# The University of Georgia New Program Proposal: Master of Science in Archaeological Resource Management

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Institution:The University of GeorgiaDate:September 12, 2005School/Division:The Franklin College of Arts and SciencesDepartment:AnthropologyDegree:MSMajor:ArchaeologyCIP Code:Starting Date:Fall 2007

Head of Anthropology UTA Ekza G. Gin

Dean, Franklin College of Arts and Sciences

Huc unplacence Garnett S. Stokes

Den The Graduate School

Maureen Grasso.

# Program description and objectives

## Description

Archaeological Resource Management (ARM) represents the principal focus of modern archaeology here and abroad. The proposed MS degree in ARM is a unique program that aims to provide graduates with critical understanding of practical and operational relationships in cultural resource management within 12-15 months. This program combines theoretical issues and the practical applications of ARM in the U.S. and the wider world. Full consideration is given to the scientific, technical, legal, philosophical, financial and practical basis of archaeological work in the context of public and private-sector development. In the United States, and specifically Georgia and the Southeast, there is a need for ARM training. Studies in this area can help archaeologists draw together diverse subject materials from many specialist areas into a coherent corpus for the purpose of research and management of the archaeological resource.

## Objectives

Objectives of this program are to provide UGA graduate students with sound, detailed knowledge and critical understanding of archaeological resource management principles and methods for all theoretical and practical activities related to human activity in both archaeological (anthropogenic) and natural contexts. It is essential that this activity be carried out within the wider context and perspective of archaeological inquiry and interest in the past and combined with an understanding of both natural and cultural taphonomic processes as they relate to conservation and preservation of the archaeological resource. Such knowledge and understanding cannot be gained solely by academic studies, and practical experience of the methods and techniques used for recording, analyzing and managing such remains is imperative. This program aims to provide its graduates with advanced, applied knowledge and understanding of:

- Defining the archaeological resource
- Archaeological resource management: principles and practice
- Project design and management
- Theory and practice of archaeological data collection
- Historic Preservation law
- Spatial Information Management (GIS): principles and practice
- Principles of archival curation

The proposed MS program requires little in the way of added resources – financial or otherwise. The Department of Anthropology's faculty and academic staff in archaeology currently consists of four professors and one Academic Professional. This is more than adequate to service the proposed MS program, particularly at the anticipated initial enrollment level of 6-10 students per annum. <u>No</u> financial resources in terms of assistantships will be required as the unique 12-month course structure of the proposed MS program mitigates against such support; the accelerated

nature of the program demands a full course load of 4-5 courses per semester. Only modest additional support for personnel is requested.

- 1. Academic Professional Dr. Mark Williams' (current eft = 1) will play an integral part in this program. He will be teaching one of the new required courses (ANTH 7001) as well as mentoring some of these new students. We ask that his current College-funded eft be increased from .484 to .75 (50/50 research and instruction). As Director of The Georgia Archaeological Site File, his remaining .25 eft would be paid from the Site File Income account (1011DH104004).
- 2. We also request permission to seek reclassification of our Graduate Program Academic Advisor to an Academic Advisor III because of the added level of decision making, paperwork, and responsibility for maintaining this program. This individual will assist the Department's Graduate Coordinator, but maintains a high level of autonomy to deal with the day-to-day issues associated with the current PhD and new MS program.

In terms of curriculum, the proposed MS program will require creation of only two new graduate courses, both at the7000 level. The existing course curriculum in Anthropology, plus electives in other departments, provide all of the other courses needed for this degree.

Goals of the proposed MS program are completely consistent with UGA's mission and strategic plan. We propose to create a new and unique graduate research degree of national distinction. It is patterned on highly successful international programs yet such a degree program is not offered in Georgia or the U.S. in general. With creation of the MS degree in ARM, UGA provides a new and innovative direction in training research professionals in this critical area of environmental and cultural preservation.

# Justification and need for the program

This proposed MS program is a direct response to the following 2004 Program Review Report recommendation:

<u>Recommendation 9:</u> The department should not abandon the master's degree program in archaeology, as there is clearly a demand for it. We see no reason why students in Georgia wanting a master's in archaeology should have to go elsewhere to get this degree. A possible solution to the problem may be establishment of an interdisciplinary master's degree in archaeological sciences that would take no funding away form the doctoral program in Anthropology, and which would involve faculty from a number of departments on campus, including archeologists in Anthropology.

## 1. Societal Need

The MS program in ARM furthers the mission of UGA by making it the only institution of higher learning in Georgia to provide this critical graduate specialty. Archaeological Resource Management (known also as "CRM" or cultural resource management) has become, since 1974, the largest sector in modern American archaeology. It has become the "business" of archaeology in that most practitioners are found in the private or public sectors.

Academic training in this area has been rather hit-or-miss in U.S. academia. Part of the reason for this is generational. Many academically-oriented archaeologists have little, or no formal experience in this specialty. Additionally, the doctorate has become less important in the professional practice of American archaeology. At UGA, in particular, the Department of

Anthropology discontinued its previous masters degree program in favor of a doctorate-only program with its unique ecological/environmental focus. With creation of the MS degree in ARM, UGA addresses the societal need here in Georgia, and nationally, for preservation professionals in modern heritage protection and management.

The Advisory Council on Historic Preservation and The American Cultural Resources Association (ACRA) identify 10,000 individuals and 500 firms dealing with heritage management in this country. At this time, <u>no</u> Georgia college or university has a degree program specifically addressing this key area. The proposed MS program will provide immediate redress of this situation upon its implementation.

## 2. Student Demand

In Georgia alone, nine private-sector companies specialize in archaeological/ cultural resource management. More than twice that number of firms work in Georgia, but have their corporate offices outside the state. Over 200 heritage professionals work in Georgia-based companies. In addition to private sector, there are state and federal agencies that maintain professional staffs to deal with heritage in Georgia: The Georgia Department of Natural Resources – Historic Preservation Division; USDA – Forest Service; National Park Service (NPS); National Oceanic and Atmospheric Administration (NOAA); and The U.S. Army Corps of Engineers (USCOE). UGA students graduating with the proposed MS degree in ARM will find steady and growing demand for their services.

Students who major in archaeology as undergraduates find their career path open to only entrylevel positions in public archaeology/heritage management. Many return to graduate studies to improve their employability and promotion with their chosen career paths. As an antidotal example of student demand, an upper-level seminar class of 12 UGA archaeology majors was informally polled on their interests in a degree program such as proposed. The response was unanimously affirmative. Outside queries from prospective students have sought information of UGA graduate programs in this area as well. At this point we identify both current UGA undergraduate majors and recent graduates as the pool of potential entries into the proposed MS program. We believe the demand will exceed our initial acceptance limit of 6-8 students per annum.

## 3. Additional reasons that make the proposed MS program attractive

CRM tends to be regional in focus, so most states have a degree program providing graduates in CRM who are familiar with their state's prehistory. Georgia does not have this. However, UGA has all the elements in place to provide this training. Beyond the quality and number of faculty, UGA is the leading repository of archaeological collection with over 3 million artifacts in specialized curation facilities. Additionally, UGA maintains and administers, for the Georgia Department of Natural Resources, The Georgia Archaeological Site File with records of over 40,000 archaeological/historic sites for the state.

# 4. Letters of Support (Apendix I)

- Dr. Kent A. Schneider, Manager, Heritage Program, U.S. Department of Agriculture, Forest Service, Southern Region;
- Dr. Robert I. Curtis, Professor and Head, Department of Classics, UGA;
- Dr. John E. Noakes, Director, Center for Applied Isotope Studies, UGA;

- Ms. Lucy Banks, President, The Society for Georgia Archaeology;
- Drs. Frances Van Keuren and Carmon Colangelo, Lamar School of Art.

## 5. List of all public and private institutions offering similar programs:

There are no public or private institutions currently offering similar programs as the proposed MS degree in ARM.

# Procedures used to develop the program

In 2003-2004, the Department underwent a mandated Program Review. The Program Review Panel's Report enjoined the Department to reinstate its Masters Program in Archaeology (see previous section "Justification"). Pursuant to this recommendation, during the department's fall 2004 retreat, fall 2004, the faculty charged the Head to present a proposal for reinstatement of a specialized masters degree program in archaeology before the end of the academic year, 2004-2005. This was done. The faculty, in consultation with the Head, modified and approved (11-O) the proposed MS degree in ARM.

# Curriculum

# MS Archaeological Resource Management (Proposed) Course Content

Part 1 (Fall Semester, 15 weeks) (Students will enroll in 4 courses)

A. Required courses

ANTH 7001: Principles of Archaeological Resource Management (New course to be developed)

ANTH 8200: Seminar in Archaeology (Topics vary)

# B. Elective Courses (2 course minimum)

ANTH(ECOL) 4210/6210: Zooarchaeology

ANTH 4010/6010: Historical Ecology

GEOL(ANTH) 4700/6700: Archaeological Geology

ANTH(NAMS) 4310/6310: Archaeology of Eastern North America

ANTH(NAMS) 4020/6020: Indians of North America

GEOG 4370/6370-4370L/6370L: Geographic Information Science

GEOG 4040/6040: Global Environmental Change During the Quaternary

ANTH 4720/6720-4720L/6720L: Forensic Anthropology

# Part 2 (Spring Semester, 15 weeks) (Students will enroll in 5 courses)

A. Required courses

ANTH 7002: A Practicum in Archaeological Research and Report Writing

ANTH 8200: Seminar in Archaeology

B. Elective courses (3 course minimum)

HIPR 6100: Cultural Resource Assessment

ANTH 4262/6262: Transitions from Foraging to Farming

ANTH(ECOL) 4290/ 6290: Environmental Archaeology

ANTH 6370: Geographic Information Science

GEOG 4020/6020: Fluvial Geomorphology

GEOG 4350/6350-4350L/6350L: Remote Sensing of Environment

GEOL 8010: Advanced Topics in Archaeological Geology

Part 3 (Summer Semester, 11 weeks)

A. Required Course

ANTH 7000: Master's Research

GEOL 6660: Shallow Geophysics Field Course

Part 3 is the capstone portion of the student's training. Every student must undertake and complete a research project during this portion of the program. The project may be based within the University, at a museum, or as a field project. The end result will be a publishable quality paper of thesis length.

With agreement of the student's graduate committee, candidates may also select courses provided by other taught programs in the University not listed in this compilation. However, not all course options above will necessarily be available in any one year and candidates should contact their advisor for more detailed information about the forthcoming session.

## **Assessment and Completion**

Candidates are assessed on each course through coursework. Successful completion of the taught component of the program qualifies candidates to proceed to a supervised project on an approved topic and submitting a publishable quality report/paper of approximately 15,000 words.

## 1. In the proposed curriculum, the only newly developed/modified courses are:

ANTH 7001 Principles of Archaeological Resource Management

ANTH 7002: Practicum in Archaeological Research and Report Writing

ANTH 8200: Seminar in Archaeology

## 2. Course Descriptions:

A description of all courses can be found in Appendix II

## 3. Prerequisites:

- a. Graduate standing: all courses
- b. POD (Permission of Department): all courses
- c. Additional Prerequisites:

ANTH 6310: ANTH 3220 or permission of major

ANTH 6200: HIPR 6000

## 4. Split-listed courses

The following courses are cross-listed:

ANTH(ECOL) 4210/6210	GEOG 4370/6370-4370L/6370L
ANTH 4010/6010	GEOG 4040/6040
GEOL(ANTH) 4700/6700	ANTH 6000(proposed course)
ANTH(NAMS)4310/6310	ANTH 4262/6262
ANTH 6370	ANTH(ECOL) 4290/6290
ANTH(NAMS)4020/6020	GEOG 4350/6350-4350L/6350L

Safeguards: All split-listed courses will be taught at the 6000-level with significant material added for academic rigor. Typically, this rigor is provided by (1) additional examination sections for graduate students-only and (2) writing/research assignments.

## **5. Institutional Requirements:**

With the exception of the two new courses, all courses in this program are listed in the current UGA curriculum. We will start the approval process for the new courses Fall 2005 so that they can be offered by Fall 2006.

## 6. Curriculum Standards:

All courses must go through the review and approval process as mandated by The University of Georgia and the Board of Regents.

# 7. Internships:

Because of the "fast track" or accelerated nature of the proposed MS program, it is unlikely that internships can be offered to participants are doing their course work. However, we will seek internships for graduates of the program.

# 8. Consistency with National Standards:

Since no program of this kind exists within the U.S., no national standards exist. However, the program will be designed so that it meets SACS requirements.

# 9. Student Outcomes:

The graduates of the proposed MS program will share the following learning outcomes:

a. Competency in management of the heritage/patrimony of the State of Georgia and the U.S.

b. Knowledge and understanding of modern archaeological theory and practice.

c. Demonstrate critical thinking abilities and oral expression related to modern archaeology practice and methodology.

d. Competency in written expression and synthesis related to issues in modern archaeological practice.

e. Demonstrate competency in organizational skills related to management of archaeological resources and curated collections.

f. Understand the true nature of the concept of "perpetuity" as it relates to the archaeological patrimony.

# Inventory of Faculty Drectly Involved

Name:	Ervan G. Garrison
Rank:	Professor
Academic Discipline:	Anthropology, Geology
Institutions / Degrees:	University of Missouri Ph.D.
	University of Arkansas M.A.
	University of Arkansas B.S.
Current Workload:	Archaeological Geology, Archaeometry, Instrumental and Shallow
	Geophysics. While Head of Anthropology Department, 2 courses for
	Anthropology, 3 in Geology.
Scholarship:	2003. Techniques in Archaeological Geology. Springer -Verlag. Berlin.
r	2001. Physics and archaeology. <i>Physics Today</i> , 54(10):32-36.
	2001. An Archaeological Geophysical Study of Historic Bethabara Park,
	Winston-Salem, North Carolina, with Kent A. Schneider,
	Douglas Leupke and Roger Kirchen. Report done under U.S.
	Department of Agriculture-Forest Service and the University of
	Georgia Cooperative Agreement.
	2001. Sangro Valley Project, Italy: Limited Geophysical Testing, with
	Kent A. Schneider. Report done under U.S. Department of
	Agriculture-Forest Service and the University of Georgia Cooperative
	Agreement.
	2001. Geoarchaeological coring, using cryoprobe techniques-An example
	from the American Southeast. Proceedings of the 31st International
	Symposium on Archaeometry. London: BAR - British Archaeological
	Reports (Central European Series)
	2000. ESR Dating of Archaeological Flints - An Unfulfilled Prophecy.
	The Practical Impact of Science on Near Eastern and Aegean
	Archaeology. Sy Gitin and Scott Pike, Editors. London: Archetype
	Books.
Professional Activity:	Archagological Director, EL DEDUOSTEL Project Strideway Island
FIOLESSIONAL ACTIVITY.	Archaeological Director, ELDERHOSTEL Project. Skidaway Island, UGA Marine Extension Service; Committee member: Chapter Faculty
	Advisor, American Indian Science and Engineering Society.
Europeted	
Expected Begnongibilities:	Teach regular courses in the MS, plus new course on Archaeological
Responsibilities:	Resource Management, advise students.
Nome	David I. Hally

Name:	David J. Hally
Rank:	Associate Professor

Academic Discipline: Institutions / Degrees: Current Workload:	AnthropologyDartmouth CollegeA.B.Harvard UniversityM.A.Harvard UniversityPh.D.New World Prehistory and Archaeology, Indians of North America,Archaeological Field Methods, Archaeological Laboratory Methods,Ceramic Analysis, Mississippian Chiefdoms and Archaeology ofHouseholds.
Scholarship:	<ul> <li>2002. Beck, Margaret. E, J. M. Skibo, D. J. Hally, and P. Yang Sample Selection for Ceramic Use-Alteration Analysis: the Effects of Abrasion on Soot. <i>Journal of Archaeological Science</i> 29:1-15.</li> <li>2002. Hally, David J.</li> <li>"As Caves Below the Ground": Making Sense of Aboriginal House Form in Between Contacts and Colonies: Archaeological Perspectives on the Protohistoric Southeast. Edited by Cameron B. Wesson and Mark A. Rees, pp. 90-109. University of Alabama Press, Tuscaloosa.</li> <li>2004. Hally, David J., and Robert C. Mainfort, Jr. Prehistory of the Eastern Interior after 500 B.C. <i>In</i> Handbook of North American Indians, Southeast, edited by Ray Fogelson, pp. 265-285. Smithsonian Institution Press, Washington, D.C.</li> <li>in press. Hally, David J. The Nature of Mississippian Regional Systems. <i>In</i> Light on the Path: Essays in the History and Anthropology of the Southeastern Indians in Honor of Charles</li> </ul>
	<ul> <li>Hudson. Edited by Thomas Pluckhahn and Robbie Ethridge. University of Alabama Press, Tuscaloosa.</li> <li>In press. Hally, David J. Mortuary Patterns at a Sixteenth-Century Town in Northwestern Georgia. Southeastern Archaeology.</li> <li>In press. Hally, David J. Introduction to Special Thematic Section – Lewis H. Larson; From Minnesota to Georgia-a Path Less Traveled. Southeastern Archaeology.</li> </ul>
Professional Activity:	Managing Editor for Early Georgia, the bi-annual journal of the Society for Georgia Archaeology; Supervision and editing of twenty-six research reports submitted by the Department of Anthropology to the National Park Service, U.S. Army Corps of Engineers, U.S. Forest Service, U.S. Soil Conservation Service, P.H. Lewis and Company, the Brannigar Organization, Inc. and the Georgia Power Company, 1975-84.
Expected Responsibilities:	Teach regular courses for the MS program, advise students.

Name:	Stephen A. Kowalewski	
Rank:	Professor	
Academic Discipline:	Anthropology	
Institutions / Degrees:		Ph.D.
	DePauw University	B.A.

Current Workload:	Method and Theory in Archaeology, Regional Analysis, Prehistoric
	Cultural Ecology, Mesoamerican Archaeology, Prehistorical and
	Historical Anthropology, Advanced Archaeology, Archaeological
	Survey, History of Anthropological Theory, Research Methods in
	Anthropology, Human Ecosystems Evolution, Archaeology and
	Holocene Environmental Change in Georgia.
Scholarship:	2000. Balkansky, Andrew K., Stephen A. Kowalewski, Verónica Pérez
Scholarship.	
	Rodríguez, Thomas J. Pluckhahn, Charlotte A. Smith, Laura R.
	Stiver, Dimitri Beliaev, John F. Chamblee, Verenice Y. Heredia,
	and Roberto Santos Pérez. Archaeological Survey in the Mixteca
	Alta of Oaxaca, Mexico. <i>Journal of Field Archaeology</i> 27(4):365-
	390.
	2003. Kowalewski, Stephen A. Backcountry Pots. Ancient
	Mesoamerica 4(1):65-75.
	2003. Scale and the Explanation of Demographic Change: 3,500 Years
	in the Valley of Oaxaca. American Anthropologist 105(2):313-325.
	2003. What Is the Community? The Long View from Oaxaca, Mexico.
	Social Evolution and History 2(1):4-24.
	2004. The New Past: From Region to Macroregion. Social Evolution &
	<i>History</i> 3(1):81-105.
	2004. Balkansky, Andrew K., Verónica Pérez Rodríguez, and Stephen
	A. Kowalewski. Monte Negro and the Urban Revolution in
	Oaxaca, Mexico. Latin American Antiquity 15(1):33-60.
	2003-4. Blanton, Richard E., Gary M. Feinman, Stephen A.
	Kowalewski, and Linda M. Nicholas. Middle America and Pre-
	Spain Civilization [Chinese translation of Chapter 1 of Ancient
	Oaxaca: The Monte Albán State, by Qian Yihui] 2003.4:79-91.
	2002. Monte Albán, Alfa y Omega. Sociedad y Patrimonio
	Arqueológico en el Valle de Oaxaca. Memoria de la Segunda Mesa
	Redonda de Monte Albán, ed. by Nelly M. Robles García, pp. 409-
	434. Instituto Nacional de Antropología e Historia, México, D.F.
	[full version].
	2002. Kowalewski, Stephen A. Kolomoki: Learning About a
	Woodland Ceremonial Center. Final Report to the National
	Geographic Society.
	2001. Informe Comunitario a San Vicente Nuñu, Teposcolula, Oaxaca.
	Submitted to the town. Department of Anthropology, University of
	Georgia, Athens. [example citation of one of 47 similar,
	approx.15-page reports]
	2001. Monte Albán, Alfa y Omega. Procesos de Cambio y
	Conceptualización de Tiempo. Memoria de la Primera Mesa
	Redonda de Monte Albán: Procesos de Cambio y
	Conceptualización del Tiempo, ed. by Nelly M. Robles García, pp.
	25-42. Instituto Nacional de Antropología e Historia, México,
	D.F. [partial version]
	2000. Cyclical Transformations in North American Prehistory. In
	Alternatives of Social Evolution, ed. by Nikolay N. Kradin,
	Andrey V. Korotayev, Dmitri Bondarenko, Victor de Munck, and
	Paul K. Wason, pp. 171-187. Vladivostok: Far Eastern Branch of
Due Construct A (* *)	the Russian Academy of Sciences.
Professional Activity:	Referee for professional publications such as American Anthropologist,

*American Antiquity, Current Anthropology, Human Ecology;* Member of the Editorial Boards of *Ancient Mesoamerica, Journal of Ecology Anthropology*, University of Georgia Press, Editorial Huaxyacac. Teach regular courses in the MS program, advise students.

Expected Responsibilities:

Name:	Elizabeth J. Reitz	
Rank:	Professor	
Academic Discipline:	Anthropology	
Institutions / Degrees:	University of Florida	Ph.D.
e	University of Florida	M.A.
	University of Florida	B.A.
	Florida Presbyterian College	N/A
Current Workload:	Zooarchaeology, Environmental Arcl Farming, Museum of Natural History Collection Management	haeology, From Foraging to
Scholarship:	Andrus, C. F. T., D. E. Crowe, D. H. Romanek 2002. Otolith $\delta^{18}$ O Re Surface Temperatures in Peru. S	ecord of Mid-Holocene Sea
	Andrus, C. F. T., D. E. Crowe, D. H.	Sandweiss, E. J. Reitz, and C. S. omments on "Otolith $\delta^{18}$ O Record
	2001. Fishing in Peru Between 10	
	Journal of Osteoarchaeology	
	Reitz, Elizabeth J. 2003. Resource U	e
	<b>e</b>	Subsistence Technology: A ern Archaeology 23(2):202-207.
	÷ .	Peruvian Pre-ceramic Site. Journal
	of Archaeological Science 28(10 Sandweiss, Daniel, K. A. Maasch, F. Reitz. 2004. Geoarchaeological Natural Climatic Variability and <i>Quaternary Research</i> 61:330-33	Chai, C. F. T. Andrus, and E. J. Evidence for Multidecadal Ancient Peruvian Fisheries.
	<i>Estudio de Caso de Uso Animal</i> <i>Ecuador</i> . University of Pittsburg Archaeology 14, Pittsburgh, PA Zierden, Martha A., and Elizabeth J.	nimal Use at El Azúcar, pres y Agricultores Guangala: Un en El Azúcar, Suroeste de gh Memoirs in Latin American Reitz. 2002. Eighteenth-century
	Charleston: Aftermath of the Sie Bonavia, Duccio, L W. Johnson-Kell 2001. El precerámico medio de F (PV35-106). <i>Bulletin de l'Institut</i>	y, E. J. Reitz, and E. S. Wing. Iuarmey: Historia de un sitio

30(2):265-333.

- Keck, Charlene, and Elizabeth J. Reitz. 2000. Vertebrate Fauna from the Rockfall Shelter. In Spradley Hollow Habitations: Four Rock Shelters and a Historic Homestead, by K. H. Cande, pp. 88-98. Arkansas Archeological Survey Research Series 56, Arkansas Archeological Survey, Fayetteville, Arkansas.
- Lucas, Gregory S., and Elizabeth J. Reitz. 2001. Vertebrate Fauna from 14 Legare Street, Charleston, South Carolina. In *Excavations at 14 Legare Street, Charleston, South Carolina*, M. Zierden, Appendix IV-1-IV-79. Charleston Museum Archaeological Contributions 28, Charleston.
- May, Elizabeth M., and Elizabeth J. Reitz. 2003. Vertebrate Remains from Aiken-Rhett House, 1985-2002. In *Aiken-Rhett House: Archaeological Research*, M. A. Zierden, pp. 151-252. The Charleston Museum Archaeological Contributions 31, Charleston, South Carolina.
- Reitz, Elizabeth J. 2000. Temperate and Arctic North America to 1492. In *The Cambridge World History of Food*, Vol. 2, edited by K. F. Kiple and K. C. Ornelas, pp. 1288-1304. Cambridge University Press, Cambridge.
- Reitz, Elizabeth J. 2001. Vertebrate Fauna from the Miles Brewton House, Charleston, South Carolina. In Archaeology at the Miles Brewton House, 27 King Street. M. Zierden, pp. 127-195. The Charleston Museum Archaeological Contributions 29, Charleston.
- Reitz, Elizabeth J. 2002. Vertebrate Fauna from Atlantic Wharf. In Excavations on Charleston's Waterfront: The Atlantic Wharf Garage Site. M. Zierden, pp. 48-81. The Charleston Museum Archaeological Contributions 30, Charleston.
- Reitz, Elizabeth J. 2004. The Use of Archaeofaunal Data in Fish Management. In *The Future from the Past*, R. C. G. M. Lauwerier and I. Plug, eds., pp. 19-33. Oxbow Books, Oxford. Reitz, Elizabeth J., C. S. Larsen, and M. J. Schoeninger
- Reitz, Elizabeth J. 2002. Resource Utilization and Dietary Reconstruction. In *Bioarchaeology of the Late Prehistoric Guale, South End Mound I, St. Catherines Island, Georgia*, C. L. Larsen, pp. 41-46. American Museum of Natural History Anthropological Papers 84, New York.
- Webber, J. Z., J. Matthew Compton, and Elizabeth J. Reitz. 2002.
  Vertebrate Fauna from Mission Nuestra Señora del Refugio (41RF1), Refugio County, Texas. Nuestra Señora del Refugio (41RF1), Refugio County, Texas, Vol. I, Archaeological Investigations, by C. L. Tennis, pp. 271-311. The University of Texas at San Antonio Center for Archaeological Research Archaeological Survey Report 315.

Professional Activity: Serve

7: Served on various committees of the Society for American Archaeology and the International Council on Archaeozoology, plus the Sigma Xi Lectureships Committee, 2004-2006, Past Director of the Georgia Museum of Natural History Teach regular courses in the MS, advise students.

Expected Responsibilities:

Name:	Mark Williams
Rank:	Academic Professional
Academic Discipline:	Anthropology
*	1 00
Institutions / Degrees:	5 8
	Florida State University M.A.
	University of Georgia B.A.
Current Workload:	Archaeological Field School, Material Culture, Archaeology of Georgia,
	History of Archaeology, Introduction to Anthropology
Scholarship:	2002. Introduction to and Editor of New Edition of Archaeology of the Funeral Mound, Ocmulgee National Monument by Charles H.
	Fairbanks. University of Alabama Press, Tuscaloosa.
	2002. With Gary Shapiro. Lamar Archaeology: Mississippian Chiefdoms
	in the Deep South. University of Alabama Press, Tuscaloosa. REPUBLISHED.
	2003. Introduction to The Funeral Mound by C. H. Fairbanks. University of Alabama Press, Tuscaloosa.
	2003. With Scott Jones. Lithics, Shellfish, and Beavers. In Charles
	Hudson and the Social History of the Southeast. Edited by R.
	Ethridge and T. Pluckhahn. University of Alabama Press (In Press).
	2004. A New Manuscript Copy of Williams Bartram's Obeservations on
	the Creek and Cherokee Indians. In Recent Research Relating to
	William Bartram. Edited by K. Braund and C. Porter. (In Press)
	2000. Archaeological Site Distributions in Georgia: 2000. Early Georgia
	28(1):1-55.
	2002. Book Review of: Antiquities of the Southern Indians, by Charles C.
	Jones, edited by Frank Schnell, University of Alabama Press.
	Mississippi Archaeology.
	2000. Archaeological Excavations at the Lamar Site. LAMAR Institute
	Publication 43 LAMAR Institute, Watkinsville, Georgia.
	2001. Archaeology of Georgia. Article in the New Georgia Encyclopedia.
	2001. Languages of Georgia's Indians. Article in the New Georgia Encyclopedia.
	2001. Indian Pottery. Article in the New Georgia Encyclopedia.
	2001. Indian Projectile Points. Article in the New Georgia Encyclopedia.
	2001. Lamar Archaeological Period. Article in the New Georgia
	Encyclopedia.
	2001. Ocmulgee Indian Mounds. Article in the New Georgia
	Encyclopedia.
	2001. Rock Mounds and Structures. Article in the New Georgia
	Encyclopedia.
	2002. Archaeological Excavations at Little River: The 1998-2000
	Seasons. LAMAR Institute Publication 49. LAMAR Institute,
	Watkinsville, Georgia.
	2003. Mapping the Cedar Creek Mound. LAMAR Institute Publication
	68. LAMAR Institute, Watkinsville, Georgia.
	2003. King Bee Briefly Revisited. LAMAR Institute Publication 67.
	LAMAR Institute, Box Springs, Georgia.
	2003. Test Excavations at the Leah and Zack Site, 9PM1182. LAMAR
	Institute Report 74. LAMAR Institute, Box Springs, Georgia.
	montule Report /4. LAWAR montule, box opilings, Ocolgia.

	2004. Shovel Testing the Estatoe Site, 9ST3. LAMAR Institute
	Publication 70. LAMAR Institute, Box Springs, Georgia.
	2004. Archaeological Excavation at the Little River Site: The 2001
	Season. LAMAR Institute Publication 66. LAMAR Institute, Box
	Springs, Georgia.
	2004. Nacoochee Revisited: The 2004 Project. LAMAR Institute
	Publication 72. LAMAR Institute, Box Springs, Georgia.
Professional Activity:	Archaeology Section Editor, New Georgia Encyclopedia Project
Expected	Teach regular courses in the MS programs, plus ANTH 7001, advise
Responsibilities:	students.

#### Outstanding programs of this nature in other institutions

There are no programs of this nature in this country. However, this model is common in Canada (Simon Frazer University, Vancouver) and the United Kingdom (University of Bournemouth; Edinburgh University; University of Leicster; University of Newcastle).

#### Inventory of pertinent library resources

#### Introduction

The University of Georgia Libraries is one of the major research libraries in the Southeast. The Association of Research Libraries (ARL), a consortium of the nation's research institutions, ranks the University of Georgia Libraries 31<sup>st</sup> among 113 university libraries in the United States and Canada. Furthermore, ARL ranks the Libraries 9th out of 72 in government documents and 8th out of 112 in cartographic materials. Altogether the Libraries own over 4 million volumes and over 5 million microform units.

For FY2005, materials expenditures totaled 10.3 million dollars, including 6.9 million dollars for serials. The Libraries subscribe to thousands of journals, in both print and electronic formats, and approval plans enable the Libraries to acquire virtually all U.S. and Canadian university press publications as well as publications from over one thousand U.S. trade publishers. GALILEO (Georgia Library Learning Online), a statewide consortium for online research, provides electronic access to a variety of full text journals and newspapers, statistical sources, historic documents and more.

#### **Overview of the Libraries' Collections**

The University of Georgia Libraries include three principal libraries on the UGA campus in Athens, with several branch locations throughout the state. The Main Library collects materials in the social sciences, humanities and business, including history, archaeology, architecture, languages, and historical documents relating to the Southeast region and culture. The Science Library contains holdings for the physical and life sciences, including geology and geomorphology. The Student Learning Center provides access to electronic library holdings and research and study space for 2,240 students.

Four collection areas would be of particular interest to the study of Archaeological Resource Management:

#### The Digital Library of Georgia

The DLG is a gateway to Georgia's history and culture found in digitized books, manuscripts, photographs, newspapers, audio, video, and other materials. A few selected resources particularly relevant to archaeology and historic sites are:

#### Historic Architecture and Landscapes of Georgia: The Hubert Bond Owens and John Linley Image Collections at the Owens Library

A joint project between the College of Environment and Design, University of Georgia and the Digital Library of Georgia, contains approximately 1500 images of important and representative architectural sites and landscapes in the state with an emphasis on Athens and Middle Georgia.

#### Photographs of the Historic American Buildings Survey: Georgia

Photographs and drawings of Georgia's historic buildings made under the Historic American Buildings Survey from the collections of the Georgia Tech Archives.

#### Southeastern Native American Documents, 1730-1842

Contains approximately 2,000 documents and images relating to the Native American population of the Southeastern United States from the collections of the University of Georgia Libraries, the University of Tennessee at Knoxville Library, the Frank H. McClung Museum, the Tennessee State Library and Archives, the Tennessee State Museum and the Museum of the Cherokee Indian. The documents are comprised of letters, legal proceedings, military orders, financial papers, and archaeological images relating to Native Americans in the Southeast.

#### **Government Documents**

As the designated repository for state and federal government documents for the state of Georgia, the Libraries house an extensive collection of documents containing historic material, in addition to reports generated by current agencies.

Some highlights of historic collection include:

American State Papers, 1789-1838

- U.S. Congressional Serial Set, 1817-1980
- U.S. National Museum reports and proceedings, 1884-1971
- U.S. National Museum Annual Report, 1884-1964
- U.S. Smithsonian's Annual Report of the Bureau of Ethnology, 1879-1965
- U.S. Smithsonian's Handbook of North American Indians

Contemporary documents relating to newly found historic sites, Native American issues, city planning documents and historic preservation complement these historic sources.

#### The Hargrett Rare Book and Manuscript Library of the University of Georgia

In addition to the Rare Book and Manuscript Library, the Georgiana Collection, the University of Georgia Archives and Records Management reside here. Concentration is in material about Georgia or the Southeast.

Map Library

The Libraries' map collection is a research level academic map library with large holdings of maps, air photos and imagery, atlases, digital spatial data, and reference materials. Many of these resources have been digitized and are available online through the Digital Library of Georgia.

#### **Subject-specific Holdings**

#### Archaeology

The Libraries' collections are especially strong in the areas of North American, British and Classical (Greek and Roman) archaeology. In fact, the most recent data available from the North American Title Count for 2001 rank the University of Georgia Libraries third in general archaeology (LC CC) and Native American studies (LC E1-E139), out of 15 southern university libraries participating, behind the University of Texas at Austin and the University of North Carolina, Chapel Hill. Intensive collection of

resources from American and European institutes/publishers, including standing orders for numerous series and periodicals, ensures continuing growth in this area. Government documents further contribute to the wealth of information available. Finally, strong holdings in North American Indian languages and Indo-European linguistics enhance the collection. GALILEO databases provide ease of access for many of the resources above.

Particularly relevant are: America: History and Life American State Papers, 1789-1838 L'Annee philologique Anthropological Literature Avery Index to Architectural Literature Early American Imprints, Series I, 1639-1800 and Series II, 1801-1819 Human Relations Area Files for archaeology and ethnography New Georgia Encyclopedia PCI Web Southeastern Native American Documents, 1730-1842 U.S. Congressional Serial Set, 1817-1980

#### Geology/Geomorphology/Environmental History

The Libraries' major strength in this area is the extensive periodicals collection, with nearly half available online through GALILEO. Holdings include 150 titles for Geology, 116 titles for Ecology and another 102 for Geography. In addition, all publications of the U.S. Geological Survey, including digital maps, are available through Government Documents and the Map Library.

Relevant GALILEO databases include: Annual Reviews Ei Engineering Village 2 GeoRef and GeoRef in Process Science Direct Springer-LINK Water Resources Abstracts Wiley Inter-Science Journal Finder

#### **Historic Preservation**

Materials related to Historic Preservation and Landscape Architecture are housed in the Owens Library, which supports the University of Georgia's School of Environmental Design, the largest school of landscape architecture in the United States. Holdings include 6,000 monographs plus journals, maps, videos, and computer and Internet resources.

#### Conclusion

In sum, an excellent and varied collection, welcoming facilities, and expert staff make the University of Georgia Libraries an outstanding resource for the study of Archaeological Resource Management

(Compiled by Sherry Allen, Caroline Cason, Susan Curtis, Nan McMurry and Rene Shoemaker, UGA Libraries, September 2005.)

## Desired qualifications of the students who will be recruited and admitted

In addition to meeting the Graduate School admissions requirements, students admitted into the MS program should have: (a) GRE score of 1100 or better; (b) 3.0 GPA; (c) three academic letters of reference. An undergraduate major in anthropology/ archaeology is preferred but not mandatory. We will seek non-traditional students with prior experience in archaeology. Some CRM experience is desirable.

## Facilities

Administration of the MS program and most of the classes will be in Baldwin Hall. We have two classrooms, a teaching lab, and one small seminar room. Students will also have access to the archaeology collections associated with the Museum of Natural History and the Georgia Archaeological Site File housed at Riverbend. Since we do not need to hire any additional faculty, no additional facilities are needed in the near future.

The Student Learning Center (SLC) provides over 500 computer stations and print facilities to all UGA students. It is two blocks from Baldwin Hall. The Main Library is directly across from Baldwin Hall, so computer access is readily available for the students who need it.

## Administration

Admissions and monitoring of the MS Program will be handled through regular departmental procedure, e.g. the Graduate Coordinator and Graduate Committee will oversee admissions. The only difference for the MS program will be the institution of a "rolling admission" procedure. The Graduate Academic Advisor, in collaboration the Graduate Coordinator, will advise, and monitor student progress and compliance with departmental and Graduate School policies. Resources, in the form, of salary/position reclassification for the Graduate Academic Advisor will be requested of the Franklin College to compensate the additional effort involved in administering the MS program.

## Assessment

This program will use a number of instruments to evaluate the quality of the degree program, its academic and intellectual outcomes, and its progress along the points of its strategic plan and the strategic plan of the University of Georgia.

Course evaluations: graduate students in the program will be asked to evaluate each course and each instructor in a form specially devised for the MS program and assessing the quality of instruction and of the classroom experience.

## Exit Interview.

External review by federal and state agencies and private archaeological contractors, especially those hiring our graduates.

## Accreditation

There is no national or regional board for a master in archaeological resource management program; however, standards for the professional practice of archaeology are maintained by the Registry of Professional Archaeologists (RPA). It is anticipated that the majority of MS graduates will seek this affiliation.

## Affirmative Action Statement

This new degree program will make special efforts, in collaboration with the Office of Institutional Diversity, to reach out to minority students. The Department of Anthropology is committed to increasing diversity among its faculty, staff, and students.

Degree inscription: Master of Science in Archaeology Resource Management

CIP code: 30.1202 "Cultural Resource Management and Policy Analysis"

# Fiscal and enrollment impact, and estimated budget

	FY 20 Year	06; First	FY 200 Year	07; Second	FY 20	08;
Costs	EFT	Dollars	EFT	Dollars	EFT	Dollars
A. Personnel (reassigned or existing positions)						
1. Faculty	.19	\$ 84,756	.19	\$103,576	.19	\$106,673
2. Part-time faculty						
3. Graduate Assistants						
4. Administrators						
5. Support staff	.20	\$ 1,825	.20	\$ 6,665	.20	\$ 6,865
6. Fringe benefits@26%		\$ 22,511		\$ 28,623		\$ 29,520
7. Other Personnel		\$ 3,500		\$ 3,500		\$ 3,50
Total Existing Personnel Costs		\$112,592		\$142,404		\$146,558
B. Personnel (new positions)						
1. Faculty	.266	\$16,316				
2. Part-time faculty						
3. Graduate Assistants						
4. Administrators						
5. Support staff		\$ 4,646				
6. Fringe benefits@26%		\$ 5,450				
7. Other Personnel						
Total New Personnel Costs		\$26,412				
C. Start-up costs						
1. Library/learning resources						
2. Equipment						
3. Other						
D. Physical Facilities						
Total One-Time Costs						

E. Operating Costs			
1. Supplies & Expenses			
2. Travel			
3. Equipment			
4. Library			
5. Other	\$ 1,000	\$ 1,000	\$ 1,000
Total Recurring Costs	\$ 1,000	\$ 1,000	\$ 1,000
GRAND TOTAL COSTS	\$140,004	\$143,404	\$147,558
III. Revenue Sources			
A. Source of Funds			
1. Reallocation of existing funds	\$112,492	\$142,404	\$146,558
2. New student work			
3. New tuition	\$ 29,484	\$ 39,312	\$ 49,140
4. Federal funds			
5. Other grants			
6. Student fees			
7. Other (Franklin College)	\$ 26,412		
SUBTOTAL	\$169,388	\$181,716	\$195,698
New state allocation requested			
GRAND TOTAL REVENUES	\$169,388	\$181,716	\$195,698
B. Nature of funds			
1. Base budget	\$141,976	\$181,716	\$195,698
2. One-time funds	\$ 26,412		
GRAND TOTAL REVENUES	\$169,388	\$181,716	\$195,698

1. Enrollment projections, MS in ARM	FY 2007 First Year	FY 2008 Second Year	FY 2009 Third Year
A. Student Majors	6	8	10
1. Shifted from other programs			
2. New to institution	6	8	10
TOTAL MAJORS	6	8	10
B. Course sections satisfying program requirements			
1. Previously existing	18	18	18
2. New	2	2	2
TOTAL PROGRAM COURSE SECTIONS	20	20	20
C. Credit Hours generated by those courses 10 courses required/AY			
1. Existing enrollments	260	260	260
2. New enrollments	1080	1440	1800
TOTAL CREDIT HOURS	1340	1700	2060
D. Degrees Awarded	6	8	10

## **APPENDIX I**

ANTH 4010/6010, Historical Ecology: Principles of human impact through time on ecological landscapes and how these principles can guide contemporary communities in the design of future sustainable land and water use. Special focus is on the American southern piedmont covering a ten thousand year period from pre-agriculture to post-industrial societies. No prerequisites. Cross-listed course. Course cannot be repeated for credit. Graduate students will be expected to explore historical ecology from an anthropological perspective at a more demanding theoretical and empirical level. Each graduate student will critically synthesize the historical ecology literature by writing a publishable paper modeled on the "Reviews in Anthropology" format plus make a special presentation to the class focused on a special topic in the southern piedmont.

ANTH(NAMS) 4020/6020, Indians of North America: North American Indian cultures at the time of European contact. Additional topics include origin and development of Indian culture, impact of European contact on native cultures, and problems faced by Native Americans today. No prerequisites. Cross-listed course. Course cannot be repeated for credit. Additional reading and/or writing assignments at discretion of the instructor.

GEOG 4020/6020, Fluvial Geomorphology: Land forming effects of surface-water movement with emphasis on surface-water hydrology, stream flow mechanics, floods, sediment transport and storage, and landform evolution. Field trips included. No prerequisites. Cross-listed course. Course cannot be repeated for credit. Graduate Students must do additional readings, assignments, and questions on tests.

GEOG 4040/6040, Global Environmental Change During the Quaternary: Chronology and geomorphic, isotopic, and palynological evidence of Quaternary paleoclimates. The effects of past climatic changes upon present landscapes, historic short-term fluctuations in temperature and precipitation, and possible explanations for climatic change are emphasized. No prerequisites. Cross-listed course. Course cannot be repeated for credit. Graduate Students must do additional readings, assignments, and questions on tests.

HIPR 6200, Preservation Law: Analysis of significant national, state, and local preservation laws and ordinances, and the legal functions for these laws; major legal challenges past, current, and anticipated; and, a review of the positive and negative effects of the application of various legal measures on the historic environments they protect. Not cross-listed. Prerequisite: HIPR 4000/6000. Course cannot be repeated for credit.

ANTH(ECOL) 4210/6210, Zooarchaeology: Animal remains recovered from archaeological sites, studied in light of zoological and archaeological methods and theories and interpreted in terms of human and animal behavior. POD. Cross-listed course. Course cannot be repeated for credit. Graduate students will be expected to identify a larger and/or more difficult archaeological sample, report on it from the perspective of relevant archaeological and environmental theories, and present findings to the class.

ANTH 4262/6262, Transistions form Foraging to Farming: A survey of archaeological evidence for the transition from foraging to farming and herding throughout the world, its causes, and its consequences. Emphasis is on evidence obtained from archaeological studies of human, plant, and non-human animal remains from archaeological sites in Africa, Asia, Australia, Europe, North America, and South America. No prerequisites. Cross-listed course. Course cannot be repeated for credit. In addition to five brief review papers, Graduate students are expected to write a formal research paper and present their paper to the class (approximately a twenty minute

presentation). The five review papers, the final paper, and the class presentation combined will constitute 25 percent of their grade. Undergraduates will only be expected to write the short review papers.

ANTH(ECOL) 4290/6290, Environmental Archaeology: Survey of theories and methods used to study the relationship between humans and their environment. Emphasis is on subsistence strategies and environmental reconstructions based on archaeological evidence and the techniques of zooarchaeology, paleobotany, and paleonutrition. No prerequisites. Cross-listed course. Course cannot be repeated for credit. Graduate students must prepare a paper germane to the student's thesis.

ANTH(NAMS) 4310/6310, Archaeology of Eastern North America: Prehistoric and early historic aboriginal cultural variation in Eastern North America. Prerequisites: ANTH 3220 or POD. Cross-listed course. Course cannot be repeated for credit. Graduate students do extra readings and discuss them in a separate one hour discussion group. Graduate student performance evaluated according to higher standards.

GEOG 4350/6350-4350L/6350L, Remote Sensing of Environment: Remote sensing with emphasis on aerospace applications in the natural sciences. Fundamental properties of the electromagnetic spectrum and remote sensing devices such as multispectral cameras, thermal infrared line scanners, and television and radar imaging systems. No prerequisites. Cross-listed course. Course cannot be repeated for credit. Graduate students do additional readings, assignments, and questions on tests.

GEOG 4370/6370, Geographic Information Science: Principles and applications of geographic information systems (GIS). Examines the nature and accuracy of spatially referenced data, as well as methods of data capture, storage, retrieval, visualization, modeling, and output using one or more GIS software packages. No prerequisites. Cross-listed course. Course cannot be repeated for credit. Graduate students do additional readings, assignments, and questions on tests; research paper

GEOL 4660/6660, Field School in Shallow Geophysics: Techniques for the geophysical propsection of near-surface geology, geohydrology, and geomorphology. Techniques include electro-magnetic, radar, sonar, and magnetism. Course cannot be repeated for credit. Graduate students do more extensive preparation and presentation of field project. Non-traditional format: Course taught during summer semester utilizing applied field exercises in addition to traditional lecture/lab methods.

GEOL(ANTH) 4700/6700, Archaeological Geology: Archaeological geology examines the use of earth science methods and theories in the study of archaeological sites and their contents. The four major areas covered include: (1) the archaeological site and geology; (2) age determination techniques; (3) exploration techniques; (4) artifact characterization. No prerequisites. Cross-listed course. Course cannot be repeated for credit. Graduate students must:(a) complete additional examination materials (b) complete and orally present a professional-quality paper on an archaeological geology topic.

ANTH 4720/6720-4720L/6720L, Forensic Anthropology: Introduction to an application of physical anthropology focusing on human identification through analysis of bone. Students recognize and identify whole and fragmentary bones and teeth, and determine age, sex, stature, racial traits, disease, and trauma from the skeleton. Case studies, hands-on experience, and report writing are included. Prerequisites: ANTH 1102 or BIOL 1103 or POD. Cross-listed course.

Course cannot be repeated for credit. Graduate students must submit an original research paper from primary source materials and suitable for publication in a peer-reviewed journal.

ANTH 7000, Master's Research: Research while enrolled for a master's degree under the direction of faculty members. Non-traditional format: Independent research under the direction of a faculty member. POM. Can be repeated for credit up to 18 credit hours.

ANTH 7001 (proposed course), Principles of ARM. This new core course (which will be submitted to CAPA upon approval of this program) introduces the principles and practices of ARM. These include an introduction to historic preservation and environmental law notably The National Historic Preservation Act (NHPA) and the National Environmental Policy Act (NEPA). Additional topics include specific levels of field survey and analysis; geoprospection; ecology/environment; zooarchaeology; etc. Course will be term-taught by faculty of the MS program.

ANTH 7002 (proposed course), Practicum in ARM Research and Report Writing. This new core course (which will be submitted to CAPA upon approval of this program) builds on ANTH 7001. Emphasized in this course are the practical issues of ARM – cost proposals, research writing and report standards for state and federal agencies. The course will be team-taught by MS faculty.

ANTH 8000, Special Topics in Anthropology: Intensive study on an individual basis in the field of the graduate student's major interest. Non-traditional format: Faculty and student will meet regularly to develop and discuss topic. POM. Can be repeated for credit up to 12 credit hours.

GEOL 8010, Advanced Topics in Archaeological Geology: Intensive study under the direction of staff members on approved topics. 1-3 credit yours; repeatable for a maximum of 9 hours.

ANTH 8200, Seminar in Archaeology: Areas of special interest in the field of archaeology. Topics to be selected according to need. POM. Can be repeated for credit up to 12 credit hours.