions	3.0
EME 6428	Evaluating HPT Interventions	3.0
EME 6427	Implementing HPT Interventions	3.0

HPT Specialization (9 sh)

EME 5xxx	Instructional Design for HPT	1.5
EME 6xx2	Tools for HPT Evaluation	1.5
EME 6xx3	Performance Analysis for HPT Environments	1.5
EME 6xx4	Seminar in HPT Issues: Human-Computer Interaction	1.5
Choose 3 sh from the following:		
EDF 5404	Educational Statistics	3.0
EDF 6481	Educational Research	3.0
EME 6408	Integrated Technology Learning Environments	3.0
EME 6414C	Web-Based Instruction	3.0
EME 6628	Managing Large Scale Systems	3.0
EME 6xx5	Field Experience in HPT	3.0 – 6.0
EME 7425	Electronic Performance Support System (EPSS)	3.0

Total semester hours required for degree: 33

Learning Outcomes:

General Program Outcomes

1. Students will provide leadership in mid-level programs in public, non-profit, and private agencies in their selected fields.
2. Students will provide budgeting planning and analysis in their selected fields.
3. Students will provide efficient administration of human resources in their selected fields.
4. Students will provide leadership in marketing of their programs and products.
5. Students will apply modern technology to business applications in their agency.
6. Students will evaluate their organization and apply appropriate intervention strategies.

Criminal Justice Administration

Students will:

1. Have basic knowledge of the relationship between criminal justice agencies and legal, political, and social environments.
2. Understand how to use budgeting tools to better manage their organizations and more effectively modify, formulate, and implement public policy.
3. Understand the fundamentals of human resource management, particularly as they apply to criminal justice settings.
4. Learn the basics of research design and data collection and analysis, and understand how to apply them to analyze organizational or policy related problems.
5. Students will increase their knowledge of cutting edge policies and paradigms in criminal justice.

Health Care Administration

Students will:

1. Demonstrate knowledge of basic institutional processes relevant to economic factors and the decision making process in health care agencies, public and private.
2. Demonstrate skills in budgeting and resource administration in health care agencies, public and private.
3. Make business applications of modern technology in the health agencies, public and private.
4. Demonstrate knowledge of issues and problems in the health care industry, public and private.
5. Recognize health and disease issues in the modern works and how different societies and cultures are affected.
6. Understand models of intervention in the health care field through social marketing strategies.

Public Administration

1. Students will demonstrate knowledge of the basic institutional processes, relevant economic factors, and general rationale of organizational decision-making.
2. Students will develop or further refine the ability to integrate and synthesis public administrative knowledge and skills.
3. Students will demonstrate the ability to understand the relationships among the respective contents of the seven specialization courses.
4. Students will demonstrate an appreciation of workplace diversity.
5. Students will demonstrate the knowledge and skills to manage in a diverse workforce.
6. Students will demonstrate the ability to search the employment market and find employment in their chosen fields (pre-service students); or, students will demonstrate to current supervisors the ability to assume the challenges and responsibilities of career advancement (in-service students).

Educational Leadership:

Students will:

1. Develop well-reasoned educational beliefs based upon an accepted theories and best practices of teaching and learning.
2. Develop skills necessary for the planning and implementation of change to enhance effective student learning.
3. Develop a personal code of ethics embracing diversity, integrity, and the dignity of all people.
4. Demonstrate and develop critical thinking, problem analysis, and decision-making skills.
5. Develop and demonstrate skill in data collection and data analysis to be used in program evaluation to provide an environment conducive to the highest student achievement.
6. Manage and interact effectively with diverse individuals and groups.
7. Develop and articulate a vision, mission, and goals essential for communicating the role of a school, the teachers, the students and the community in the learning of all students.

8. Demonstrate skills necessary to assess the curriculum needs in a particular setting; develop curriculum aligned to state and national standards based upon the vision, mission, and goals of the organization.
9. Interpret and apply requirements of legal agreements, local, state, and federal policies and laws in the efficient and effective administration of an organization.
10. Demonstrate knowledge of the concept of life long learning and model that through a dynamic professional development program.

Human Performance Technology

Students will be able to:

1. Identify issues and problems in the work place of various organizations and agencies.
2. Analyze performance problems and issues in the workplace.
3. Apply principles of instructional design and product development to the workplace.
4. Integrate technology in workplace environments.
5. Use new technology products.
6. Evaluate human performance technology interventions.
7. Apply intervention strategies in work environments.

B. Provide a one or two sentence description of each required or elective course.

CORE REQUIREMENTS

EME 6xx1	Evaluation for MSA Professionals Develop skills in selecting appropriate models for conducting an evaluation in an administrative environment. A series of models will be evaluated for applicability and use in administrative environments.	1.5
GEB 5870	MBA Foundations: E-Business Systems A course in the Accelerated MBA Foundations Series in which students will gain an understanding of the principles of E-Business systems planning, development, and implementation. The overall objective is to provide a common foundation composed of the fundamental concepts required for the use and application of systems and technologies found in the E-Business environment.	1.5
GEB 5871	MBA Foundations: Managerial Economics A course in the Accelerated MBA Foundations Series in which students will gain an understanding of basic economics. Special emphasis will be placed on the determinants of supply and demand and the desirable properties of a competitive equilibrium; followed by the undesirable properties of markets with a monopoly and with externalities.	1.5
GEB 5872	MBA Foundations: Financial Management I A course in the Accelerated MBA Foundations Series in which students are introduced to the accounting process of analyzing, measuring, and reporting business activity. Explores the precise language, assumptions, concepts, principles, and logic patterns inherent in the analysis and measurement of business activity.	1.5
GEB 5875	MBA Foundations: Management Skills & Applications	1.5

Covers the historical evolution of management, organizational design, motivation, team building, leadership, change management, culture, strategic planning, and critical implementation/control elements critical to successful management and strategy. Social responsibility, ethics, globalization, and futures are also stressed.

GEB 5876 MBA Foundations: Marketing Management 1.5

A course in the Accelerated MBA Foundations Series in which students are introduced to foundational concepts of marketing management processes. Provides students with intensive exposure to the basic philosophy, concepts, and knowledge common to effective marketing management.

MAN 6156 Management and Organizational Behavior 3.0

Appreciation and understanding of the field of organizational behavior and its application in managing human and other resources. Emphasizes understanding individual behavior (motivation, self-awareness, leadership, etc.) and group dynamics (decision-making, group development and work) plus conflict, climate, learning styles, power, stress, process/content, human rights and quality.

SPECIALIZATIONS

Criminal Justice Administration

CCJ 5xxx Criminal Justice Organization and Management 3.0

Focuses on the principles of organization, administration, and function of criminal justice agencies. These agencies include law enforcement, the courts, and corrections. Includes an examination of management approaches and problems in criminal justice, including the planning and evaluation techniques and the use of information systems.

CCJ 5xx2 Critical Analysis of Justice Administration 3.0

A detailed survey of the government agencies involved in the administration of the American criminal justice system. An overview of the processes of the justice system from entry to exit of criminal defendants. Evaluation of organizational performance in justice agencies and the critical analysis of the public policies they promulgate.

CCJ 6xxx Seminars: Special Topics in Criminal Justice 3.0

Designed to provide students with specialized knowledge in a particular field of criminal justice such as juvenile justice/corrections or on a cutting edge topic of relevance to criminal justice practitioners such as restorative justice or homeland security.

CCJ 6xx1 Criminal Justice Research Methods & Data Analysis 3.0

Covers issues related to research methods and data analysis as they are applied in the field of criminal justice and criminology. Lectures and discussions will be used to help students understand what constitutes scientifically acceptable inquiry and how to conduct empirical research. Also examines statistical concepts as they are used for criminal justice and other social science research. (Prerequisite: Introduction to Statistics.)

CCJ 6xx2 Applied Research Project (pre-req: CCJ 6xx1) 3.0

The applied research project is a capstone course that gives students the opportunity to integrate and apply the knowledge and skills they have learned in the MSA curriculum to an organizational or policy related problem. Students are expected to produce a paper showing evidence that they have mastered the learning outcomes. Before enrolling, the student should have completed at least 27-30 hours of MSA coursework including CCJ 6XX1 (CJ Research Methods and Data Analysis). Permission is required.

Health Care Administration

HSA 6106	Critical Analysis of Health	3.0
	Analysis of research being conducted on causes of illness and death in United States and other countries.	
HSC 5585	Health Promotion and Planning	3.0
	A comprehensive overview and analysis of theory, principles, and practices of health education planning and implementation processes.	
HSC 6206	Community Health Delivery System	3.0
	Stimulating and uniting community efforts to facilitate communication and services between health agencies, health specialists and consumers.	
HSC 6666	Health Education and Interactive Technology	3.0
	The purpose is to offer various perspectives relating to the development, effectiveness, and implementation of interactive computing technology for use in health education programs and in health care administration, which are aimed at improving various health-related outcomes such as involvement in care, quality of life, adherence, disease management, and healthy lifestyle.	
HSC 6667	Social Marketing	3.0
	Social Marketing is designed to analyze the components and applications of social marketing for community health education and health care administration.	
PAD 6227	Public Budgeting	3.0
	Detailed study of various budgeting systems and the political processes and environment that impact upon them. Extensive practical work in budget preparation.	
PAD 6417	Human Resources Management for Public Organizations	3.0
	An examination of the theories, practices and issues central to contemporary human resource management in public and not for profit organizations.	

Public Administration

PAD 5107	Modern Organization Theory	3.0
	Analysis of contemporary theories of organizations applicable to individual, group and system levels. Organizations treated generically with examples and applications drawn from both public and private sectors.	
PAD 6053	Public Administrations Professional	3.0
	Scope and nature of field of public administration; development of public administration; politics of bureaucracy; dynamics of policy making and implementation	
PAD 6227	Public Budgeting	3.0
	Detailed study of various budgeting systems and the political processes and environment that impact upon them. Extensive practical work in budget preparation.	
PAD 6275	Political Economy of Public Administration	3.0
	Consideration of the American political economy including: markets, politics and democracy; market failure and bureaucratic failure; relationships between government and business; public choice theory; privatization and contracting out.	
PAD 6417	Human Resources Management	3.0
	An examination of the theories, practices and issues central to contemporary human resource management in public and not for profit organizations.	
PAD 6701	Quantitative Applications in Public Administration	3.0
	Review of the quantitative techniques employed in the field of public administration. The techniques involve: data analysis, techniques, decision-making routines, and projection methods necessary for rational decision-making in the public sector.	

PAD 6706 Research Methods in Public Administration 3.0
Basic ideas of scientific research and how it is used in public administration.
Prepares the student as both a consumer and a potential producer of research.

Educational Leadership

EDA 5xx1 Community Partnerships 1.0
Community and Stakeholder Partnerships is a standard that identifies the skills and knowledge base needed by high performing leaders in the area of community relations. Participants will identify major opinion leaders in the community and their relationships to school goals and programs. Models of shared decision making will be reviewed and applied to foster sensitivity to allowing shared decision making with appropriate stakeholders. Participants will realize the methods and the need for shared responsibility for student and school success.

EDA 6105 The Principalship 3.0
Focus is on problems, practices, and theories pertinent to the administration of building level programs in elementary, middle, and secondary schools. Includes planning, staffing, implementing, and evaluation techniques needed to administer a school program.

EDA 6222 Administration of School Personnel 2.0
Focus is on the improvement of educational programs through the proper management of human resources. Emphasis is upon recruitment, selection placement, and evaluation of school personnel.

EDA 6232 Law and Education 3.0
Examines law and its relationship to education. Students study constitutional law, legislative enactments, school policies, and the relationships among these aspects of school law as they pertain to administration. Tort liability, due process for students, corporal punishment, teacher contracts, and other law relating to authority and responsibility of teachers and administrators are included.

EDA 6240 Introduction to School Finance 3.0
Focus is on principles, trends, and practices in financing public education, including federal, state, and local financial support programs. School finance as related to taxation and other areas of school finance is included. Fiscal policies, planning, and management as related to the total education program are central themes.

EDG 6xx9 Data Driven Decisions in an Educational Setting 1.5
Learning, Accountability, and Assessment is one of the new standards in Educational Leadership in Florida and it speaks specifically to the use of data in creating a school environment and curriculum that will enhance student learning. High Performing Leaders must monitor the success of all students in the learning environment, align the curriculum, instruction, and assessment processes to promote effective student performance, and use a variety of benchmarks, learning expectations, and feedback measures to ensure accountability for all participants engaged in the educational process. Using data to drive decisions is a critical component of the accountability system currently in place in Florida. Participants will develop skills in determining data needed to make certain decisions; in analyzing data; in communicating information about the decision making process to stakeholders. Specifically for administrators in the K12 educational setting.

EDG 5250 Principles of Curriculum Development 3.0
Emphasis on school curricula, underlying theories, and strategies for improvement make up the foundation for curricular reform. Students intending to meet SDOE certification requirements should select specialization areas. The specialization areas are (a) early childhood/primary education, (b) middle school education, (c) secondary school education, and (d) exceptional student education.

EDG 6344C Instructional Management and Technology 3.0

Explores the basic terminology, historical perspectives, theoretical basis, research, and practical application of instructional technology. In addition, students will build knowledge and skill bases to use and apply instructional technology to educational management and instruction.

EME 6xx2 Tools for HPT Evaluation 1.5
 Develop skills in developing and using tools for evaluation, focused on administrative and education and training settings. Students will follow a process and integrate tools for evaluation into this project-based course.

Human Performance Technology

HPT Certificate

EME 6426 HPT Interventions 3.0
 Human Performance Technologists, education and training leaders in organizations, identify gaps between desired and actual employee performance levels. Once the gaps have been identified, the HPT practitioner determines interventions or combinations of interventions that are needed to close those gaps.

EME 6427 Implementing HPT Interventions 3.0
 Once performance gaps have been identified, Human Performance Technologists determine interventions or combinations of interventions that are required to close those performance gaps. The implementation of instructional and non-instructional interventions follows a process model that meets education and training needs of the organization.

EME 6428 Evaluating HPT Interventions 3.0
 Human Performance Technologists, education and training leaders in organizations, evaluate the success of HPT interventions, both instructional and non-instructional. The impact of these interventions must be quantified and solutions modified as needed based on evaluation data.

EME 6429 Human Performance Improvement 3.0
 Models of human performance technology, associated processes, and procedures for completing the tasks ascribed to the various stages within the models/processes are explored.

Human Performance Technology Specialization

EME 5xxx Instructional Design for HPT **1.5**
 Instructional Systems Design is the basis of creating training interventions. HPT professionals must be able to articulate systematic ways of integrating instructional interventions into the workplace from a pedagogical and practical viewpoint. Emphasized will be theories and models that support the design of instruction. Focus areas will include instructional strategies, and media selection techniques.

EME 6xx2 Tools for HPT Evaluation 1.5
 Develop skills in developing and using tools for evaluation, focused on administrative and education and training settings. Students will follow a process and integrate tools for evaluation into this project-based course.

EME 6xx3 Performance Analysis for HPT Environments 1.5
 Application of knowledge, skills, and abilities in performance consulting activities associated with analysis of organizational systems.

EME 6xx4 Seminar in HPT Issues: Human-Computer Interaction 1.5
 HPT Professionals face a range of performance issues resulting from the incorporation of technology and technological-processes into organizations. Merging concepts of human factors, ergonomics, usability, and way finding into performance

considerations provides the HPT Professional with an opportunity to analyze performance from a variety of perspectives.

Choose 3 sh from the following

- EDF 5404 Educational Statistics 3.0
Enables graduate students to apply basic descriptive and inferential statistical techniques to solve educational research problems. The concepts introduced and the software employed are designed to be useful for solving school site based educational problems.
- EDF 6481 Educational Research 3.0
Develops skills for evaluating and for conducting applied research studies in an appropriate area of emphasis. Includes strategies of research appropriate for particular area of emphasis and methods appropriate for those strategies.
- EME 6408 Integrated Technology Learning Environments 3.0
Students evaluate how technology is impacting education and training from an instructional systems perspective, students will review what educational and training leaders are promoting for the future, what new approaches exist, and how to integrate this into a technology-rich learning environment.
- EME 6414C Web-Based Instruction 3.0
Students will develop the skills necessary to design web-based instructional programs. In addition, students will develop the knowledge, skill, and abilities needed to provide leadership in the area of web-based design, development, and delivery of instruction.
- EME 6628 Managing Large Scale Systems 3.0
Will incorporate selected concepts from the trends and issues in instructional technology, current large scale technological initiatives, project planning and contract administration for large scale instructional technology systems. Students will learn to search from a variety of funding sources in instructional technology funding, write proposals and grants, gather data from large databases and manage/administer contracts from a project management perspective.
- EME 6xx5 Field Experience in HPT 3.0 – 6.0
Observation and participation in HPT organizational settings. Students participate in field-based experiences related to their course of study and future goals.
- EME 7425 Electronic Performance Support System (EPSS) 3.0
Students will be engaged in active research and rapid prototype design of Electronic Performance Support System (EPSS). Students will explore components of EPSS technology; make comparisons of various examples of EPSS available; and design a rapid prototype of a model EPSS through emerging instructional systems models including prototyping; iterative design; and concurrent evaluation.

VI. UWF CAPABILITY

A. How does the proposed program specifically relate to existing UWF strengths such as programs of distinction, other academic programs, and/or institutes and centers?

The proposed MSA specifically relates to several existing UWF strengths.

College of Professional Studies Technology Resources

The University of West Florida is well equipped to deliver the Master of Science in Administration as one of its primary online programs. The College of Professional Studies and the College of Business are primarily developing the proposed interdisciplinary degree. The College of Professional Studies has been a leader in technology-based curricula in the University and offers strong support for the delivery of the MSA. Recently, the University created the Academic Technology Center that will offer training and support for on line programs. Where feasible, some courses may continue to be offered in a traditional classroom setting and other specializations may be added by any of the three colleges that could have traditional delivery coupled with the on line offering of the core courses. The options would be at the discretion of the department offering the specialization.

National Council on Accreditation of Teacher Education (NCATE) and the Florida Department of Education (DOE)

The University's teacher education programs have enjoyed a history of accreditation by NCATE and approval by DOE. Much has changed in the education field during the last several years and alternate methods of delivery of programs related to teacher education have been created. The Educational Leadership specialization is a program that has been developed to meet needs in the public and private schools and has been recently approved by both NCATE and DOE. The teacher education programs at UWF has a history of a strong relationship and support from both agencies and is a recognized force in the field of teacher education, especially in the university's service area and beyond.

Center on Aging

The College of Professional Studies has a Center on Aging that is housed in the Division of Health, Leisure, and Exercise Science. The Center on Aging is interdisciplinary in nature with faculty from the sciences, education, and business. Its mission is to provide educational opportunities for students, research on aging issues, and provide outreach activities to address the needs of the growing aging population. The center will be a resource for students in the public administration and health care administration specializations within the MSA.

Academic Technology Center

The university has recently created a the Academic Technology Center That will develop a model for creating online courses and it has identified three programs as its first priority. Included is the graduate business core in the College of Business and the Human Performance Technology graduate program. Both of these programs are part of the proposed MSA degree. The ATC will also assist with the development of the other specializations within the MSA as the need for faculty training arises. The center will play a vital role in the development and delivery of university programs that will become part of the university's "electronic campus."

Existing HPT program

This program capitalizes on our strength in faculty, our relationships with business and industry and the military, and our ability to address trends in the field of HPT. Our faculty is well grounded in the field and represents many years of practical experience meeting human performance needs. Dr. Nancy Maloy, our newest faculty member, joined UWF after serving as Competency Manager for the Human Performance Center under the Naval Education and Training Command (NETC). Dr. Chuck Lombardo joined UWF in 2001 to coordinate the development of an HPT program. He was previously employed in a several organizations holding positions of VP of Consulting and Educational Services and Director of Human Performance Technology. Drs. Pam Northrup and Karen Rasmussen are supporting faculty. They both have many years of teaching experience as well as practical experience in the area of human performance

improvement. They have worked as faculty in the development and delivery of distance learning programs for several years.

If there have been program reviews, accreditation visits, or internal reviews in the discipline pertinent to the proposed program, or related disciplines, provide all the recommendations and summarize progress toward implementing the recommendations.

Program Review in Criminal Justice

The most recent program review of the Criminal Justice and Legal Studies program was the April 2003 five-year review of the undergraduate degree program. The undergraduate program in Criminal Justice was judged to be a very strong program with a highly qualified faculty that works hard to ensure that the program is well grounded and comprehensive. A quality education for their students is the utmost objective of the dedicated faculty. It will be this same faculty that will develop the Criminal Justice specialization within the proposed MSA.

The most significant recommendation from the program review of the Bachelors program in Criminal Justice and Legal Studies that relates to the proposed MSA recommends the phase-in of a master's degree. The proposed MSA that includes the specialization in Criminal Justice brings this recommendation to fruition and will meet the current needs for the advanced degree within the field.

The Division of Criminal Justice has offered its program at the Chipola University campus in Marianna, Florida during the last several years and the program review recommended that this program should be phased out and to concentrate more in the Ft. Walton Beach area. The offering of the MSA via online delivery method will now allow the Division of Criminal Justice to offer an advanced degree to all of those regions without the continued strain upon resources.

Program Review of the Division of Health, Leisure, and Exercise Science

A BOT review of the Division of Health, Leisure and Exercise Science programs in Health and Physical Education was conducted in May 2003. The review substantiated the need for the undergraduate Health Education/Community Health degree program that is a foundation for students who desire to pursue a graduate program in the same field. Some of the undergraduate students are interested in finding professional employment in their field and are attracted to the online proposed MSA degree specialization in Health Care Administration. The program review cites concerns of insufficient offering of graduate courses. This concern has been mostly rectified with the development of several additional online courses in the health curriculum that will also become part of the proposed MSA specialization in Health Care Administration.

Program Review of Public Administration

The most recent program review of the Public Administration master's program reaffirmed accreditation by the National Association of Schools of Public Affairs and Administration. The next review is due two years from now and the decision has been made not to pursue re-accreditation of the MPA program because of the strain of additional required resources for the low enrollment program. The Public Administration specialization will migrate into the proposed MSA program with the objective of reducing cost while maintaining an advanced degree offering in the field.

Program Review of Educational Leadership

The Educational Leadership program has been one of the traditional programs that has met Department of Education (DOE) and the National Council on Accreditation of Teacher Education (NCATE) standards for training and certifying personnel to become school principals. The program has served the school systems well for many years but no longer is needed in its original form. The program continues to be the DOE and

NCATE approved program (November 2003) that will serve to qualify school principals but it will also provide advanced study for people in other leadership roles in society.

Program Review of Human Performance Technology

The program is Human Performance Technology is a new program and has had no formal external reviews at this time. One of the factors that prompted the initial development of an HPT program at UWF was a request from NTPDC, a unit within the US Navy charged with creating professional development opportunities for navy personnel. Since the Navy was undergoing a transition to a human performance focus, there was a recognized need to provide education and training in HPT. Faculty worked closely with Navy personnel to align learning outcomes with the skills required of Human Performance Consultants and to compliment the development of the 5 Vector Model for the affected job ratings. This group reviewed our program throughout the development process. An HPT Advisory Board did a second review. This group is made up of leaders in the field of human performance improvement and includes representatives of business and industry and the military. They reviewed the core competencies we proposed to develop within the program. As a result of these reviews, the program has undergone revision and has been strengthened. Discussions with ASTD and ISPI pertaining to future accreditation possibilities of the HPT program appear promising.

- C. Describe briefly the anticipated delivery system for the proposed program as it may relate to resources e.g., traditional delivery on main campus; traditional delivery at branches or centers; or nontraditional instruction such as instructional technology (distance learning), self-paced instruction, and external degrees. Include an analysis of the feasibility of providing all or a portion of the proposed program through distance learning technologies. Include an assessment of the UWF's technological capabilities as well as the potential for delivery of the proposed program through collaboration with other universities or community colleges. Cite specific queries made of other institutions with respect to the feasibility of utilizing distance learning technologies for this degree program.**

The anticipated delivery system is primarily via online delivery. Equipment necessary for the online delivery are desktop computers that are normally found in each professors office. While many faculty members already offer online courses, the new Academic Technology Center will be available to train faculty and offer support for the program.

The online delivery method affords the opportunity for the university to reach a broader population of students who otherwise might not be able to pursue an advance degree. For example, UWF has offered Public Administration at distance locations by sending faculty members to meet face to face with students. Enrollments at these distant locations in classrooms have not been significant enough to warrant sending faculty members to those locations on a continual basis.

The program offerings at the Ft. Walton Beach area and the Chipola University area will be enhanced by the increased opportunities provided for students who live remote to the main campus.

The University of West Florida has a local campus population and the off campus centers have another distinct population of students. The MSA program will enhance the growth of the "electronic" campus offerings and will assist the university and the colleges in the delivery of online programs.

Where feasible, there will most likely continue to be traditional face-to-face classroom instruction provided. In the future, some new specializations could be added to the MSA and will not be held to the electronic delivery method as the only option. The specific departments will make the decisions as they create specializations within the MSA.

- D. Assessment of Current and Anticipated Faculty**

1. **Use UWF Table Two to provide information about each existing faculty member who is expected to participate in the proposed program by the fifth year. If the proposal is for a graduate degree, append to the table the number of master's theses directed, number of doctoral dissertations directed, and the number and type of professional publications for each faculty member.**

The following Table Two provides a summary of faculty participation in the proposed program for the fifth year. Appendix A provides specific information about each specialization within the proposed degree program.

See Appendix A

See Appendix B for abbreviated resumes of participating faculty. These resumes provide data pertaining to master's theses directed, doctoral dissertations directed, and committee memberships. Also, samples of professional publications are provided.

See Appendix B

SUMMARY TABLE TWO

FACULTY PARTICIPATION IN PROPOSED DEGREE PROGRAM BY FIFTH YEAR

Faculty CODE (see below)	Faculty Name or "New Hire"	Academic Discipline / Specialty	Rank	(For Existing Faculty Only)		Initial Date for Participation in Proposed Program	5th Year Workload in Proposed Program (portion of Person-year)
				Contract Status (tenure?)	Highest Degree Granted		
			See individual program sheets.				

Faculty CODE	Corresponding Faculty Position Category in TABLE 3 for the Fifth Year	Proposed Source of Funding for Faculty	TOTAL 5th Year Workload by Budget Classification
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A	Current General Revenue	Existing Faculty -- Regular Line	9.55
B	Current General Revenue	New Faculty -- To Be Hired on Existing Vacant Line	2.25

C	New General Revenue	New Faculty -- To Be Hired on a New Line	1.60
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D	Continuing Education	Existing Faculty -- Funded on Continuing Ed.	.24
E	Continuing Education	New Faculty -- To Be Hired on Continuing Ed.	.25

Overall Total for 5th Year- Summary			13.89
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2. Also, use UWF Table Two to indicate whether additional faculty will be needed to initiate the program, their faculty code (i.e., one of five unofficial budget classifications as explained on the table), their areas of specialization, their proposed ranks, and when they would be hired. Provide in narrative the rationale for this plan; if there is no need for additional faculty, explain.

The proposed program projects a total of 13.89 faculty lines involved in the delivery of the proposed program by the fifth year. Of these lines only 1.6 will be new hires.

The required business core courses will be offered on a paid overload basis to qualified business faculty who chose to participate in the program. If necessary, qualified adjunct instructors will be hired to deliver the core courses. Based on the projected enrollment by the fifth year, a .6 portion of a new line will be necessary to sustain the program.

The Criminal Justice Administration specialization will be a new graduate program and is predicted to experience significant enrollment and growth. The addition of a .6 portion of a line will be necessary for allocation to the graduate program. Criminal Justice projects two new hires in 2005 and 2006 respectively with .3 portion of each line supporting the proposed program.

The Health Care Administration specialization projects an additional .40 portion of a faculty line will be necessary to sustain the proposed program. Current plans are to add qualified adjunct instructors at a .2 line each during the years 2005 and 2006.

There is no need for additional faculty in the public administration, educational leadership, and human performance technology specializations.

In summary, of the 13.89 projected lines to support the proposed program, only 1.6 new lines are necessary and will be added during 2005 and 2006 pending growth as predicted. The bulk of faculty lines necessary to support the program will be the lines in the existing programs that will be transitioned into the proposed MSA.

See Appendix A for specific specialization Information

3. **Use UWF Table Two to estimate each existing and additional faculty member's workload (in percent person-years) that would be devoted to the proposed program by the 5th year of implementation, assuming that the program is approved. (Note: this total will carry over to UWF Table Three's fifth year summary of faculty positions.)**

See Appendix A for specific specialization Information

Assessment of Current and Anticipated Resources

1. **In narrative form, assess current facilities and resources available for the proposed program in the following categories:**
 - a. **Library volumes (Provide the total number of volumes available in this discipline and related fields.)**

The following information was prepared by Helen Wigersma and Dan North of the Pace Library:

It is important to point out that several of the disciplines represented in the Master of Science in Administration (MSA) program were recipients of special Collection Development Project funds in recent years. Collection Development Project funding is one-time funding which allows a discipline to significantly enhance its library collection and purchase book and media materials which support current and planned programs. As a result, the book collections in the following disciplines are especially current and capable of supporting the MSA. The name of the discipline is followed by the year in which it received special funding.

- Criminal Justice (FY99)
- Public Administration (FY99)

- Psychology (FY01) – related to Human Performance Technology Program
- Health, Leisure, Exercise Studies (FY02) – related to Health Care Administration
- Nursing (FY02) – related to Health Care Administration
- Social Work (FY03) – related to Health Care Administration

Books Chart 1

Pace Library holdings in LC class areas related to proposed
MSA in CRIMINAL JUSTICE ADMIN program

DN 12/11/2003

Call number area	Subject area	# Physical titles owned (1995-date) (All dates)		#Electronic titles (netLibrary)	TOTAL COUNT
Required common core					
HA29 - HA34	Social science research and statistics	66	367	7	374
HB	Economic theory	347	3,584	106	3,690
HD30 - HD58	Business mgmt; organizational behavior	763	3,813	268	4,081
HD2321 - HD4730.9	Economics of business	217	1,695	87	1,782
HF5548 - HF5548.5	Automation in business; e- business	128	811	25	836
HF5548.6 - HF5548.9	Industrial & organizational psychology	40	246	6	252
HF5549 - HF5549.5	Personnel management	235	1,689	116	1,805
HG4001 - HG4280.7	Financial management	88	638	23	661
HM141	Leadership	9	119	0	119
QA276 - QA280	Mathematical statistics	144	784	23	807
SUBTOTAL		2,037	13,746	661	14,407
Specialization areas					
HJ	Public finance, public budgeting	117	1,228	37	1,265
HV	Social pathology, soc & pub welfare, addictions, criminology	1,749	7,837	318	8,155
<i>HV4961 - HV5840</i>	<i>Addictions, substance abuse (included in HV)</i>	154	647	43	690
K	Law (general)	135	953	124	1,077
KF	Law, US and states	1,005	5,432	173	5,605
<i>KFF</i>	<i>Law, Florida (included in KF)</i>	7	47	1	48
SUBTOTAL		3,006	15,450	652	16,102
TOTAL		5,043	29,196	1,313	30,509

Books Chart 2

Pace Library holdings in LC class areas related to proposed
MSA in HEALTH CARE ADMIN program

DN 12/11/2003

Call number area	Subject area	# Physical titles owned (1995-date)	(All dates)	#Electronic titles (netLibrary)	TOTAL COUNT
Required common core					
HA29 - HA34	Social science research and statistics	66	367	7	374
HB	Economic theory	347	3,584	106	3,690
HD30 - HD58	Business mgmt; organizational behavior	763	3,813	268	4,081
HD2321 - HD4730.9	Economics of business	217	1,695	87	1,782
HF5548 - HF5548.5	Automation in business; e-business	128	811	25	836
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HV	Social pathology, soc & pub welfare, addictions, criminology	1,749	7,837	318	8,155
K	Law (general)	135	953	124	1,077
KF	Law, US and states	1,005	5,432	173	5,605
<i>KFF</i>	<i>Law, Florida (included in KF)</i>	<i>7</i>	<i>47</i>	<i>1</i>	<i>48</i>
R	Medicine (gen'l), history of med, med education, med technology	298	1,129	103	1,232
RA	Public aspects of medicine, care, epidemiology, health care industry, marketing, etc.	521	2,485	282	2,767
RC	Practice and branches of medicine	987	6,283	284	6,567
RT	Nursing	190	1,941	25	1,966
SUBTOTAL		5,002	27,288	1,346	28,634
TOTAL		7,039	41,034	2,007	43,041

Books Chart 3

Pace Library holdings in LC class areas related to proposed MSA in Criminal Justice ADMIN program.
12/11/2003

DN

Call number area	Subject area	# Physical titles owned (1995-date) (All dates)		#Electronic titles (netLibrary)	TOTAL COUNT
Required common core					
HA29 - HA34	Social science research and statistics	66	367	7	374
HB	Economic theory	347	3,584	106	3,690
HD30 - HD58	Business mgmt; organizational behavior	763	3,813	268	4,081
HD2321 - HD4730.9	Economics of business	217	1,695	87	1,782
HF5548 - HF5548.5	Automation in business; e-business	128	811	25	836
HF5548.6 - HF5548.9	Industrial & organizational psychology	40	246	6	252
HF5549 - HF5549.5	Personnel management	235	1,689	116	1,805
HG4001 - HG4280.7	Financial management	88	638	23	661
HM141	Leadership	9	119	0	119
QA276 - QA280	Mathematical statistics	144	784	23	807
SUBTOTAL		2,037	13,746	661	14,407
Specialization areas					
HJ	Public finance, public budgeting	117	1,228	37	1,265
HM786 - HM806	Organization theory	6	6	0	6
JF	Government and administration	127	911	28	939
JK	US and state government	485	3,190	76	3,266
JS	Local and municipal government	46	666	13	679
K	Law (general)	135	953	124	1,077
KF	Law, US and states	1,005	5,432	173	5,605
<i>KFF</i>	<i>Law, Florida (included in KF)</i>	<i>7</i>	<i>47</i>	<i>1</i>	<i>48</i>
SUBTOTAL		1,921	12,386	451	12,837
TOTAL		3,958	26,132	1,112	27,244

Books Chart 4

Pace Library holdings in LC class areas related to proposed MSA in EDUCATION LEADERSHIP program

12/11/200

DN 3

Call number area	Subject area	# Physical titles owned (1995-date) (All dates)		# Electronic titles (netLibrary)	TOTAL COUNT
Required common core					
HA29 - HA34	Social science research and statistics	66	367	7	374
HB	Economic theory	347	3,584	106	3,690
HD30 - HD58	Business mgmt; organizational behavior	763	3,813	268	4,081
HD2321 - HD4730.9	Economics of business	217	1,695	87	1,782
HF5548 - HF5548.5	Automation in business; e-business	128	811	25	836
HF5548.6 - HF5548.9	Industrial & organizational psychology	40	246	6	252
HF5549 - HF5549.5	Personnel management	235	1,689	116	1,805
HG4001 - HG4280.7	Financial management	88	638	23	661
HM141	Leadership	9	119	0	119
QA276 - QA280	Mathematical statistics	144	784	23	807
SUBTOTAL		2,037	13,746	661	14,407
Specialization areas					
K	Law (general)	135	953	124	1,077
KF	Law, US and states	1,005	5,432	173	5,605
<i>KFF</i>	<i>Law, Florida (included in KF)</i>	7	47	1	48
L	Education (general)	2	124	0	124
LB	Theory and practice of education	2,248	12,815	280	13,095
<i>LB1028.35 - LB1029</i>	<i>Educational research, instructional technology (incl. in LB)</i>	107	527	2	529
<i>LB2800 - LB3047</i>	<i>Educational administration topics (incl. in LB)</i>	517	2,157	49	2,206
LD - LT	Indiv. institutions, student groups, etc.	90	583	17	600
SUBTOTAL		3,487	19,954	595	20,549
TOTAL		5,524	33,700	1,256	34,956

Books Chart 5

Pace Library holdings in LC class areas related to proposed MSA in
HUMAN PERFORMANCE TECHNOLOGY program

DN

Call number area	Subject area	# Physical titles owned (1995-date) (All dates)		# Electronic titles (netLibrary)
Required common core				
HA29 - HA34	Social science research and statistics	66	367	7
HB	Economic theory	347	3,584	106
HD30 - HD58	Business mgmt; organizational behavior	763	3,813	268
HD2321 - HD4730.9	Economics of business	217	1,695	87
HF5548 - HF5548.5	Automation in business; e-business	128	811	25
HF5548.6 - HF5548.9	Industrial & organizational psychology	40	246	6
HF5549 - HF5549.5	Personnel management	235	1,689	116
HG4001 - HG4280.7	Financial management	88	638	23
HM141	Leadership	9	119	0
QA276 - QA280	Mathematical statistics	144	784	23
SUBTOTAL		2,037	13,746	661
Specialization areas				
BF501 - BF635	Human motivation, emotions	146	723	23
HD69	Business consultants; project management	84	558	51
HM786 - HM806	Organization theory	6	6	0
LB1028.35 - LB1029	Educational research; instructional technology	107	527	2
LB2799 - LB2799.3	Educational consulting	0	2	0
QA75 - QA79	Computers, human-computer interaction	876	5,000	219
SUBTOTAL		1,219	6,816	295
TOTAL		3,256	20,562	956

b. Serials (Provide the total number available in this discipline and related fields, and list those major journals which are available at UWF.)

The University of West Florida Libraries subscribes to over 5,000 serials including 2,100 in print format, 1,292 in print format with online access, and 1,735 in electronic format. In addition, the

library has access to many more full-text serials through aggregator indexes provided by companies such as FirstSearch and Gale.

The attached sheets provide serials information related to each of the specialty areas by indicating:

- The total number of journal subscriptions currently received by UWF whether in print or electronic format
- A listing by title of major journals available at UWF
- The primary indexing/abstracting services available and whether they provide full-text journal access
- A sample of titles for which UWF does not have a print or electronic subscription, but for which full-text access is available

Serials Chart 1

Master of Science - Administration Criminal Justice Program Journals December, 2003
--

Number of Serial Subscriptions	
In Criminal Justice	39
In Legal Studies	78
TOTAL	117

Major Titles	Format
American Criminal Law Review	Print/Online
Corrections Today	Print
Crime and Delinquency	Print/Online
Criminal Justice and Behavior	Print/Online
Criminal Justice Review	Print
Criminal Law Bulletin	Print
Federal Probation	Print/Online
Journal of Criminal Justice	Print/Online
Journal of Criminal Law & Criminology	Print
Journal of Quantitative Criminology	Electronic
Journal of Research in Crime and Delinquency	Print/Online
Juvenile Justice Digest	Print/Online
Law and Order	Print/Online
Police Chief	Print
Prison Journal	Print/Online

	Full-Text Articles Available?
Abstracting and Indexing Services	
Criminal Justice Periodical Index	Yes
InfoTrac OneFile	Yes
Lexis/Nexis	Yes
Social Sciences Abstracts	Yes
Sociological Abstracts	Yes
Wilson Select	Yes

Sample Titles for which UWF has Full-Text Journal Access
Crime Control Digest
Criminal Justice Ethics
Criminology
Criminology and Public Policy
Journal of Correctional Education
Journal of Forensic Identification
Justice Quarterly: JQ
Security Management
Women Police

Serials Chart 2

Master of Science - Administration Health Care Administration Program Journals December, 2003
--

Number of Serial Subscriptions	
In Health Care Administration	21
In Health/Leisure & Exercise Science	80
In Management	78
In Nursing	189
TOTAL	368

Major Titles	Format
American Journal of Health Promotion	Print
Health Care Analysis	Electronic
Health Care Financing Review	Print
Health Care Financing Review: Statistical Supplement	Print
Health Policy	Electronic
Health Policy and Planning	Electronic
Health Services & Outcomes Research Methodology	Electronic
International Journal for Quality in Health Care	Electronic
International Journal of Health Care Finance and Economics	Electronic
JONA's Healthcare Law, Ethics and Regulation	Print
Journal for Nurses in Staff Development	Print
Journal of Community Health	Electronic
Journal of Health Politics, Policy and Law	Electronic
Journal of Medical Humanities	Electronic
Journal of Medical Systems	Electronic
Journal of Nursing Administration	Print
Medicine, Health Care, and Philosophy	Electronic
Nursing Administration Quarterly	Print
Nursing Economics	Print
Patient Education and Counseling	Electronic
Theoretical Medicine and Bioethics	Electronic

	Full-Text Articles Available?
Abstracting and Indexing Services	
ABI/INFORM	Yes
CINAHL	Yes
InfoTrac OneFile	Yes
Lexis/Nexis	Yes
MedLine	No
Wilson Select	Yes
Sample Titles for which UWF has Full-Text Journal Access	

DePaul Journal of Health Care Law
Health care management review
The health care manager
Health care strategic management
Hospital access management
Hospital law's Regan report
Hospital material\$ management
Hospital topics
Journal of health care finance
Journal of Medical Ethics
Quality & Safety in Health Care
Quality management in health care

Serials Chart 3

Master of Science - Administration Public Administration Program Journals December, 2003

Number of Serial Subscriptions	
In Administrative Studies (Public Administration)	35
In Economics	111
In Sociology	61
TOTAL	207

Major Titles	Format
Administration & Society	Print
Brookings-Wharton Papers on Urban Affairs	Electronic
Economics of Planning	Print/Online
Employee Assistance Quarterly	Print
Good Society	Electronic
Harvard Journal of Law & Public Policy	Print
Journal of Collective Negotiations in the Public Sector	Electronic
Journal of Government Financial Management	Print
Journal of Housing Economics	Print
Journal of Political Economy	Print
Journal of Public Administration Research and Theory	Electronic
Journal of Public Affairs Education	Print
Journal of Public Service & Outreach (title change)	Print
Journal of Public Economics	Electronic
Journal of Urban Economics	Electronic
Journal of Volunteer Administration	Print
Professional Ethics in VSA	Print
Public Administration Quarterly	Print
Public Administration Review	Print/Online

Public Finance	Print
Public Organization Review	Electronic
Public Performance & Management Review	Print
Public Personnel Management	Print
Review of Public Personnel Administration	Print
Social Problems	Print
State & Local Government Review	Print
Urban Affairs Review	Print/Online

Abstracting and Indexing Services	Full-Text Articles Available?
Index to Legal Periodicals	Yes
Lexis/Nexis	Yes
PAIS International	Yes
Sage Public Administration Abstracts	No
Social Sciences Abstracts	Yes
Social Services Abstracts	No
Social Work Abstracts	No
Sociological Abstracts	No
Wilson Select	Yes

Sample Titles for which UWF has Full-Text Journal Access	
American review of public administration	
CPA governmental & nonprofit report	
International journal of public administration	
The NonProfit times	
Public management	

Serials Chart 4

Master of Science - Administration Educational Leadership Program Journals December, 2003
--

Number of Serial Subscriptions	
In Educational Leadership	50
In Management	78
In Education	285
TOTAL	413
Major Titles	Format
Administrative Information Report	Print
American School Board Journal	Print
American Secondary Education	Print
Brookings Papers on Education Policy	Electronic
Change	Print
Clearing House	Print
Communicator	Print
E-Subscribe (ERIC reports)	Electronic
Economics of Education Review	Print/Online
Education Week	Print
Educational Administration Quarterly	Print
Educational evaluation and Policy Analysis	Print
Educational Horizons	Print
Educational Leadership	Print
Journal of Curriculum and Supervision	Print
Journal of Curriculum Studies	Print
Journal of Educational Change	Electronic
Journal of Law & Education	Print
Journal of Personnel Evaluation in Education	Electronic
Journal of School Leadership	Print
Journal of School Public Relations	Print
Leadership Quarterly	Print/Online
NASSP Bulletin	Print
Phi Delta Kappan	Print
Preventing School Failure	Print
Principal	Print
Principal Leadership (High School ed.)	Print
Principal Leadership (Middle School ed.)	Print
Abstracting and Indexing Services	Full-Text Articles Available?
Education Abstracts	Yes
ERIC	Yes

ERIC E-Subscribe	Yes
Lexis/Nexis	Yes
PsycINFO	Yes
Wilson Select	Yes

Sample Titles for which UWF has Full- Text Journal Access
Educational Management and Administration
International journal of leadership in education
Journal of leadership studies
Leadership
Leadership and Policy in Schools
School Administrator
Thrust for Educational Leadership

Serials Chart 5

Master of Science - Administration Human Performance Technology Program Journals December, 2003
--

Number of Serial Subscriptions	
In Instructional Technology	30
In Management	75
In Computer Science	154
in Psychology	247
TOTAL	506

Major Titles	Format
AI & Society	Print
Artificial Intelligence	Electronic
Artificial Intelligence Review	Electronic
Applied Ergonomics	Electronic
Computer Aided Design	Electronic
Computer Supported Cooperative Work	Electronic
Computers in Industry	Print/online
Educational Technology	Print
Educational Technology Research & Development	Print
HR: Human Resource Planning	Print
HR focus	Print
HRMagazine	Print
Human Computer Interaction	Electronic
Human Factors	Print
Human Factors in Computing Systems	Print
Human Resource Management	Print/online
Human Resource Management Review	Print/online

Human Systems Management	Print/online
Interacting with Computers	Electronic
International Journal of Human-Computer Studies	Electronic
International Journal of Man-Machine Studies	Electronic
Journal of Productivity Analysis	Electronic
Journal of Special Education Technology	Print
Learning and Leading with Technology	Print
People Management	Print
Performance Evaluation	Electronic
Performance Improvement	Print
Performance Improvement Quarterly	Print
T+D	Print
Training	Print
Training and Development (title change to T+D)	Print

	Full-Text Articles Available?
Abstracting and Indexing Services	
ABI/INFORM	Yes
Business Abstracts	Yes
Computer & Information Systems Abstracts	No
ERIC	Yes
ERIC E-Subscribe	Yes
Health and Human Safety Abstracts	Yes
InfoTrac OneFile	Yes
Lexis/Nexis	Yes
Wilson Select	Yes

Sample Titles for which UWF has Electronic Full-Text Journal Access	
International Journal of Stress Management	
IOMA's Report on Managing Training and Development	
Technical Training	

- c. **Describe classroom, teaching laboratory, research laboratory, office, and any other type of space that is necessary and currently available for the proposed program.**

The primarily online MSA will require no additional classrooms or laboratory space for delivery of the program. The program will be delivered from the desktop computers located in each participating instructor's office. As previously stated, if it is feasible to offer some of the courses in this proposed program in a face-to-face format, there are modern computer classrooms and technology facilities available on campus, especially in the newly refurbished Pickens Computer Libratory in the College of Professional Studies. New computers will be purchased for new hires.

- d. **Equipment**

The program will be delivered utilizing the desktop computers that are in every faculty member's office. The college, Instructional Technology Center, and the newly created Academic Training Center will provide support and maintenance of the equipment.

e. Fellowships, scholarships, and graduate assistantships (List the number and amount allocated to the academic unit in question for the past year.)

Below are two tables indicating the amount of scholarships, fellowships, and graduate assistantships allocated and used in the academic units during the year 2002/2003. The scholarship and fellowship awards were allocated relative to the number of graduate students in the specialization or degree program.

Graduate assistantships are allocated relative to the academic units program needs.

Criminal Justice has been an undergraduate program only and will receive a relative share of funding based upon graduate enrollment in the future.

Scholarship and Fellowship Table
2002-2003

Program	Pace Graduate	Graduate Merit	Graduate Fellowship	Minority
Admin. Studies	\$3,870	\$3,202	\$2,060	\$275
Criminal Justice	N/A	Undergraduate	program	
Health, Leisure, & Exercise Sc.	\$2,989	\$3,245	\$1,591	\$212
Ed. Leadership	\$1,000	\$1,000	\$1,000	\$0
Tech, Research, & Development (HPT)	\$9,970	\$10,825	\$4,304	\$702

Assistantships and OPS Funds Table 2002-2003

Academic Unit	Teaching Assistantships	Graduate Assistantships	Student Assistants	OPS Staff
Admin. Studies	0	\$8,304	\$6,643	0
Criminal Justice	0	\$5,710	\$2,428	0
Health, Leisure, Exercise Science	\$10,828	\$34,938	\$1,800	\$4,274
Technology, R & D (HPT)	\$6,977	\$18,056	0	\$2,567
Grad. Ed. (Ed. Leadership)	0	\$4,924	0	\$1,358

f. Internship sites

Possible internship sites for each of the specializations are listed below:

Criminal Justice

County Sheriff Departments
Florida Department of Corrections
Florida Department of Law Enforcement
Alabama State Department of Corrections
State social service agencies
Division of Juvenile Justice

Health Care Administration

County Health Departments
Hospitals
American Cancer Society
American Lung Association
American Heart Association
Health Care Agencies
Florida Blue Cross Blue Shield

Public Administration

City governments
County governments
Utilities organizations
Communications and fire services
Environmental agencies

Educational Leadership

Florida School Districts
Alabama School Districts
School Districts in the United States
Colleges and Universities
Private Schools
Training organizations
Military training organizations

Human Performance and Technology

United States Navy
Military organizations
Private corporations
Private businesses
Educational institutions

2. **Describe additional facilities and resources required for the initiation of the proposed program (e.g., library volumes, serials, space, assistantships, specialized equipment, other expenses, OPS time, etc.). If a new capital expenditure for instructional or research space is required, indicate where this item appears on UWF's capital outlay priority list. The provision of new resources will need to be reflected in the budget table (UWF Table Three), and the source of funding indicated. UWF Table Three requires the display of**

Instruction and Research (I&R) costs only, unless expected enrollment in the new program is high enough to impact non I&R costs, such as library staffing, university support, and student services.

As indicated earlier in this document, the majority of this program will be delivered by existing faculty using their existing technology and the support of the new Academic Technology Center that has been created to support and train faculty to offer distance learning programs. New hires will replace some retiring faculty and the decision to dissolve the Master's in Public Administration will result in more faculty available to support the new Master's of Science in Administration.

Currently there is a staff assistant line in the MPA program that will transition into the new MSA program. The planning document also reflects the addition of one more staff assist line in the future as the program experiences significant enrollment.

As indicated earlier, the library resources are outstanding and will not require any additional resources initially. Recent special funding has bolstered the holdings of all of the disciplines participating in the proposed MSA program. The College of Business with its personnel and library holdings is also in a strong position to support the program.

Capital expenditures for teaching or research will not be necessary for the delivery of this proposed program.

New expenses in the projected budget will mostly be associated with the few new hires who will need computers, technology support, office furniture, normal expenses for instruction and professional activities, and learning materials.

Projections are that the program will generate funding in an amount that will offset the costs of the program.

VII. ASSESSMENT OF IMPACT ON PROGRAMS CURRENTLY OFFERED

A. Budget

1. Assuming no special appropriation or UWF allocation for initiation of the program, how would resources within the College and Department be shifted to support the new program?

The university can support this new program by shifting existing personnel to support the proposed MSA. There are several trends that take place that facilitates this initiative. There has been a decline in teacher education programs and significant numbers of retirements have occurred and there is quite a few that will take place within the near future. Obviously, these lines can be shifted to support new programs. The Master's Degree in Public Administration will be dissolved because of low enrollment and the faculty and staff assistant from that program will support the proposed MSA. A close look at Tables One B, Table Two, and Table Three indicates the shifting of resources within the college and reflects adequate resources to support the MSA.

2. Use UWF Table Three to display dollar estimates of both current and new resources for the proposed program for the first through the fifth years of the program. In narrative form, identify the source of both current and any new resources to be devoted to the proposed program.

UWF TABLE THREE: COSTS FOR THE PROPOSED PROGRAM

COSTS FOR PROPOSED PROGRAM

FIRST YEAR				FIFTH YEAR			
GENERAL REVENUE		Continuing Education	SUMMARY	GENERAL REVENUE		Continuing Education	SUMMARY
CURRENT	NEW			CURRENT	NEW		

INSTRUCTION & RESEARCH

POSITIONS (FTE)

FACULTY	9.55		.24	9.79	11.79	1.85	.25	13.89
A&P								
USPS	1.00			1.00	1.00	1.00		2.00
TOTAL	10.55		.24	10.79	12.79	2.85	.25	15.89

SALARY RATE

FACULTY	688,888		19,123	708,011	794,011	70,500		864,511
A&P								
USPS	24,000			24,000	24,000	33,600	9,600	67,200
TOTAL	712,888	0	19,123	732,011	818,011	104,100	9,600	931,711

I&R

SALARIES & BENEFITS	912,497		24,477	936,974	1,056,994	133,248	12,288	1,202,530
OTHER PERSONAL SERVICES						2,173		2,173
EXPENSES	1,550			1,550	3,430	2,720	300	6,450
EQUIPMENT	0			0	2,100	4,275	375	6,750
TECHNOLOGY	2,700			2,700	5,910	5,910	600	11,700
LEARNING RESOURCES	1,300			1,300	3,310	3,040	350	6,700
SPECIAL								
TOTAL I&R	918,047	0	24,477	942,524	1,071,744	150,646	13,913	1,236,303

NON-I&R

OTHER ACTIVITIES

LIBRARY STAFFING	2,872			2,872	5,267	1,276	140	6,683
UNIV SUPPORT	7,180			7,180	13,327	3,203	370	16,900
FINANCIAL AID	1,796			1,796	3,332	893	185	4,410
STUDENT SVCS	3,590			3,590	6,664	1,601	185	8,450
TOTAL OTHER ACTIVITIES	15,438	0	0	15,438	28,590	6,973	880	36,443

SUMMARY- Summary

	933,485	0	24,477	957,962	1,100,334	157,619	14,793	1,272,746
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The large majority of instruction in the new program will come from existing faculty who are already teaching in their respective disciplines. The major change is the mode of delivery—an online program that will reach a much larger audience, which will make UWF more visible and competitive as a distance-learning provider.

New hires will come from vacated lines that are currently vacate or will become vacant as early as next year. The few new lines that are planned to be added to the program in the near future will be added as program demands grow. Criminal Justice Administration does not have a graduate program and it is expected there will be a significant enrollment surge in this program. Therefore, two new hires are projected for years 2005 and 2006. It is worthy to note that these two new hires will also participate in support of the undergraduate program, which presently is one of the divisions within the college with the highest enrollment.

Educational leadership will be able to add two new faculty members in the years 2005 and 2006 as replacements for retiring faculty and the Health Care Administration specialization (Division of Health, Leisure, and Exercise Science) will be recruiting to fill a vacant line in 2005 also.

The Human Performance Technology specialization will have a unique feature that will help support instruction in that program. The HPT program has a 12-semester hour certificate program that is delivered through the Division of Continuing Education and is non-FTE generating. The faculty or adjuncts in an overload status through extra compensation may also be assigned to a different division within the college or university to teach on an enhanced compensation model.

Some of the faculty from the Public Administration program will assist with teaching some courses for other disciplines within the MSA. Criminal Justice and the Health Care Administration programs require courses dealing with public budgeting and human resources that will be taught by faculty members from the Public Administration specialization.

As indicated previously in this document, the staff assistant line in the current Public Administration graduate program will be transitioned into the proposed MSA program.

3. Describe what steps have been taken to obtain information regarding resources available outside the institution (businesses, industrial organizations, governmental entities, etc.). Delineate the external resources that appear to be available to support the proposed program.

No significant resources have been identified in the local community at this time other than the external grants that Human Performance Technology has acquired in the past. Most of these programs have excellent relationships/partnerships with agencies within the community and the potential exists for possible external funding acquisition in the future. The local community does provide many valuable experiences for UWF students who seek field experiences and internships in their discipline.

Over the past few years, HPT faculty has worked on several projects that have provided external funding. This funding is used to promote research and development activities as well to hire students who reap the benefits of real-world experiences. Over two and a half million dollars in external funding have been received since the 1997-98 academic year.

The faculty members who will be participating in the Human Performance Technology have a strong history of acquiring external funding and will be positioned to continue their success in the new MSA program.

Examples of successful external funding projects and their funding include:

STEPS Online Performance (\$1,850,000)
Institutional Tech Support Santa Rosa County, (\$5,396)
Naval Air and Warfare Command (\$5,551)
ETC (Reading in the Content Area) (\$39,900)
ETC2 (Closing the Loop) (\$60,000)
Successful STEPS (Making of a Technology-Rich Classroom) (\$48,825)
FSU Distance Learning Partnership (\$26,945)
Jostens' Learning Research (\$18,001)
Instructional Technology Utilization in Okaloosa County (\$30,000)
Webmaster in Santa Rosa County (\$46,358)
FIRNTEC Position (\$41,502)
Integrating Technology into Middle Schools (\$4,499)
CPB, Integrating Technology into PK-2 (\$5,000)
Microsoft Software Partnership (\$15,000/year; 4 years)
Florida Inclusion Network (\$275,000 [per year])
Center for Curriculum and Technology (\$150,000)
FIN OPD (\$68,000)
Harcourt Evaluations (2 projects for a total of \$33,000)

B. Describe any other projected impacts on related programs, such as prerequisites, required courses in other departments, etc.

The proposed MSA program will provide an attractive graduate degree for students from undergraduate programs at the University of West Florida. Obviously, the opportunity will be provided for those students who seek employment and would also like to continue their education while in the work place. Also, they will not be limited to the immediate area in their initial job search.

The Health Care Administration specialization requires two courses from the Public Administration specialization. Public Budgeting and Human Resource Management for Public Institutions will be taught by present Public Administration faculty. The Criminal Justice Administration specialization will utilize some Public Administration faculty to teach some related courses. This cooperation provides opportunities for Public Administration faculty to teach additional courses as the MPA is dissolved.

VIII. COMMUNITY COLLEGE ARTICULATION

For undergraduate programs, describe in detail plans for articulation with area community colleges.

Although the proposed MSA is a graduate program, UWF catalogs are available to community college counselors throughout the state and the service area. The community colleges will be made aware of this program and the opportunities that it will present.

IX. ASSESSMENT OF APPLICABLE ACCREDITATION STANDARDS List the accreditation agencies and learned societies that would be concerned with the proposed program. Does the department or program anticipate seeking accreditation from any of these agencies? If so, indicate when accreditation will be sought. If the proposed program is at the graduate level, and a corresponding undergraduate program is already in existence, is the undergraduate program accredited? If not, why?

At this point in the development of the proposed MSA degree program accreditation has not been a foremost issue. As the program is further developed, accreditation agencies will be reviewed to

determine the feasibility of accreditation. It is likely that accreditation could be sought where appropriate within three to five years from the initiation of the program

Currently, the Master's in Public Administration is accredited and will expire within two years. Accreditation of the Public Administration specialization in the MSA will not be sought at this time. As previously mentioned in this document, the enrollment and high cost of the current program are determining factors in the revision of the Public Administration program.

Educational Leadership has the endorsement of the National Council on Accreditation of Teacher Education and is approved by the Florida Department of Education.

The Human Performance Technology specialization is relatively new and is in strong demand, especially because of the interest from military installations in the local vicinity and the creation of the online program. There is a strong possibility that accreditation of this specialization could be sought within the next few years. Among the possible accreditation agencies are the American Society for Training & Development and the International Society for Performance Improvement.

XIV. PRODUCTIVITY

Provide evidence that the academic unit(s) associated with this new degree have been productive in teaching, research, and service. Such evidence may include trends over time for average course-load, FTE productivity, student headcounts in major or service courses, degrees granted, external funding attracted; as well as qualitative indicators of excellence.

Productivity Tables 1-6 are provided below. These tables provide some measures of the past productivity of the academic units involved in the proposed Master's of Science in Administration degree. Data on graduate and undergraduate enrollment, faculty productivity for 02/03, cost analysis based on FTE for 01/02 and external funding by college for FY 2003 are presented. Note that the names of some of the units reported are somewhat different from current use. This is due to the organizational scheme in place at the time. Presentation of these data is for the purpose of understanding where productivity, cost, and profit trends have occurred.

For specific information pertaining to individual faculty's research activities refer to Appendix B.

Productivity Table 1

Academic Units
Graduate Enrollments by Major
1999-2003

Program	Fall 99	Fall 00	Fall 01	Fall 02	Fall 03
Educational Leadership*	216	250	196	206	188
(Training and Management)**	(61)	(76)	(84)	(75)	(75)
Public Administration	70	59	50	47	35
Health, Leisure, Exercise Sci.	62	63	61	62	65
Criminal Justice	N/A	Under	Graduate	only	

***Includes training with Management majors and Educational Leadership Majors in Certification Programs**

****Now Human Performance Technology major**

Productivity Table 2

Academic Units
Undergraduate Enrollments
1999-2003

Division	Fall 99	Fall 00	Fall 01	Fall02	Fall 03
Criminal Justice	*L 156 *U 142	L 174 U 169	L 227 U 219	L 264 U 260	L 275 U 257
Health, Leisure, U121	L 162 U121	L 111 U 145	L 166 U 156	L 177 U 161	L 189 U 138
Public Admin.	N/A	Graduate	Only		
HPT	N/A	Graduate	Only		
Educational Leadership	N/A	Gradate	Only		

* L = lower level U = upper level

Productivity Table 3

Fall 2002 Faculty Productivity

Division	Student Credit Hours	Number of Faculty	Hours per Faculty
Administrative Studies *	267	4	66.75
Criminal Justice & Legal Studies	2274	7	324.86
Engineering and Computer Technology **	397	3.5	113.43
Graduate Education***	1781	12	148.42
Health, Leisure, and Exercise Sci.	2151	9	239.00

* Includes Public Administration

** Includes HPT which is now a separate program

*** Includes Educational Leadership

Productivity Table 4

Spring 2003 Faculty Productivity

Division	Student Credit Hours	Number of Faculty	Hours per Faculty member
Administrative Studies*	297	4	74.25
Criminal Justice & Legal Studies	1897	7	271.00
Engineering & Computer Tech **	426	3.5	121.71
Graduate*** Education	1791	12	149.25
Health, Leisure, and Exercise Sci.	2103	9	233.67

*includes Public Administration

**includes HPT which is now a separate program

***includes Educational Leadership

Productivity Table 5

**Costs Analysis for FY 2001-2002
For Academic Units based on FTE**

Program	Income	Cost	Net
Administrative Studies	\$664,013	\$594,976	\$69,037
Criminal Justice	\$1,397,778	\$316,058	\$1,081,719
Health, Leisure & Exercise Sci.	\$2,754,169	\$896,203	\$1857,966
Instructional Technology (HPT)	\$1,787,816	\$1,160,266	\$627,550
Teacher Education*	\$5,129,973	\$2,206,612	\$2,923,362

*Teacher education is an undergraduate program that is a feeder for Educational Leadership

Productivity Table 6

External Funding by College FY 2003

College	Amount
Arts and Sciences	\$764,355
College of Business	\$1,126,360
College of Professional Studies	\$3,884,514

XV. HISTORY

Provide a history page at the end of the proposal document to display approvals at each level (see page 82 of this document).

*Note: The Florida Board of Governors uses a different format for requests to implement new specialist and doctoral degree programs. Contact the Associate Vice President for Academic Affairs for forms to use for specialist and doctoral degree programs.

SPECIALIZATION INFORMATION

Business Core TABLE ONE B
NUMBER OF ANTICIPATED MAJORS FROM POTENTIAL SOURCES

GRADUATE DEGREE PROGRAM

NAME OF PROGRAM: MSA/Business Core

CIP CODE: 30-9999

ACADEMIC YEAR	YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5	
	04	05	05	06	06	07	07	08	08	09

Source of Students (Non-Duplicative Count in Any Given Year)	HC*	FTE*	HC*	FTE*	HC*	FTE*	HC*	FTE*	HC*	FTE*
Individuals drawn from agencies/ industries in your service area (e.g., older returning students)	7	3.9	12	6.8	14	7.7	15	8.6	17	9.8
Students who transfer from other graduate programs within the university	5	2.8	4	2.3	5	2.8	5	2.8	6	3.4
Individuals who have recently graduated from preceding degree programs at this university	4	2.3	4	2.3	7	3.9	8	4.5	9	5.1
Individuals who graduated from preceding degree programs at other SUS universities	2	1.1	3	1.7	3	1.7	4	2.3	5	2.8
Individuals who graduated from preceding degree programs at non-SUS Florida colleges and universities	1	.6	3	1.7	2	1.1	4	2.3	4	2.3
Additional in-state residents	1	.6	2	1.1	4	2.3	6	3.4	8	4.5
Additional out-of-state residents	0	0	1	.6	5	2.8	7	3.9	10	5.6
Additional foreign residents	1	.6	1	.6	1	.6	2	1.1	3	1.7
Other (Explain)	0	0	0	0	0	0	0	0	0	0
TOTAL	21	11.9	30	17.1	41	22.9	51	28.9	62	35.2

Note: HC = Headcount of students in this major FTE = Annualized Full-Time-Equivalent students taking courses offered by this major. Annualized FTE's are calculated at 32 credit hours for graduate courses.

*Estimated enrollments in core. Headcount is not included in summary table but FTE is.

BUSINESS CORE TABLE TWO

FACULTY PARTICIPATION IN PROPOSED DEGREE PROGRAM BY FIFTH YEAR

Faculty CODE (see below)	Faculty Name or "New Hire"	Academic Discipline / Specialty	Rank	(For Existing Faculty Only)		Initial Date for Participation in Proposed Program	5 th Year Workload in Proposed Program (portion of Person-year)
				Contract Status (tenure?)	Highest Degree Granted		
A	TBA	Business	Assistant Professor	Tenure	Ph.D	.40	1.00

Faculty CODE	Corresponding Faculty Position Category in TABLE 3 for the Fifth Year	Proposed Source of Funding for Faculty	TOTAL 5 th Year Workload by Budget Classification
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A	Current General Revenue	Existing Faculty – Regular Line	.40
B	Current General Revenue	New Faculty – To Be Hired on Existing Vacant Line	

C	New General Revenue	New Faculty – To Be Hired on a New Line	.60
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D	Continuing Education	Existing Faculty – Funded on Continuing Ed.	
E	Contracts & Grants	New Faculty – To Be Hired on Continuing Ed.	

Overall Total for 5th Year			1.00
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BUSINESS CORE TABLE THREE
PROGRAM COSTS

**UWF TABLE THREE
COSTS FOR PROPOSED
PROGRAM**

FIRST YEAR				FIFTH YEAR			
GENERAL REVENUE		Continuing Education	SUMMARY	GENERAL REVENUE		Continuing Education	SUMMARY
CURRENT	NEW			CURRENT	NEW		

INSTRUCTION & RESEARCH

POSITIONS (FTE)								
FACULTY	9.55		.24	9.79	11.79	1.85	.25	13.89
A&P								
USPS	1.00			1.00	1.00	1.00		2.00
TOTAL	10.55		.24	10.79	12.79	2.85	.25	15.89

SALARY RATE								
FACULTY	688,888		19,123	708,011	794,011	70,500		864,511
A&P								
USPS	24,000			24,000	24,000	33,600	9,600	67,200
TOTAL	712,888	0	19,123	732,011	818,011	104,100	9,600	931,711

I&R								
SALARIES & BENEFITS	912,497		24,477	936,974	1,056,994	133,248	12,288	1,202,530
OTHER PERSONAL SERVICES						2,173		2,173
EXPENSES	1,550			1,550	3,430	2,720	300	6,450
EQUIPMENT	0			0	2,100	4,275	375	6,750
TECHNOLOGY	2,700			2,700	5,910	5,910	600	11,700
LEARNING RESOURCES	1,300			1,300	3,310	3,040	350	6,700
SPECIAL								
TOTAL I&R	918,047	0	24,477	942,524	1,071,744	150,646	13,913	1,236,303

NON-I&R

OTHER ACTIVITIES								
LIBRARY STAFFING	2,872			2,872	5,267	1,276	140	6,683
UNIV SUPPORT	7,180			7,180	13,327	3,203	370	16,900
FINANCIAL AID	1,796			1,796	3,332	893	185	4,410
STUDENT SVCS	3,590			3,590	6,664	1,601	185	8,450
TOTAL OTHER ACTIVITIES	15,438	0	0	15,438	28,590	6,973	880	36,443

SUMMARY- Summary	933,485	0	24,477	957,962	1,100,334	157,619	14,793	1,272,746
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CRIMINAL JUSTICE TABLE ONE B

NUMBER OF ANTICIPATED MAJORS FROM POTENTIAL SOURCES

GRADUATE DEGREE PROGRAM

NAME OF PROGRAM: MSA/Criminal Justice

CIP CODE: 30-9999

ACADEMIC YEAR	YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5	
	04	05	05	06	06	07	07	08	08	09

Source of Students (Non-Duplicative Count in Any Given Year)	HC	FTE	HC	FTE	HC	FTE	HC	FTE	HC	FTE
Individuals drawn from agencies/ industries in your service area (e.g., older returning students)	5	2.8	5	2.8	7	3.9	8	4.5	10	5.6
Students who transfer from other graduate programs within the university	5	2.8	5	2.8	6	3.4	7	3.9	7	3.9
Individuals who have recently graduated from preceding degree programs at this university	7	3.9	10	5.6	12	6.8	14	7.9	16	9.0
Individuals who graduated from preceding degree programs at other SUS universities	0	0	5	2.8	5	2.8	6	3.4	7	3.9
Individuals who graduated from preceding degree programs at non-SUS Florida colleges and universities	0	0	5	2.8	5	2.8	7	3.9	7	3.9
Additional in-state residents										
Additional out-of-state residents										
Additional foreign residents	0	0	0	0	3	1.7	5	2.8	6	3.4
Other (Explain)										
TOTAL	17	9.5	30	16.8	38	21.4	47	26.4	53	29.7

Note: HC = Headcount of students in this major FTE = Annualized Full-Time-Equivalent students taking courses offered by this major. Annualized FTE's are calculated at 32 credit hours for graduate courses.

CRIMINAL JUSTICE TABLE TWO

FACULTY PARTICIPATION IN PROPOSED DEGREE PROGRAM BY FIFTH YEAR

Faculty CODE (see below)	Faculty Name or "New Hire"	Academic Discipline / Specialty	Rank	(For Existing Faculty Only)		Initial Date for Participation in Proposed Program	5 th Year Workload in Proposed Program (portion of Person-year)
				Contract Status (tenure?)	Highest Degree Granted		
A	Dr. Swanson	Criminal Justice	Chair	Tenured	Ph.D	2004	.30
A	Dr. Clement	Criminal Justice	Associate Professor	Tenure-Earning	Ph.D	2004	.30
A	Dr. Johnson	Criminal Justice	Assistant Professor	Tenure-Earning	Ph.D	2004	.30
A	Dr. Kunselman	Criminal Justice	Assistant Professor	Tenure-Earning	Ph.D	2004	.20
C	New Hire	Criminal Justice	Assistant Professor			2005	.30
C	New Hire	Criminal Justice	Associate Professor			2006	.30

Faculty CODE	Corresponding Faculty Position Category in TABLE 3 for the Fifth Year	Proposed Source of Funding for Faculty	TOTAL 5 th Year Workload by Budget Classification
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A	Current General Revenue	Existing Faculty – Regular Line	1.10
B	Current General Revenue	New Faculty – To Be Hired on Existing Vacant Line	

C	New General Revenue	New Faculty – To Be Hired on a New Line	.60
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D	Contracts & Grants	Existing Faculty – Funded on Contracts & Grants	
E	Contracts & Grants	New Faculty – To Be Hired on Contracts & Grants	

Overall Total for 5th Year			1.70
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CRIMINAL JUSTICE TABLE THREE
PROGRAM COSTS

**UWF TABLE THREE
COSTS FOR
PROPOSED PROGRAM**

FIRST YEAR				FIFTH YEAR			
GENERAL REVENUE		Contracts & Grants	SUMMARY	GENERAL REVENUE		Contracts & Grants	SUMMARY
CURRENT	NEW			CURRENT	NEW		

INSTRUCTION & RESEARCH

POSITIONS (FTE)

FACULTY	1.10			1.10	1.10	.60		1.70
A&P								
USPS								
TOTAL	1.10			1.10	1.10	.60		1.70

SALARY RATE

FACULTY	202,415			202,415	202,415	31,500		233,915
A&P								
USPS								
TOTAL	202,415			202,415	202,415	31,500		233,915

I&R

SALARIES & BENEFITS	259,091			259,091	259,091	40,320		299,411
OTHER PERSONAL SERVICES EXPENSES	500			500	500	1,200		1,700
EQUIPMENT	0			0	0	1,500		1,500
TECHNOLOGY	800			800	800	2,400		3,200
LEARNING RESOURCES	300			300	300	1,400		1,700
SPECIAL								
TOTAL I&R	260,691			260,691	260,691	46,820		307,511

NON-I&R

OTHER ACTIVITIES

LIBRARY STAFFING	400			400	1,020	180		1,200
UNIV SUPPORT	1,000			1,000	2,550	450		3,000
FINANCIAL AID	250			250	638	112		750
STUDENT SVCS	500			500	1,275	225		1,500
TOTAL OTHER ACTIVITIES	2,150			2,150	5,483	967		6,450

SUMMARY- Criminal Justice-MSA	262,841			262,841	266,174	47,787		313,961
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HEALTH CARE ADMINISTRATION TABLE ONE B

NUMBER OF ANTICIPATED MAJORS FROM POTENTIAL SOURCES

GRADUATE DEGREE PROGRAM

NAME OF PROGRAM: MSA/ Health Care
Administration
CIP CODE: 30-9999

ACADEMIC YEAR	YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5	
	04	05	05	06	06	07	07	08	08	09

Source of Students (Non-Duplicative Count in Any Given Year)	HC	FTE	HC	FTE	HC	FTE	HC	FTE	HC	FTE
Individuals drawn from agencies/ industries in your service area (e.g., older returning students)	3	1.7	5	2.8	6	3.4	7	3.9	8	4.5
Students who transfer from other graduate programs within the university	3	1.7	3	1.7	4	2.3	4	2.3	4	2.3
Individuals who have recently graduated from preceding degree programs at this university	2	1.1	3	1.7	4	2.3	4	2.3	5	2.8
Individuals who graduated from preceding degree programs at other SUS universities	1	.6	2	1.1	2	1.1	3	1.7	4	2.3
Individuals who graduated from preceding degree programs at non-SUS Florida colleges and universities	1	.6	2	1.1	3	1.7	3	1.7	4	2.3
Additional in-state residents	1	.6	1	.6	2	1.1	2	1.1	3	1.7
Additional out-of-state residents			1	.6	2	1.1	2	1.1	2	1.1
Additional foreign residents			1	.6	1	.6	2	1.1	2	1.1
Other (Explain)										
TOTAL	11	6.3	18	10.2	24	13.6	27	15.2	32	18.1

Note: HC = Headcount of students in this major FTE = Annualized Full-Time-Equivalent students taking courses offered by this major. Annualized FTE's are calculated at 32 credit hours for graduate courses.

HEALTH CARE ADMINISTRATION TABLE TWO

FACULTY PARTICIPATION IN PROPOSED DEGREE PROGRAM BY FIFTH YEAR

Faculty CODE (see below)	Faculty Name or "New Hire"	Academic Discipline / Specialty	Rank	(For Existing Faculty Only)		Initial Date for Participation in Proposed Program	5 th Year Workload in Proposed Program (portion of Person-year)
				Contract Status (tenure?)	Highest Degree Granted		
A	Dr. Bridges	Health	Professor	Tenured	Ed.D	2004	.75
B	New Hire	Health	Associate Professor			2004	.25
C	Adjunct	Health	Instructor	Adjunct	Ph.D	2005	.20
C	Adjunct	Health	Instructor	Adjunct	Ph.D	2006	.20

Faculty CODE	Corresponding Faculty Position Category in TABLE 3 for the Fifth Year	Proposed Source of Funding for Faculty	TOTAL 5 th Year Workload by Budget Classification
A	Current General Revenue	Existing Faculty – Regular Line	.75
B	Current General Revenue	New Faculty – To Be Hired on Existing Vacant Line	.25
C	New General Revenue	New Faculty – To Be Hired on a New Line	.40
D	Contracts & Grants	Existing Faculty – Funded on Contracts & Grants	
E	Contracts & Grants	New Faculty – To Be Hired on Contracts & Grants	
Overall Total for 5th Year			1.40

HEALTH CARE ADMINISTRATION TABLE THREE
PROGRAM COSTS

**UWF TABLE THREE
COSTS FOR
PROPOSED PROGRAM**

FIRST YEAR				FIFTH YEAR			
GENERAL REVENUE		Contracts & Grants	SUMMARY	GENERAL REVENUE		Contracts & Grants	SUMMARY
CURRENT	NEW			CURRENT	NEW		

INSTRUCTION & RESEARCH

POSITIONS (FTE)								
FACULTY	1.10			1.10	1.10	.60		1.70
A&P								
USPS								
TOTAL	1.10			1.10	1.10	.60		1.70

SALARY RATE								
FACULTY	202,415			202,415	202,415	31,500		233,915
A&P								
USPS								
TOTAL	202,415			202,415	202,415	31,500		233,915

I&R								
SALARIES & BENEFITS	259,091			259,091	259,091	40,320		299,411
OTHER PERSONAL SERVICES EXPENSES	500			500	500	1,200		1,700
EQUIPMENT	0			0	0	1,500		1,500
TECHNOLOGY	800			800	800	2,400		3,200
LEARNING RESOURCES	300			300	300	1,400		1,700
SPECIAL								
TOTAL I&R	260,691			260,691	260,691	46,820		307,511

NON-I&R

OTHER ACTIVITIES								
LIBRARY STAFFING	400			400	1,020	180		1,200
UNIV SUPPORT	1,000			1,000	2,550	450		3,000
FINANCIAL AID	250			250	638	112		750
STUDENT SVCS	500			500	1,275	225		1,500
TOTAL OTHER ACTIVITIES	2,150			2,150	5,483	967		6,450

SUMMARY- Criminal Justice-MSA	262,841			262,841	266,174	47,787		313,961
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PUBLIC ADMINISTRATION TABLE ONE B

NUMBER OF ANTICIPATED MAJORS FROM POTENTIAL SOURCES

GRADUATE DEGREE PROGRAM

NAME OF PROGRAM: MSA/Public
Administration

CIP CODE: 30-9999

ACADEMIC YEAR	YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5	
	04	05	05	06	06	07	07	08	08	09

Source of Students (Non-Duplicative Count in Any Given Year)	HC	FTE	HC	FTE	HC	FTE	HC	FTE	HC	FTE
Individuals drawn from agencies/ industries in your service area (e.g., older returning students)	4	2.3	6	3.4	8	4.5	10	5.6	14	7.7
Students who transfer from other graduate programs within the university	10	5.6	9	5.1	8	4.5	8	4.5	9	5.1
Individuals who have recently graduated from preceding degree programs at this university	2	1.1	3	1.7	4	2.3	4	2.3	5	2.8
Individuals who graduated from preceding degree programs at other SUS universities	3	1.7	2	1.1	2	1.1	3	1.7	3	1.7
Individuals who graduated from preceding degree programs at non-SUS Florida colleges and universities	1	.6	2	1.1	2	1.1	3	1.7	3	1.7
Additional in-state residents	2	1.1	2	1.1	2	1.1	2	1.1	2	1.1
Additional out-of-state residents										
Additional foreign residents	2	1.1	1	.6	1	.6	2	1.1	2	1.1
Other (Explain)										
TOTAL	24	13.5	25	14.1	27	15.2	32	18.0	38	21.2

Note: HC = Headcount of students in this major FTE = Annualized Full-Time-Equivalent students taking courses offered by this major. Annualized FTE's are calculated at 32 credit hours for graduate courses.

PUBLIC ADMINISTRATION TABLE TWO

FACULTY PARTICIPATION IN PROPOSED DEGREE PROGRAM BY FIFTH YEAR

Faculty CODE (see below)	Faculty Name or "New Hire"	Academic Discipline / Specialty	Rank	(For Existing Faculty Only)		Initial Date for Participation in Proposed Program	5 th Year Workload in Proposed Program (portion of Person-year)
				Contract Status (tenure?)	Highest Degree Granted		
A	Dr. Keeton	Public Admin	Associate Professor	Tenured	Ph.D	2004	1.0
A	Dr. Walker	Public Admin	Associate Professor	Tenured	Ph.D	2004	.30
A	Dr. Tankersley	Public Admin	Assistant Professor	Tenured	Ph.D	2004	.75
A	Dr. Haraway	Public Admin	Assistant Professor	Tenure-Earning	Ph.D	2004	1.0
A	Dr. Kim	Public Admin	Assistant Professor	Tenure-Earning	Ph.D	2004	1.0

Faculty CODE	Corresponding Faculty Position Category in TABLE 3 for the Fifth Year	Proposed Source of Funding for Faculty	TOTAL 5 th Year Workload by Budget Classification
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A	Current General Revenue	Existing Faculty – Regular Line	4.05
B	Current General Revenue	New Faculty – To Be Hired on Existing Vacant Line	

C	New General Revenue	New Faculty – To Be Hired on a New Line	
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D	Contracts & Grants	Existing Faculty – Funded on Contracts & Grants	
E	Contracts & Grants	New Faculty – To Be Hired on Contracts & Grants	

Overall Total for 5th Year			4.05
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PUBLIC ADMINISTRATION TABLE THREE
PROGRAM COSTS

**UWF TABLE THREE
COSTS FOR
PROPOSED
PROGRAM**

FIRST YEAR				FIFTH YEAR			
GENERAL REVENUE		Contracts & Grants	SUMMARY	GENERAL REVENUE		Contracts & Grants	SUMMARY
CURRENT	NEW			CURRENT	NEW		

INSTRUCTION & RESEARCH

POSITIONS (FTE)

FACULTY	4.05			4.05	4.05			4.05
A&P								
USPS	1.00			1.00	1.00	1.00		2.00*
TOTAL	5.05			5.05	5.05	1.00		6.05

SALARY RATE

FACULTY	231,729			231,729	231,729			231,729
A&P								
USPS	24,000			24,000	24,000	24,000		48,000
TOTAL	255,729			255,729	255,729	24,000		279,729

I&R

SALARIES & BENEFITS	327,333			327,333	327,333	30,720		358,053
OTHER PERSONAL SERVICES								
EXPENSES	250			250	500	500		1,000
EQUIPMENT	0			0		1,500		1,500
TECHNOLOGY	500			500	750	750		1,500
LEARNING RESOURCES	300			300	450	450		900
SPECIAL								
TOTAL I&R	328,383			328,383	329,033	33,920		362,953

NON-I&R

OTHER ACTIVITIES

LIBRARY STAFFING	540			540	769	71		840
UNIV SUPPORT	1350			1350	1,922	178		2,100
FINANCIAL AID	338			338	480	45		525
STUDENT SVCS	675			675	961	89		1,050
TOTAL OTHER ACTIVITIES	2,903			2,903	4,132	383		4,515

SUMMARY- Public Administration-MSA	331,286			331,286	333,165	34,303		367,468
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EDUCATIONAL LEADERSHIP TABLE ONE B

NUMBER OF ANTICIPATED MAJORS FROM POTENTIAL SOURCES

GRADUATE DEGREE PROGRAM

NAME OF PROGRAM: MSA/Educational
Leadership
CIP CODE: 30.9999

ACADEMIC YEAR	YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5	
	04	05	05	06	06	07	07	08	08	09

Source of Students (Non-Duplicative Count in Any Given Year)	HC	FTE	HC	FTE	HC	FTE	HC	FTE	HC	FTE
Individuals drawn from agencies/ industries in your service area (e.g., older returning students)	6	3.4	10	5.6	14	7.9	16	9.0	19	10.7
Students who transfer from other graduate programs within the university	12	6.8	8	4.5	2	1.1	1	.6	1	.6
Individuals who have recently graduated from preceding degree programs at this university	1	.60	2	1.1	3	1.7	3	1.7	3	1.7
Individuals who graduated from preceding degree programs at other SUS universities	3	1.7	4	2.3	5	2.8	5	2.8	5	2.8
Individuals who graduated from preceding degree programs at non-SUS Florida colleges and universities	1	.60	2	1.1	2	1.1	2	1.1	2	1.1
Additional in-state residents			2	1.1	3	1.7	7	3.9	10	5.6
Additional out-of-state residents			2	1.1	6	3.4	8	4.5	10	5.6
Additional foreign residents										
Other (Explain)										
TOTAL	23	13.1	30	16.8	35	19.7	42	23.6	50	28.1

Note: HC = Headcount of students in this major FTE = Annualized Full-Time-Equivalent students taking courses offered by this major. Annualized FTE's are calculated at 32 credit hours for graduate courses.

EDUCATIONAL LEADERSHIP TABLE TWO

FACULTY PARTICIPATION IN PROPOSED DEGREE PROGRAM BY FIFTH YEAR

Faculty CODE (see below)	Faculty Name or "New Hire"	Academic Discipline / Specialty	Rank	(For Existing Faculty Only)		Initial Date for Participation in Proposed Program	5 th Year Workload in Proposed Program (portion of Person-year)
				Contract Status (tenure?)	Highest Degree Granted		
A	Dr. Zimmerman	Ed. Leadshp	Assistant Professor	Regular	Ed.D	2004	.75
A	Dr. Lague	Ed. Leadshp	Visiting Associate Professor	Regular	Ed.D	2004	.75
B	Retirement	Ed. Leadshp	Assistant Professor			2005	1.0
B	Retirement	Ed. Leadshp	Assistant Professor			2006	1.0

Faculty CODE	Corresponding Faculty Position Category in TABLE 3 for the Fifth Year	Proposed Source of Funding for Faculty	TOTAL 5 th Year Workload by Budget Classification
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A	Current General Revenue	Existing Faculty – Regular Line	1.5
B	Current General Revenue	New Faculty – To Be Hired on Existing Vacant Line	2.0

C	New General Revenue	New Faculty – To Be Hired on a New Line	
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D	Contracts & Grants	Existing Faculty – Funded on Contracts & Grants	
E	Contracts & Grants	New Faculty – To Be Hired on Contracts & Grants	

Overall Total for 5th Year			3.5
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EDUCATIONAL LEADERSHIP TABLE THREE
PROGRAM COSTS

**UWF TABLE THREE
COSTS FOR
PROPOSED PROGRAM**

FIRST YEAR				FIFTH YEAR			
GENERAL REVENUE		Contracts & Grants	SUMMARY	GENERAL REVENUE		Contract s & Grants	SUMMARY
CURRENT	NEW			CURRENT	NEW		

INSTRUCTION & RESEARCH

POSITIONS (FTE)

FACULTY	1.5		1.5	3.5		3.5
A&P						
USPS						
TOTAL	1.5		1.5	3.5		3.5

SALARY RATE

FACULTY	92,902		92,902	178,902		178,902
A&P						
USPS						
TOTAL	92,902		92,902	178,902		178,902

I&R

SALARIES & BENEFITS	118,915		118,915	228,995		228,995
OTHER PERSONAL SERVICES						
EXPENSES	250		250	1,200		1,200
EQUIPMENT	0		0	1,500		1,500
TECHNOLOGY	400		400	2,400		2,400
LEARNING RESOURCES	200		200	1,400		1,400
SPECIAL						
TOTAL I&R	119,765		119,765	235,495		235,495

NON-I&R

OTHER ACTIVITIES

LIBRARY STAFFING	520		520	1,120		1,120
UNIV SUPPORT	1,300		1,300	2,800		2,800
FINANCIAL AID	325		325	700		700
STUDENT SVCS	650		650	1,400		1,400
TOTAL OTHER ACTIVITIES	2,795		2,795	6,020		6,020

SUMMARY- Educational Leadership-MSA	122,560		122,560	241,515		241,515
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HUMAN PERFORMANCE TECHNOLOGY

TABLE ONE B

NUMBER OF ANTICIPATED MAJORS FROM POTENTIAL SOURCES

GRADUATE DEGREE PROGRAM

NAME OF PROGRAM: MSA-HPT Option

CIP CODE: V 30.9999

ACADEMIC YEAR	YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5	
	04	05	05	06	06	07	07	08	08	09

Source of Students (Non-Duplicative Count in Any Given Year)	HC	FTE	HC	FTE	HC	FTE	HC	FTE	HC	FTE
Individuals drawn from agencies/ industries in your service area (e.g., older returning students)	10	5.6	15	8.4	15	8.4	20	11.3	20	11.3
Students who transfer from other graduate programs within the university	10	5.6	5	2.8	2	1.1	2	1.1	2	1.1
Individuals who have recently graduated from preceding degree programs at this university	6	3.4	5	2.8	10	5.6	10	5.6	10	5.6
Individuals who graduated from preceding degree programs at other SUS universities	2	1.1	3	1.7	3	1.7	3	1.7	3	1.7
Individuals who graduated from preceding degree programs at non-SUS Florida colleges and universities	2	1.1	2	1.1						
Additional in-state residents			5	2.8	10	5.6	10	5.6	15	8.4
Additional out-of-state residents			5	2.8	10	5.6	10	5.6	15	8.4
Additional foreign residents										
Other (Explain)										
TOTAL	30	16.8	40	22.4	50	28.0	55	30.9	65	36.5

Note: HC = Headcount of students in this major FTE = Annualized Full-Time-Equivalent students taking courses offered by this major. Annualized FTE's are calculated at 32 credit hours for graduate courses.

HUMAN PERFORMANCE TECHNOLOGY TABLE TWO

FACULTY PARTICIPATION IN PROPOSED DEGREE PROGRAM BY FIFTH YEAR

Faculty CODE (see below)	Faculty Name or "New Hire"	Academic Discipline / Specialty	Rank	(For Existing Faculty Only)		Initial Date for Participation in Proposed Program	5 th Year Workload in Proposed Program (portion of Person-year)
				Contract Status (tenure?)	Highest Degree Granted		
A	Lombardo	ISD/HPT	Assistant Professor	Tenure-earning	Ph.D.	Fall, 2004	.75
A	Maloy	ISD/HPT	Assistant Professor	Tenure-earning	Ed.D.	Fall, 2004	.75
D	Rasmussen	ISD	Associate Professor	Tenured	Ph.D.	Fall, 2004	.12
D	Northrup	ISD	Associate Professor	Tenured	Ph.D.	Fall, 2004	.12
A	New Hire	HPT	Assistant Professor (share with IT)			Fall, 2008	.25
E	New Hire	HPT	Assistant Professor (share with IT)			Fall, 2008	.25

Faculty CODE	Corresponding Faculty Position Category in TABLE 3 for the Fifth Year	Proposed Source of Funding for Faculty	TOTAL 5 th Year Workload by Budget Classification
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A	Current General Revenue	Existing Faculty – Regular Line	1.75
B	Current General Revenue	New Faculty – To Be Hired on Existing Vacant Line	

C	New General Revenue	New Faculty – To Be Hired on a New Line	
---	---------------------	---	--

D	Continuing Education	Existing Faculty – Funded on Continuing Ed.	.24
E	Continuing Education	New Faculty – To Be Hired on Continuing Ed.	.25

Overall Total for 5th Year			2.24
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HUMAN PERFORMANCE TECHNOLOGY TABLE THREE
PROGRAM COSTS

UWF TABLE THREE
**COSTS FOR
PROPOSED
PROGRAM**

FIRST YEAR				FIFTH YEAR			
GENERAL REVENUE		Continuing Education	SUMMARY	GENERAL REVENUE		Continuing Education	SUMMARY
CURRENT	NEW			CURRENT	NEW		

INSTRUCTION & RESEARCH

POSITIONS (FTE)

	1.50		.24	1.74	1.74	.25	.25	2.24
FACULTY								
A&P								
USPS								
TOTAL	1.50		.24	1.74	1.74	.25	.25	2.24

SALARY RATE

	73,967		19,123	93,090	93,090			93,090
FACULTY								
A&P								
USPS						9,600	9,600	19,200
TOTAL	73,967		19,123	93,090	93,090	9,600	9,600	112,290

I&R

	94,678		24,477	119,155	119,155	12,288	12,288	143,731
SALARIES & BENEFITS								
OTHER PERSONAL SERVICES								
EXPENSES	100			100		300	300	600
EQUIPMENT	0			0		375	375	750
TECHNOLOGY	200			200		600	600	1200
LEARNING RESOURCES	100			100		350	350	700
SPECIAL								
TOTAL I&R	95,078		24,477	119,555	119,155	13,913	13,913	146,981

NON-I&R

OTHER ACTIVITIES

	680			680	1,120	140	140	1,400
LIBRARY STAFFING								
UNIV SUPPORT	1,700			1,700	2,960	370	370	3,700
FINANCIAL AID	425			425	740	185	185	1,110
STUDENT SVCS	850			850	1,480	185	185	1,850
TOTAL OTHER ACTIVITIES	3,655			3,655	6,300	880	880	8,060

SUMMARY- HPT Option-MSA	98,733		24,477	123,210	125,455	14,793	14,793	155,041
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APPENDIX B

ABREVIATED RESUMES OF PARTICIPATING FACULTY

PUBLIC ADMINISTRATION

NAME:

Kato B. Keeton

HIGHEST DEGREE:

Ph.D. Public Administration

SCHOOL:

University of Delaware, College of Urban Affairs and Public Policy

RANK:

Associate Professor/Division of Administrative Studies

SAMPLE OF PROFESSIONAL PUBLICATIONS:

Keeton, Kato B. "Evaluation of HIV/AIDS Education Program." Journal of Public Affairs Education, Volume 4, Number 4, October 1998.

Keeton, Kato B. and Cheryl Swanson. "HIV/AIDS Education Needs Assessment: A Comparative Study of Jail and Prison Inmates in Northwest Florida." The Prison Journal, Volume 78, Number 2, June, 1998, pp. 119-132.

Keeton, Kato B. "Characteristics of Successful Women Managers and Professionals in Local Government: A National Survey." Women in Management Review, Volume 11, Number 3, 1996, pp. 27-34.

Keeton, Kato B. and Denise L. Brewton. "AIDS Related Attitudes Among Private Industry Employees: Implications for Training Programs." Southern Business Review, Volume 22, Number 1, 1996, pp. 30-34.

Keeton, Kato B. and Berhanu Mengistu. "Motivators and Job Satisfaction: A Study of Two Public Organizations." Virginia Social Science Journal, Volume 31, Winter, 1996, pp. 142-155.

GRANTS:

Principal investigator on grant awarded by Escambia AIDS Services and Education, Inc. in the amount of \$14,000 for project "Needs Assessment for AIDS Education in Northwest Florida's Prisons and Jails." Summer, 1996.

Summer Research and Small Grant Award in the amount of \$2,000.00 for project "Evaluation of HIV/AIDS Training Programs." University of West Florida, 1995.

DISSERTATION COMMITTEES:

Chair – 4

NAME:

Seok-Eun Kim

HIGHEST DEGREE:

D.P.A. Public Administration

SCHOOL:

University of Georgia, Athens 2002

RANK:

Assistant Professor/Division of Administrative Studies

SAMPLE OF PROFESSIONAL PUBLICATIONS:

Seok E. Kim. (2003) Networks, Organizational. In J. Rabin, & M. Kelly (Eds.), Encyclopedia of Public Administration and Public Policy. New York: Marcel Dekker

Seok E. Kim. (2001) Public trust in government agencies: Basic conceptual considerations. In M.A. Rahim, R.T. Golembieski, & K.D. Mackenzie (Eds.), Current Topics in Management (Vol. 6, pp.331-351). Greenwich, CT: JAI Press

Robert T. Golembiewski, & Seok E. Kim. Perspectives on Appleby and Organizational Analysis. In P.L. Sanjeev Reddy (Ed.) IJPA's Golden Jubilee Volume in Honour of Dean Paul H. Appleby. Indian Institute of Public Administration (in press).

Robert T. Golembiewski, Jong I. Yoon, Seok E. Kim, & Jung W. Lee. Informing an apparent irony in OD II: High success rates and good fit with Confucian work ethic. In R. Woodman & W.A. Pasmore (Eds.), Research in Organizational Change and Development (Vol. 15). New York: Elsevier Science (in press).

William Gillespie, & Seok E. Kim. (2001, June). Cellular phone use while driving: Should it be banned or restricted in Georgia? In R. W. Campbell (Ed.), Policy Notes, 2 (6), Athens, GA: Carl Vinson Institute of Government.

GRANTS:

\$1,000 award from the Advantage Behavioral Health Systems in Georgia for dissertation research.

NAME:

William B. Tankersley

HIGHEST DEGREE:

Doctor of Philosophy, Public Administration

SCHOOL:

Florida State University, 1990

RANK:

Assistant Professor/Division of Administrative Studies

SAMPLE OF PROFESSIONAL PUBLICATIONS:

"Linking Dimensions of Service Quality to Organizational Outcomes", Julia E. Blose and William b. Tankersley. Managing Service Quality (in press)

"The Impact of External Control Arrangements on Organizational Performance", William B. Tankersley. Administration & Society, Volume 32, Number 3, July 2000.

"Florida Privatization in the Mid-1990's: A Focus on Contracting", William B. Tankersley and Richard Chackerian. Substantially revised (2nd edition) chapter in The Florida Policy

Management System: Growth and Reform in American's Fourth Largest State (2nd edition), Richard Chackerian, (ed.) Tallahassee: Florida Institute of Government. (1999) pp. 385-411.

"The Hypothetically Efficient Organization: Exploring The Diagnostic Value of Data Envelopment Analysis", William B. Tankersley and Julia E. Tankersley. Coastal Business Review, Vol. 6, (1997)

"Relative Efficiency of Electric Cooperatives in South Carolina: An Application and Test of Data Envelopment Analysis", William B. Tankersley and Julia E. Tankersley, Coastal Business Review, Vol. 5, (1996), pp. 41-48.

THESIS COMMITTEE:

MPA Member – 2

M.A. Member – 4

NAME:

William M. Haraway, III

HIGHEST DEGREE:

Doctor of Philosophy in Public Administration and Public Affairs

SCHOOL:

Virginia Polytechnic Institute and State University, 1999

RANK:

Assistant Professor/Division of Administrative Studies

SAMPLE OF PROFESSIONAL PUBLICATIONS:

Haraway, III, W.M. "Rohr's Ethics for Bureaucrats Revisited: A Case Study in Local Government Selection Practices for Entry Level Fire Fighters," (Accepted for the cancelled 2003 National Ethics Conference. Under revision for publication consideration in the Ethical Leadership Symposium in Public Integrity).

Haraway, III, W.M. and Haraway, D.L. "Lessons in Administrative Statesmanship: The French Higher Civil Service," (manuscript submitted to International Social Science Review for publication consideration, August 2003)

Haraway, III, W.M. "Rediscovering Process Values in Employee Grievance Procedures," Administrative & Society, vol. 34, no. 5, November 2002: 499-521.

Haraway, III, W.M. "Securing a Job is Hard Work," Getting a Job in Public Administration: The Best Career Advice I Ever Received, PA Times, vol 25, no. 10, 2002 Education Supplement, The American Society for Public Administration, October 2002: 9.

Beach, J.C., Carter, E.D., Goodsell, C.T., Guignard, R.M., Haraway III, W.M., Kumar, M., Morgan, B.N., and Sweet, V.K. "State Administration and The Founding Fathers During the Critical Period," Administrative & Society, vol 28, no. 4, February 1997: 511-530.

NAME:

Larry N. Walker

HIGHEST DEGREE:
Ph.D., Political Science

SCHOOL:
University of North Carolina, Chapel Hill, 1974

RANK:
Associate Professor/Division of Administrative Studies

SAMPLE OF PROFESSIONAL PUBLICATIONS:
Walker, Larry N., Proposed City Charter for the City of Anna Maria, Florida, for the City Council of the City of Anna Maria, 2001

Walker, Larry N., "Report on Impact Fees." Prepared for the Whitman Center for Public Service for the Board of County Commissioners, Santa Rosa County, 1999

Walker, Larry N., The Florida Municipal Officials' Manual, 3rd edition, 1996. Published by the Florida Institute of Government and distributed by the Florida League of Cities. The League has distributed 5,000 copies of this third edition, including one to every elected municipal official in the state.

Walker, Larry N., "Report on a Second Survey of Public Opinion regarding the Proposal of a Charter for Escambia County," prepared for the Charter Commission on Home Rule in Escambia County, August 8, 1994 (7 pp)

Walker, Larry N., "Five-Year Fiscal Analysis," prepared for the City of Milton, August 1, 1994 (49 pp)

CRIMINAL JUSTICE

NAME:
Katherine A. Johnson

HIGHEST DEGREE:
Ph.D. Criminology

SCHOOL:
Indiana University of Pennsylvania

RANK:
Assistant Professor/Dept. of Criminal Justice and Legal Studies

SAMPLE OF PROFESSIONAL PUBLICATIONS:
Johnson, K. (Forthcoming 2003). Interviews as a data collection method: But which type should I use? In *Controversies in Criminal Justice Research*. (R. Tewksbury and E. Mustaine, Eds.). Cincinnati: Anderson Publishing.

Kunselman, J. and Johnson, K. (Forthcoming 2003). Using case studies to facilitate learning. *College Teaching*.

Kunselman, J., Johnson, K., and Rayboun, M. (2003). Profiling sentence enhancement offenders: A case study of Florida's 10-20 Lifers. *Criminal Justice Policy Review*, 14 (2) pp. 229-248.

Johnson, K. (2002). States' Use of GPS Offender Tracking Systems. *Journal of Offender Monitoring*, 15(2), pp. 15, 21-22, 26.

Johnson, K. and White, J. (2002). The use of Multiple Intelligences in criminal justice education. *Journal of Criminal Justice Education*, 13(2), pp. 39-386.

GRANTS:

Johnson, K. (2003). For whom the alarm sounds: The use of global positioning satellites to monitor sex and other violent offenders in Florida. Awarded through the UWF 2003 Faculty Summer Research Grant Program. (\$6,250.00)

Johnson, K. (2002). Creation of a mixed format course for CCJ 3070. Awarded through the Center for University Learning and Teaching. (\$2,500.00 stipend)

Johnson, K. (2002). Club Drug Use by University Student Athletes: A Pilot Study. Awarded through the UWF Faculty Small Grants. (\$1,700.20)

Johnson, K. and Kunselman, J. (2001). Club Drug Use among College Students: A Trend Analysis. Awarded through the UWF 2001 Faculty Summer Research Grant Program. (\$6,150.00 salary only)

NAME:

Julie C. Kunselman

HIGHEST DEGREE:

Ph.D. Urban and Public Affairs

SCHOOL:

University of Louisville, Louisville, Kentucky, 2000

RANK:

Assistant Professor/Division of Criminal Justice and Legal Studies

SAMPLE OF PROFESSIONAL PUBLICATIONS:

Kunselman, Julie C. (In press). Broadening the education experience: Findings from a K-12 and Higher Education service learning pilot project. *Journal of Higher Education Outreach and Engagement*, 8(2).

Kunselman, Julie C., and Johnson, K., (In press). Using the case method to facilitate learning. *College Teaching*.

Vito, G. F., Walsh, W. F., Kunselman, J.C., (In press). Community policing: The middle manager's perspective. *Policy Quarterly*.

Kunselman, Julie C., Hensley, C., Tewksbury, R., (2003). Mentoring in academia: A commitment that facilitates professional development. *Journal of Criminal Justice Education*, 14(1): 17-36.

Kunselman, Julie C., Johnson, K., Rayboun, M. (2003). Profiling sentence enhancement offenders: A case study of Florida's 10-20 Lifers. *Criminal Justice Policy Review*, 14(2): 229-248.

GRANTS:

Kunselman, J.C. (2003). Computers to Enhance Student Learning: Internships and Research. Five computers received from AmSouth Bank for students use at on and off-campus internship and research sites. (Five computers)

Kunselman, J.C. and Ferguson, F. (2001-2002). UWF-Woodham High School Law Academy Conflict Resolution Pilot Model. Funded by Florida Department of Education: Florida Learn and Serve K-12. (Year 2: \$15,877)

Kunselman, J.C. and Ferguson, F. (2000-2001). UWF-Woodham High School Law Academy Conflict Resolution Pilot Model. Funded by Florida Department of Education: Florida Learn and Serve K-12. (Year 1: \$17,830)

Kunselman, J. C. (2003). Web based Course Creation of CCJ3024: American Criminal Justice System. Funded by UWF Center for University Teaching and Learning Program for Enhancing Teaching and Learning with Technology. (\$2,500)

Kunselman, J.C., Scott, D.L., Tatum, K.M., (2003). Profiling Juveniles in Unified Family Court, Santa Rosa County, FL. Funded by UWF 2002/2003 Faculty Scholarly and Creative Activity Award. (\$1,773)

Scott, D.L., and Kunselman, J.C., (2003). Analysis of Civil Court Domestic Violence Cases in Santa Rosa County, FL. Funded by UWF 2002/2003 Faculty Scholarly and Creative Activity Award. (\$1,780)

Kunselman, J.C. (2002). Profiling Juvenile Arrestees in Escambia County, FL. Funded by UWF 2001/2002 Faculty Small Grants Award. (\$1,926)

Johnson, K.A., and Kunselman, J.C. (2001). Patterns and Trends of GHB Use Among College Students: A Case Study at the UWF. Funded by UWF 2000 Summer Research Grant (\$6,150)

Kunselman, J.C., Johnson, K.A., and Rayboun, M. (2001). 10-20-Life: A Policy Analysis of a Florida Criminal Statute. Funded by UWF 2000/2001 Faculty Small Grants Award. (\$1,954)

NAME:

Cheryl Swanson

HIGHEST DEGREE:

Ph.D. Political Science

SCHOOL:

University of Oklahoma, 1976

RANK:

Associate Professor/Division of Criminal Justice and Legal Studies

SAMPLE OF PROFESSIONAL PUBLICATIONS:

"Juvenile Mentoring in Jail: A Partnership with Higher Education." American Jails, (May/June, 1998), pp. 38-43.

"HIV/AIDS Education Needs Assessment: A Comparative Study of Jail and Prison Inmates in Northwest Florida." The Prison Journal, (June, 1998), pp. 119-132.

"Mentoring Juveniles in Adult Jail: An Example of Service Learning." Journal of Criminal Justice Education, (Fall, 1997), pp.263-271. (with Kate King and Nicole Wolbert as second and third authors).

"Have Attitudes Changed? Citizen' Views of Prison Effects on Their Community Over Time." State and Local Government Review, (Fall, 1997), pp. 147-155.

"Children of Incarcerated Parents: Hidden Victims at Risk." Proteus: A Journal of Ideas, (Fall, 1996), pp.61-64.

NAME:

Bernadette Olson

HIGHEST DEGREE:

Ph.D. Criminal Justice, Sociological Deviance & Forensic Psychology

SCHOOL:

Washington State University, 2003

RANK:

Assistant Professor/ Division of Criminal Justice and Legal Studies

SAMPLE OF PROFESSIONAL PUBLICATIONS:

Co-creator in the development, writing, and implementation of an *Introduction to Criminal Justice* course for Washington State University's Extended Degree Program

Book Reviews:

Treating Youth Who Sexually Abuse: An Integrated Multi-Component Approach. The Haworth Press, September 2002, *Journal of Cotemporary Criminal Justice*.

Identifying Child Molesters: Preventing Child Sexual Abuse by Recognizing the Patterns of the Offenders. The Haworth Maltreatment and Trauma Press, December 2002, *Journal of Cotemporary Criminal Justice*.

NAME:

Keith E. Clement

HIGHEST DEGREE:

Ph.D. Political Science

SCHOOL:

University of Tennessee, 2001

RANK:

Assistant Professor/Division of Criminal Justice and Legal Studies

SAMPLE OF PROFESSIONAL PUBLICATIONS:

Clement, K.E., 2003. "Three Strikes Laws." In Otis H. Stephens and John Scheb, Eds. *Encyclopedia of American Civil Liberties and Rights*. Westport, CT: Greenwood Publishing. Forthcoming.

Clement, K.E., 2003. "Contributions of Political Science Models to Understanding U.S. Supreme Court Decisions." *Judicature*. Submitted for review in September 2003.

Barbrey, J.W., and Clement, K.E., 2001. "An investigation into the Hybridization of State Sentencing Schemes." *American Jails*. Vol. 15, No. 3 July/August.

EDUCATIONAL LEADERSHIP

NAME:

Robin Largue

HIGHEST DEGREE:

Ed.D. Educational Leadership

SCHOOL:

Florida State University, 1980

RANK:

Associate Professor/Department of Curriculum Studies and Educational Leadership

NAME:

Arthur H. Olson

HIGHEST DEGREE:

Ed.D. Secondary Leadership and Curriculum & Instruction

SCHOOL:

Northern Illinois University, 1974

RANK:

Professor/Department of Curriculum Studies and Educational Leadership

SAMPLE OF PROFESSIONAL PUBLICATIONS:

Co-authored with Robert Rothberg, *A Work Text for Educational Supervision*, Burgess Publishing Company, 1980; 1984.

Judge Competency?? 9(2), 161-173, *Applied Measurement in Education*, 1996, Lawrence Erlbaum Associates, Inc.

Olson, Art and Weos, Lynn, (2001) "ARDA's Convention Offers Personal Enrichment Leadership Experience Developments, 4/5, 92-93

GRANTS:

Strengthening School and Community Communication. DOE, Office of Policy Research and Improvement for Osceola County Schools, \$200,000.

To develop learning episodes for the EDA 6130, Supervision course which will employ the microcomputer as a vehicle of instruction, Fall, 1984. UCF Instructional Development Grant, \$2,700.

"True Colors – The Real Me" (Drop Out Prevention Program), June, 1988. DOE – Mille Childhood District Multiagency Coordinating Council for Osceola County Schools, \$31,690.

Candidate and Semi-finalist in Selection Process, Battle Creek, MI, December, 1987 Kellogg National Fellowship Program, \$25,000

"An Analysis of National State and District Strategies Relating to Level III – Principal Certification," March, 1988. DOE – Florida Council on Educational Management, Tallahassee, FL, \$4,000

"Democracy in Action – An American Studies Winter Institute," Bureau of Educational and Cultural Efforts of the United States Information Agency (USA), Washington, DC, \$100,319

"Recycling Awareness Curriculum Development Program," April, 1989 Florida DOE, \$131,000

"Development and Administration of EMT and Paramedic Exams," February, 1989 Florida Emergency Services Department, \$650,000.

"Subject Area Teacher Competency Exam," 1987-1989 Florida DOE, \$1,419,261

"Subject Area Teacher Competency Exam Passing Score Research," 1988-1989 Florida DOE, \$616,000

"IGE Implementation Grant," 1979-1980 University of Wisconsin Research and Development Center, Madison, WI, \$15,000

Improvement of Geographic Awareness and Network Development for the State of Florida National Geographic Society Grant to Florida Geographic Alliance, "Scribe" and one of founding members of Florida Geographic Alliance, \$15,000 (1987); \$50,000 (1988)

Professional Development Grant. UCF College of Education Award to become a certified trainer of LIFO Training, (A Human Resource Technology Organization, Beverly Hill, CA), November 1987, \$1000.

DISSERTATIONS DIRECTED – 30

NAME:

Sherri Zimmerman

HIGHEST DEGREE:

Ph.D. Educational Administration and Supervision

SCHOOL:

Saint Louis University, 1995

RANK:

Assistant Professor/Department of Curriculum Studies and Educational Leadership

SAMPLE OF PROFESSIONAL PUBLICATIONS:

Zimmerman, S. (2002). Handbook of certification requirements for school administrators. Bowie, MD, University Press.

Lawson, J., & Zimmerman, S. (2003) *Data driven and research based drop-out prevention strategies that work*. Larchmont, NY, Eye on Education.

Zimmerman, S. (2002). Five steps for improving teacher education: focusing on the continual improvement of teaching and learning. *The Professional Educator*, Spring 2003

Zimmerman, S. & Lawson, J. (2002). Implementing effective in-school suspension: a model that works, *The Journal of At-Risk Issues*, Fall 2003.

Zimmerman, S. & Pelton, M. (2002). Perceptual sensitivity and motor competence in 5 and 6 month old infants. *Journal of Genetic Psychology*, Fall 2003.

THESIS/DISSERTATION DIRECTED – 1

HUMAN PERFORMANCE TECHNOLOGY

NAME:

Charles J. Lombardo

HIGHEST DEGREE:

Ph.D., Instructional Systems

SCHOOL:

Florida State University, 1992

RANK:

Assistant Professor/Department of Instructional and Performance Technology

SAMPLE OF PROFESSIONAL PUBLICATIONS:

Rasmussen, K., Northup, P. & Lombardo, C. (2002). *Seven Years of Online Learning*, IITSEC, Orlando

Lombardo, C. & Northrup, P. (2003). *Developing Human Performance Technologists: How are Graduate Programs Responding?* ISPI, Boston.

Lombardo, C., Kelley, D., and Garman, A. (2004). *Lessons Learned: Implementing a Distance Learning Initiative*. Annual international meeting of the Society of Information Technology and Education, Atlanta, GA

Lombardo, C., O'Connor, H, and Hayes, R. (1996). *Metaphors and Analogies in Interface Design*, Annual Conference of the International Society for Performance Improvement, Dallas TX

GRANTS:

Researcher: program evaluation of product for Harcourt Interactive Technology

THESES/DISSERTATION DIRECTED – 3 currently

NAME:

Nancy N. Maloy

HIGHEST DEGREE:

Ed.D. Instructional Design and Development/Postsecondary Education

SCHOOL:

Florida State University, 1980

RANK:

Assistant Professor/Department of Instructional and Performance Technology

SAMPLE OF PROFESSIONAL PUBLICATIONS:

Perry (Maloy), N.N., Mini or Maxi: Which computer is right for you? *Audiovisual Instruction*, 1979, 24 (2), 16-18

Perry, (Maloy), N.N., *Effects of Structural and Pictorial Support upon Aural Learning of Concepts, Rules, and Problem-Solving Skills*. Florida State University. Unpublished doctoral dissertation, 1979.

Perry (Maloy), N.N., *Effects of Structural and Pictorial Support upon Aural Learning of Concepts, Rules, and Problem-Solving Skills*. Paper presented at the Association of Education Communications and Technology Annual Convention for Young Researcher Award. Denver, Colorado, April 1980.

Perry (Maloy), N.N., Solving our training problems. *Campus*, 10 (3), 1981, 23-29.

Perry (Maloy), N.N. and T. Perry. Media: Selection of the fittest. *Educational Technology XXI*, 21 (4), 1981, 23-27.

NAME:

Karen Rasmussen

HIGHEST DEGREE:

Ph.D. Instructional Design and Development

SCHOOL:

University of South Alabama, 1996

RANK:

Associate Professor/Department of Instructional and Performance Technology

SAMPLE OF PROFESSIONAL PUBLICATIONS:

Rasmussen, K.L. (2003). *Faculty Teaching Portfolio*. In Peter Seldin, *The Teaching Portfolio*.

Northrup, P.T., Rasmussen, K.L., & Dawson, B. (2004). Designing and Reusing Learning Objects to Streamline Web-Based Instructional Development. In A-M. Armstrong, (ed). *Instructional Design in the Real World: A View from the Trenches*. Hershey, PA: IDEA Group.

Rasmussen, K.L. (2002). Competence at a Glance: Professional Knowledge, Skills, and Abilities in the Field of Instructional Design and Technology. Dempsey, J. & Reiser, R. (eds.) *Trends and Issues in Instructional Design and Technology*, pgs. 375-386. Upper Saddle River, NJ: Merrill.

Northrup, P.T. & Rasmussen, K.L., (2001). A Web-Based Graduate Program: Theoretical Frameworks in Practice. Maddux, C.D. & Johnson, D.L. (eds.) *The Web in Higher Education: Assessing the Impact and Fulfilling the Potential*. NY: The Haworth Press.

Northrup, P.T., Rasmussen, K.L. & Pilcher, J.K. (2001). EPSS: A Professional Development Tool. In B.H. Khan (ed.), *Web-based Training*, pgs. 469-474. Englewood Cliffs, NJ: Educational Technology Publications.

DISSERTATIONS COMMITTEES:

Chair – 14 doctoral

NAME:

Pamela Northrup

HIGHEST DEGREE:

Ph.D. Educational Research/Instructional Systems

SCHOOL:

Florida State University, 1992

RANK:

Associate Professor and Director/Innovative Technology Center

SAMPLE OF PROFESSIONAL PUBLICATIONS:

Northrup, P.T. (2002). In Rossett, A., *ASTD's e-Learning Handbook: Best Practices, Strategies and Case Studies for an Emerging Field. A framework for designing interactivity into web-based instruction*. McGraw-Hill

Northrup, P.T. (2002). An initial investigation of online learners' preferences for interaction. *Quarterly Review of Distance Education*, 3(3).

Northrup, P.T. and Rasmussen, K.L. (in press). In Armstrong, A.M., *Instructional Design for the Real World: A View from the Trenches. Designing and reusing learning objects to streamline web-based instructional development*.

Northrup, P.T. and Rasmussen, K.L. (2001). In Maddux, C.D. and Johnson, D.L., *The Web in Higher Education. Considerations for designing web-based programs*. The Haworth Press, New York.

Northrup, P.T., Rasmussen, K.R. & Pilcher, J. (2001). *STEPS as a tool for supporting teacher performance*. In Khan, B.H. *Web-based instruction*. Englewood Cliffs, NJ: Educational Technology Publications.

DISSERTATION COMMITTEES:

Chair – 14 doctoral

HEALTH CARE ADMINISTRATION

NAME:

Francis Stephen Bridges

HIGHEST DEGREE:
Ed.D. Health Education

SCHOOL:
The University of Alabama, 1982

RANK:
Professor/Division of Health, Leisure and Exercise Science

SAMPLE OF PROFESSIONAL PUBLICATIONS:

Bridges, F.S., & Kunselman, J. (2003). Rates of suicide in the world: 2002 update. *North American Journal of Psychology*, In Press.

Bridges, F.S. & Williamson, C.B. (2003). Association of national cancer mortality and suicide rates. *Perceptual & Motor Skills*, 97, 424-426.

Bridges, F.S., Keeton, K.B., & Clark, L.N. (2002). Responses to Lost Letters about a 2000 General Election Amendment to Abolish Prohibition of Interracial Marriages in Alabama. *Psychological Reports*, 91, 1148-1150.

Bridges, F.S., Scheibe, J.J., Meyer, L.G. (2002) Reliability of estimates of return rates as a measure of public attitudes to violence. *Psychological Reports*, 90, 677-678.

Bridges, F.S., and Coady, N.P. Urban Size Differences in Incidence of Altruistic Behavior. In Bradley J. Caskey (Ed.), *STAND! Social Psychology* (Section 13: Prosocial Behavior, Issue: "Small-town nice" and big-city mean" – fact or fiction?, Article #25). ISBN: 0-395-97364-3. River Falls, WI: Coursewise Publishing (2000)

GRANTS:

University Summer (2002) Research Award: "Perceptions of and Reactions to the Homeless: A Survey of Grade School, High School, and College Students in a Large Florida Community." (\$7,500)

Program for Enhanced Teaching and Learning with Technology (Summer 2001): Social Marketing for Health Education (\$2,500), College of Professional Studies, UWF

Development of an on-line course for Summer 2000: Interactive Technology for Health Educators - .25FTE (\$5000) College of Professional Studies, UWF

Escambia H.E.A.T./Florida Tobacco Prevention Pilot Program, P.I. Bridges, F.S. "An Intervention to Reduce the Sale of Cigarettes to Underage Minority Youths." (\$728) and "An Intervention to Reduce the Sale of Smokeless Tobacco Products to Minors. (\$728.) Oct. 1998

Escambia H.E.A.T./Florida Tobacco Prevention Pilot Program, P.I. Bridges, F.S. "Accessibility to Minors of Cigars – Escambia County, Florida, 1998." (\$1000) June 1998

A Proposal for a Distance Learning Initiative: "Delivery of a Personal and Community Health Class via a Distance Learning Format." Scheduled as HSC4990 (5745p)/HSC5990 (5924p), Summer, 1998. (\$5000) Feb. 1998

UWF's Small Grants Award, P.I. Bridges, F.S. "Affiliation, Community Size, Preparation Style, and Regional Differences in Incidence of Helping Behavior." (\$1722) April 1997

Florida Atlantic University's Foundation Faculty Research Grants, P.I., Bridges, F.S. "The Effects of Aerobic Exercise on Immunologic Responsiveness and Resistance to Tumor Growth in Rats." (\$1000) Aug. 1995

East Carolina University's Faculty Senate Research and Creative Activity Committee, P.I. Bridges, F.S. "Effects of Vasectomy and Exercise on Immunologic Function and Tumor Growth in Lewis Strain Rats, (\$2500) March 1983

East Carolina University Faculty Senate Research and Creative Activity Committee, P.I. Bridges, F.S. "Effects of Vasectomy and Exercise on Antisperm Antibody and Serum Lipid Levels, Arterial Wall Cholesterol Deposition and the Extent and Severity of Atherosclerosis" (\$3000) March 1984

DISSERTATION COMMITTEES:
Member – 7 doctoral students

Proposed New Programs - History: (This page is to be included at the end of the proposal document to display approvals at each level.)

Approved to Explore and Plan:

Dean _____ Date June 16, 2003

Faculty Senate _____ Date Oct. 10, 2003

Provost _____ Date Oct. 20, 2003

President _____ Date Oct. 22, 2003

BOT A&SA Committee _____ Date Nov. 7, 2003

Approved to Implement:

Dean _____ Date _____

Faculty Senate _____ Date _____

Provost _____ Date _____

President _____ Date _____

BOT A&SA Committee _____ Date _____

BOT _____ Date _____

FBOE Reporting and Approvals:

Bachelor's and Master's Programs Reported to the FBOE: _____

Specialist and Doctoral Programs Submitted to FBOG: _____

Specialist and Doctoral Programs Approved by FBOG: _____

Licensure Programs approved by Legislature: _____

Implementation and Reporting:

Term Implemented: _____

One-Year Report Presented to Board of Trustees: _____

Three-Year Report Presented to Board of Trustees: _____

Five-Year Program Review Presented to Board of Trustees: _____

**The University of West Florida
REQUEST TO OFFER A NEW DEGREE PROGRAM
Master's Degrees**

College Requesting Program: College of Professional Studies

Department Requesting Program: Division of Teacher Education/Department of Elementary and Middle Level Education

Academic Specialty or Field: Reading Education

Name of Program Requested: Reading Education

Proposed Implementation Date: Fall 2004

Proposed Classification of Instruction Program (CIP) Code: CIP 13.1315, DOE Code 212

The submission of this proposal constitutes a commitment by the Division of Academic Affairs, the appropriate College, and the Department that, if the proposal is approved, the necessary financial commitment and the criteria for establishing new programs have been met prior to the initiation of the program.

Approved for Submission to the UWF Board of Trustees:

_____ Vice President for Academic Affairs, Date _____

_____ President, Date _____

Indicate the dollar amounts appearing as totals for the first and fifth years of implementation as shown in the appropriate summary columns in New Program Table Three. Provide headcount and FTE estimates of majors for years 1 through 5. Headcount and FTE estimates should be identical to those in New Program Table One.

	Projected Total Estimated Costs (from Table Three)	Student HDCT / FTE (from Table One)
First Year of Implementation	\$161,407	10/5.6
Second Year of Implementation	\$164,407	12/6.8
Third Year of Implementation	\$168,407	14/7.9
Fourth Year of Implementation	\$169,407	16/9.0
Fifth Year of Implementation	\$171,677	18/10.1

Note: This outline and the questions pertaining to each section must be reproduced within the body of the proposal in order to ensure that all sections have been satisfactorily addressed.

I. PROGRAM DESCRIPTION

Describe the degree program under consideration, including its level, and emphases (including tracks or specializations).

The Reading Education program currently exists as a track in the Curriculum and Instruction umbrella. It is a Masters of Education in Curriculum and Instruction/Reading Education. With the proposed CIP change, it will be a Master's of Education Reading Education.

II. INSTITUTIONAL MISSION

Is the proposed program listed on the current List of Proposed New Degree Programs for Exploration, Planning, and Implementation? How do the goals of the proposed program relate to the UWF mission statement as contained in the Partnership Strategic Plan?

The program is concurrently being proposed for exploration, planning, implementation, and CCR changes, because it is an existing program and there will not be any faculty and/or resource changes.

III. PLANNING PROCESS AND TIMETABLE

Describe the planning process leading up to submission of this proposal. Include a chronology of activities, listing UWF personnel directly involved and any external individuals who participated in planning. Provide a timetable of events for the implementation of the proposed program.

For several years, we have had to turn away students interested in a Master's of Education in Reading because they already graduated using this CIP code and the State of Florida would not allow a second Master's degree utilizing the same CIP code. Therefore, the Division of Teacher Education faculty members pursued the ability to return Reading Education to its original CIP. Originally, the CIP was unilaterally changed to Curriculum and Instruction as part of a university effort to reduce programs and did not follow the current planning guidelines.

IV. ASSESSMENT OF NEED AND DEMAND

A. What national, state, or local data support the need for more people to be prepared in this program at this level? (This may include national, state, or local plans or reports that support the need for this program; demand for the proposed program which has emanated from a perceived need by agencies or industries in Northwest Florida; and summaries of prospective student inquiries.) Indicate potential employment options for graduates of the program. If similar programs exist in the Northwest Florida region, provide data that support the need for an additional program.

There is an ongoing emphasis in reading instruction based on declining literacy rates. This is further emphasized by the *Just Read*

Florida! program implemented by Governor Bush (Executive Order 01-260 signed by Governor Jeb Bush on September 7, 2001 implementing a comprehensive and coordinated reading initiative see: <http://www.justreadflorida.com/>).

Teachers pursuing initial certification generally seek grade-band certification initially and then pursue reading certification secondarily. One a graduate student receives a Master's in Curriculum and Instruction for a grade level (Primary, Elementary, Middle Level, Secondary) they cannot continue on at UWF in a Reading program.

- A. Use UWF Table One A (baccalaureate) or UWF Table One B (graduate) to indicate the number of students (headcount and FTE) you expect to major in the proposed program during each of the first 5 years of implementation, categorizing them according to their primary sources. In the narrative following Table One, the rationale for enrollment projections should be provided and the estimated headcount to FTE ratio explained. If, initially, students within the institution are expected to change majors to enroll in the proposed program, describe the shifts from disciplines that will likely occur.

We anticipate that the program will continue to grow based on the strong focus for Reading Education nationwide and especially in Florida. The anticipated headcount and FTE will grow steadily from 10/5.6 to 18/10.1 over the five year period.

- CI. **For all programs, indicate what steps will be taken to recruit and achieve a diverse student body in this program.**

The problem is not with recruiting, the students are already available. The problem is our ability to offer the students what they need.

V. CURRICULUM

- A. **For all programs, provide expected specific learning outcomes, a sequenced course of study, and list the total number of credit hours for the degree. Degree programs in the science and technology disciplines must discuss how industry-driven competencies were identified and incorporated into the curriculum. For bachelor's programs, also indicate the number of credit hours for the major coursework, the number of credit hours required as prerequisites to the major (if applicable), and the number of hours available for electives.**

Learning Outcomes

1. Demonstrate knowledge of the theories of literacy processes.
2. Demonstrate knowledge of emergent literacy.
3. Demonstrate knowledge of decoding and encoding.
4. Demonstrate knowledge of comprehension of narrative and expository texts.
5. Demonstrate knowledge of content area literacy.

6. Demonstrate knowledge of literature.
7. Demonstrate knowledge of oral and silent reading.
8. Demonstrate knowledge of students' attitudes.
9. Demonstrate knowledge of exceptional learners and diverse populations.
10. Demonstrate knowledge of literacy assessment.
11. Demonstrate knowledge of print and nonprint media.
12. Demonstrate knowledge of instructional approaches, organization, and management of a literacy program.
13. Demonstrate knowledge of literacy program supervision and administration

Course Sequencing

Educational Foundation Courses (7 semester hours)

1. EDF 6460 Foundations of Measurement
2. EDF 6691 Issues in Teacher Education: Bio-Psycho-Social Understanding

Reading Specialization (30 semester hours)

3. LAE 5xxx Teaching Pupils to be Effective Writers
4. LAE 5xx1 Literature for Children and Young Adults
5. RED 5515 Classroom Reading Assessments
6. RED 6116 Foundations of Early Literacy
7. RED 6161 Reading Across the Curriculum
8. RED 6546 Identifying and Preventing Reading Difficulties
9. RED 6747 Research & Trends in Reading
10. RED 6xxx Foundations of Middle and Secondary Literacy
11. RED 6xx1 Differentiating Instruction
12. RED 6xx2 Practicum in the Clinical Teaching of Reading

Program: 37 Hours

- B. For bachelor's programs, if the total number of credit hours exceeds 120, provide a justification for an exception to the FBOG policy of a 120 maximum.**

N/A

- C. Provide a one or two sentence description of each required or elective course.**

Educational Foundation Courses (7 semester hours)

- EDF 6460 Foundations of Measurement
 - Provides an understanding of the nature of instrument and test development and focuses on the information and skills needed to design, develop, analyze, and interpret

tests and instruments; the use of testing or instrument results in planning, monitoring, and evaluating instruction or programs; and to evaluate student or program progress. Intended to provide a foundation in testing and instrument development skills for those who work in a variety of applied settings.

- EDF 6691 Issues in Teacher Education: Bio-Psycho-Social Understanding
 - Examines current issues in education from a multi-perspective point of view. Issues may include changes in school achievement, standardized testing, motivation, social, economic, and political pressures, character education, population make-up, exceptionalities, new technologies, and the role of the public school in society. We will focus on understanding the biological, psychological and social factors that inform these issues.

Reading Specialization (30 semester hours)

- LAE 5xxx Teaching Pupils to be Effective Writers
 - Designed to assist K-12 teachers to further develop skills and understandings requisite to implementing a successful writing program in the classroom. Emphasis is placed upon provision of a balance between expressive and practical composition opportunities for pupils and upon instructional procedures to assist pupils to develop the strategies and skills that support effective written communication.
- LAE 5xx1 Literature for Children and Young Adults
 - Comprehensive survey of literature for children and young adults. Critical analysis and review of the writings of authors and illustrators and how to effectively use their materials in instructional settings. Evaluation and selection of materials based upon the biological, socio-cultural, psychological and developmental characteristics of children and young adults; guidance in their use, emphasizing attitudes, interests, problems, and opportunities of children and young adults in contemporary society. Evaluation, selection, and use of both print and nonprint materials for children; impact of mass media on children and young adults in our society; analysis of attitudes, issues and values reflected in these media and their use in educational settings.
- RED 5515 Classroom Reading Assessments
 - An exploration into the theories and appropriate assessment practices by classroom teachers.
- RED 6116 Foundations of Early Literacy
 - Emphasizes reading theory and instruction for early and beginning literacy. Students will examine how particular theories of literacy impact instructional practices used when teaching reading and writing in the Pre-K - 5 classroom.
- RED 6161 Reading Across the Curriculum
 - Features techniques and activities for assessing needs and teaching comprehension, vocabulary, and study skills in content areas. Integrates theory with practice and is designed for teachers of content area subjects and reading teachers. Prepares teachers to make instructional decisions based on sound theory, reason, applied knowledge and learner needs.
- RED 6546 Identifying and Preventing Reading Difficulties
 - Study and clinical experience to develop competence in determining causes and degrees of reading disabilities,

recommending specific corrective or remedial instruction to meet specific needs and preparing case studies.

- RED 6747 Research & Trends in Reading
 - Review of significant research in reading, introduction to techniques and critical analysis of reading research, review and comparison of trends in development of materials, approaches and reading programs.
- RED 6xxx Foundations of Middle and Secondary Literacy
 - Emphasizes reading theory and instruction in the middle and secondary grades based on research and classroom practice. Students will examine how particular theories of literacy impact the instructional practices used when teaching reading and writing.
- RED 6xx1 Differentiating Instruction
 - Explores differentiating instruction to meet the needs of all learners and teaches how to prevent or remediate reading difficulties. The focus will be on the interpretation of reading assessment and the implementation of research based instructional practices.
- RED 6xx2 Practicum in the Clinical Teaching of Reading
 - Designed to provide a supervised clinical experience in reading assessment and tutoring. Students will conduct a thorough diagnostic screening and provide one-to-one tutoring for a struggling reader. Permission is required.

D. For bachelor's programs, list any prerequisites, and provide assurance that they are the same as the standardized prerequisites for other such degree programs within the FBOG. If they are not, provide a rationale for a request for exception to the policy of standardized prerequisites.

N/A

E. For bachelor's programs, if the Department intends to seek formal Limited Access status for the proposed program, provide a rationale which includes an analysis of diversity issues with respect to such a designation.

N/A

VI. UWF CAPABILITY

A. How does the proposed program specifically relate to existing UWF strengths such as programs of distinction, other academic programs, and/or institutes and centers?

We currently have a strong Reading program with support throughout the Florida Panhandle.

B. If there have been program reviews, accreditation visits, or internal reviews in the discipline pertinent to the proposed program, or related disciplines,

provide all the recommendations and summarize progress toward implementing the recommendations.

This program achieved full National Council for Accreditation of Teacher Education (NCATE) and Florida Department of Education approval in 2003/2004.

- C. Describe briefly the anticipated delivery system for the proposed program as it may relate to resources e.g., traditional delivery on main campus; traditional delivery at branches or centers; or nontraditional instruction such as instructional technology (distance learning), self-paced instruction, and external degrees. Include an analysis of the feasibility of providing all or a portion of the proposed program through distance learning technologies. Include an assessment of the UWF's technological capabilities as well as the potential for delivery of the proposed program through collaboration with other universities or community colleges. Cite specific queries made of other institutions with respect to the feasibility of utilizing distance learning technologies for this degree program.**

This program will continue to use a blend of traditional, off-campus, and online course delivery methods. If the student base warrants, a significant portion of the program could be made available online.

- D. Assessment of Current and Anticipated Faculty**

- 1. Use UWF Table Two to provide information about each existing faculty member who is expected to participate in the proposed program by the fifth year. If the proposal is for a graduate degree, append to the table the number of master's theses directed, number of doctoral dissertations directed, and the number and type of professional publications for each faculty member.**

There are two full-time faculty members currently in the program. We anticipate that this will remain the same for the next five years.

- 2. Also, use UWF Table Two to indicate whether additional faculty will be needed to initiate the program, their faculty code (i.e., one of five unofficial budget classifications as explained on the table), their areas of specialization, their proposed ranks, and when they would be hired. Provide in narrative the rationale for this plan; if there is no need for additional faculty, explain.**

N/A

- 3. Use UWF Table Two to estimate each existing and additional faculty member's workload (in percent person-years) that would be devoted to the proposed program by the 5th year of implementation, assuming that the program is approved. (Note: this total will carry over to UWF Table Three's fifth year summary of faculty positions.)**

Workloads will not be changed.

E. Assessment of Current and Anticipated Resources

1. In narrative form, assess current facilities and resources available for the proposed program in the following categories:

a. Library volumes (Provide the total number of volumes available in this discipline and related fields.)

There are currently approximately 6741 Reading library volumes.

b. Serials (Provide the total number available in this discipline and related fields, and list those major journals which are available at UWF.)

There are currently 20 Reading serials.

c. Describe classroom, teaching laboratory, research laboratory, office, and any other type of space that is necessary and currently available for the proposed program.

We have one-two classrooms used in Building 86 for courses and two offices in Building 85 for the faculty members. This should remain constant throughout the next five years.

d. Equipment

There is not any specialized equipment related to this program.

e. Fellowships, scholarships, and graduate assistantships (List the number and amount allocated to the academic unit in question for the past year.)

There are not any fellowships, scholarships, and graduate assistantships directly related to the Reading program.

f. Internship sites

The Reading program does not have any internship sites

2. Describe additional facilities and resources required for the initiation of the proposed program (e.g., library volumes, serials, space, assistantships, specialized equipment, other expenses, OPS time, etc.). If a new capital expenditure for instructional or research space

is required, indicate where this item appears on UWF's capital outlay priority list. The provision of new resources will need to be reflected in the budget table (UWF Table Three), and the source of funding indicated. UWF Table Three requires the display of Instruction and Research (I&R) costs only, unless expected enrollment in the new program is high enough to impact non I&R costs, such as library staffing, university support, and student services.

There will not be a change in resources for the CIP change.

VII. ASSESSMENT OF IMPACT ON PROGRAMS CURRENTLY OFFERED

A. Budget

1. **Assuming no special appropriation or UWF allocation for initiation of the program, how would resources within the College and Department be shifted to support the new program?**

There will not be any shifted resources or new budgetary needs.

2. **Use UWF Table Three to display dollar estimates of both current and new resources for the proposed program for the first through the fifth years of the program. In narrative form, identify the source of both current and any new resources to be devoted to the proposed program.**

Current revenue as well as future revenue will be based on the traditional FTE funding model for the Department of Elementary and Middle Level Education. The current budgetary amount is \$161,407 and the proposed figure after five years is \$171,677 due to salary increases of existing faculty members.

3. **Describe what steps have been taken to obtain information regarding resources available outside the institution (businesses, industrial organizations, governmental entities, etc.). Delineate the external resources that appear to be available to support the proposed program.**

N/A

- B. **Describe any other projected impacts on related programs, such as prerequisites, required courses in other departments, etc.**

N/A

VIII. COMMUNITY COLLEGE ARTICULATION

For undergraduate programs, describe in detail plans for articulation with area community colleges.

N/A

- IX. ASSESSMENT OF APPLICABLE ACCREDITATION STANDARDS** List the accreditation agencies and learned societies that would be concerned with the proposed program. Does the department or program anticipate seeking accreditation from any of these agencies? If so, indicate when accreditation will be sought. If the proposed program is at the graduate level, and a corresponding undergraduate program is already in existence, is the undergraduate program accredited? If not, why?

This program is currently accredited under NCATE and approved by the Florida Department of Education (program code 212).

XVI. PRODUCTIVITY

Provide evidence that the academic unit(s) associated with this new degree have been productive in teaching, research, and service. Such evidence may include trends over time for average course-load, FTE productivity, student headcounts in major or service courses, degrees granted, external funding attracted; as well as qualitative indicators of excellence.

Productivity figures indicate that Teacher Education productivity is increasing with 4419 total student credit hours for Fall of 2002 and 5109 total student credit hours for Fall of 2003.

XVII. HISTORY

Provide a history page at the end of the proposal document to display approvals at each level (see page 19 of this document).

Review Committee Comments/Notes

CCR Review Notes

DEPARTMENT: Approved by the Division of Teacher Education, 8/27/03.

ACADEMIC AFFAIRS REVIEW:

11/19/03 Articulation revised; CIP code change indicated per departmental request. RES

From: Joe Peters [mailto:jpeters@uwf.edu]
Sent: Wednesday, November 19, 2003 12:31 PM
To: bshaw@uwf.edu
Cc: juvah@uwf.edu; 'Rex'; 'Carl Backman'; 'Kathleen Heubach'; 'Susan Gillman'
Subject: MCI5007P - CURR&INS/READING ED CCR

MEMORANDUM
November 19, 2003

TO: Dr. Bob Shaw
Director, Student Academic Support Services

Dr Carl Backman
Associate Vice President for Academic Affairs

Dr. Jossy Uvah
Chair of the Academic Council

Dr. Rex Schmid
Associate Dean, College of Professional Studies

FROM: Dr. Joe Peters
Chair, Division of Teacher Education

SUBJECT: Change in CIP Code

Please amend the MCI5007P - CURR&INS/READING ED CCR (<http://ccr.enroll.uwf.edu/ccr/programview.cfm?ccrid=5200>) to change the CIP code from 13.0301 (Curriculum and Instruction) to 13.1315 (Reading Teacher Education). Simultaneous paperwork for the Board of Trustees program approval is also being submitted per guidelines provided by Dr. Carl Backman. Revised Rationale for the CCR (Including CIP Code Change Information). The proposed changes in the masters of reading education program have been made to better prepare teachers for the role of reading specialist. The changes reflect professional standards provided by the International Reading Association/National Council for Accreditation of Teacher Education (<http://www.reading.org/advocacy/ncate.html>) and the Florida Department of Education (<http://www.firn.edu/doe/sas/ftce/pdf/ftcomp35.pdf>). The need for a CIP code change coincides with the emerging emphasis on reading credentialing in the State of Florida. Under the current CIP code structure, a student with a Curriculum and Instruction Masters degree in Primary, Elementary, Middle Level, or Secondary Education cannot receive a second Masters in Curriculum and Instruction-Reading Education. Because of the Reading First initiatives of the No Child Left Behind Act of 2001 (legislation that was signed into law in January 2002), Florida school districts and schools are mandated to implement proven methods of scientifically based reading instruction in classrooms in order to prevent reading difficulties. The legal interpretation is that all Florida districts must provide reading professional development in Reading First to all K-12 ESE teachers (<http://www.justreadflorida.com/docs/guidance.pdf>). Many teachers choose the limited five-course Reading Endorsement as an option, since the second masters is not available.

Thank you for your assistance.

cc: Dr. Kathleen Heubach, Coordinator for the Graduate Program in Reading Education

09/02/2003 Concerns resolved. Course has new number and name. RES

09/02/2003 CCR reviewed and concerns forwarded to chairperson. RES

From: Bob Shaw [mailto:bshaw@uwf.edu]
Sent: Tuesday, September 02, 2003 10:51 AM
To: 'jpeters@uwf.edu'
Cc: 'kheubach@uwf.edu'; 'Susan Gillman'
Subject: MCI5007P - CURR&INS/READING ED

This CCR has been reviewed and the following concern identified:

EDF 6460 Foundations of Measurement - I find no reference to this course in our approved course files or in the CCR system. Please let me know when this has been resolved.

Other minor changes were made to CCR to reflect catalog formatting. Additionally course titles and numbers updated to match current course inventory and proposed CCRs.

Thanks, Bob

CCR System Approval Dates
Department: September 02, 2003
Department Chair: September 02, 2003
Academic Affairs: September 02, 2003
College Dean: October 06, 2003
Academic Council: January 08, 2004
Faculty Senate: January 09, 2004
Provost: January 14, 2004

(Source: <http://ccr.enroll.uwf.edu/ccr/programview.cfm?ccrid=5200>)

***Note: The Florida Board of Governors uses a different format for requests to implement new specialist and doctoral degree programs. Contact the Associate Vice President for Academic Affairs for forms to use for specialist and doctoral degree programs.**

UWF TABLE ONE B

NUMBER OF ANTICIPATED MAJORS FROM POTENTIAL SOURCES

GRADUATE DEGREE PROGRAM

NAME OF PROGRAM: Reading Education
 CIP CODE: Old CIP: 13.0301; New CIP: 13.1315;
 DOE Code: 212

ACADEMIC YEAR	YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5	
	03	04	04	05	05	06	06	07	07	08

Source of Students (Non-Duplicative Count in Any Given Year)	HC	FTE	HC	FTE	HC	FTE	HC	FTE	HC	FTE
Individuals drawn from agencies/ industries in your service area (e.g., older returning students)	0	0	0	0	0	0	0	0	0	0
Students who transfer from other graduate programs within the university	0	0	0	0	0	0	0	0	0	0
Individuals who have recently graduated from preceding degree programs at this university	5	2.8	6	3.4	7	3.95	8	4.5	9	5.05
Individuals who graduated from preceding degree programs at other SUS universities	5	2.8	6	3.4	7	3.95	8	4.5	9	5.05
Individuals who graduated from preceding degree programs at non-SUS Florida colleges and universities	0	0	0	0	0	0	0	0	0	0
Additional in-state residents	0	0	0	0	0	0	0	0	0	0
Additional out-of-state residents	0	0	0	0	0	0	0	0	0	0
Additional foreign residents	0	0	0	0	0	0	0	0	0	0
Other (Explain)	0	0	0	0	0	0	0	0	0	0
TOTAL	10	5.6	12	6.8	14	7.9	16	9.0	18	10.1

Note: HC = Headcount of students in this major
 FTE = Annualized Full-Time-Equivalent students taking courses offered by this
 major. Annualized FTE's are calculated at 32 credit hours for graduate courses.

UWF TABLE TWO

FACULTY PARTICIPATION IN PROPOSED DEGREE PROGRAM BY FIFTH YEAR

Faculty CODE (see below)	Faculty Name or "New Hire"	Academic Discipline / Specialty	Rank	(For Existing Faculty Only)		Initial Date for Participation in Proposed Program	5th Year Workload in Proposed Program (portion of Person-year)
				Contract Status (tenure earning)	Highest Degree Granted		
A	Dr. Kathleen Heubach	Reading Education	Assistant Professor	Regular/Not Tenured	Ph.D.	Current	1.0
A	Dr. Charlotte Boling	Reading Education	Assistant Professor	Regular/Not Tenured	Ph.D.	Current	1.0

Faculty CODE	Corresponding Faculty Position Category in TABLE 3 for the Fifth Year	Proposed Source of Funding for Faculty	TOTAL 5th Year Workload by Budget Classification
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A	Current General Revenue	Existing Faculty -- Regular Line	2.0
B	Current General Revenue	New Faculty -- To Be Hired on Existing Vacant Line	

C	New General Revenue	New Faculty -- To Be Hired on a New Line	
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D	Contracts & Grants	Existing Faculty -- Funded on Contracts & Grants	
E	Contracts & Grants	New Faculty -- To Be Hired on Contracts & Grants	

Overall Total for 5th Year			2.0
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**UWF TABLE THREE
COSTS FOR PROPOSED
PROGRAM**

	FIRST YEAR				FIFTH YEAR			
	GENERAL REVENUE		CONTRACTS & GRANTS	SUMMARY	GENERAL REVENUE		CONTRACTS & GRANTS	SUMMARY
	CURRENT	NEW			CURRENT	NEW		
INSTRUCTION & RESEARCH								
POSITIONS (FTE)								
FACULTY	2.0	0	0	2.0	2.0	0	0	2.0
A&P								
USPS								
TOTAL	2.0	0	0	2.0	2.0	0	0	2.0
SALARY RATE								
FACULTY	112,813			112,813	112,813			112,813
A&P								
USPS								
TOTAL	112,813			112,813	112,813			112,813
I&R								
SALARIES & BENEFITS	146,657			146,657	146,657			146,657
OTHER PERSONAL SERVICES	1,000			1,000	2,500			2,500
EXPENSES	6,000			6,000	10,000			10,000
EQUIPMENT	2,400			2,400	3,600			3,600
TECHNOLOGY	2,000			2,000	3,000			3,000
LEARNING RESOURCES	1,200			1,200	2,000			2,000
SPECIAL								
TOTAL I&R	159,257			159,257	167,757			167,757
NON-I&R								
OTHER ACTIVITIES								
LIBRARY STAFFING	400			400	720			720
UNIV SUPPORT	1,000			1,000	1,800			1,800
FINANCIAL AID	250			250	500			500
STUDENT SVCS	500			500	900			900
TOTAL OTHER ACTIVITIES	2,150			2,150	3,920			3,900
SUMMARY								
	161,407			161,407	171,677			171,677

Note: No additional resources will required as part of the program CIP change.

Proposed New Programs - History: (This page is to be included at the end of the proposal document to display approvals at each level.)

Approved to Explore and Plan:

Dean _____ Date _____

Faculty Senate _____ Date _____

Provost _____ Date _____

President _____ Date _____

BOT A&SA Committee _____ Date _____

Approved to Implement:

Dean _____ Date _____

Faculty Senate _____ Date _____

Provost _____ Date _____

President _____ Date _____

BOT A&SA Committee _____ Date _____

BOT _____ Date _____

FBOE Reporting and Approvals:

Bachelor's and Master's Programs Reported to the FBOE: _____

Specialist and Doctoral Programs Submitted to FBOG: _____

Specialist and Doctoral Programs Approved by FBOG: _____

Licensure Programs approved by Legislature: _____

Implementation and Reporting:

Term Implemented: _____

One-Year Report Presented to Board of Trustees: _____

Three-Year Report Presented to Board of Trustees: _____

Five-Year Program Review Presented to Board of Trustees: _____