#### ANG 6122C ARCHAEOLOGICAL CERAMICS

Instructor: Dr. Neill J. Wallis Spring 2021

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Office Hours (via Zoom): Mondays 9:00 to 12:00 or by appointment

**COURSE DESCRIPTION** 

Ceramics are some of the most common and durable artifacts on archaeological sites throughout the world. Fortunately they are also exceptionally useful material for understanding the human past. The analysis of ceramics often forms a cornerstone of archaeological research programs and is the basis for investigations of a wide range of topics such as diet, cuisine, chronology, technological change, social learning, social boundaries, kinship, trade and exchange, migration, and demography, to name a few.

Archaeological Ceramics is a graduate-level seminar in the analysis and interpretation of pottery. In this sense the course title is a misnomer—we will consider low-fired, unglazed, and unvitrified pottery nearly exclusively. We will review a wide variety of analytical approaches to pottery, but the emphasis is on technological and functional (a.k.a. "technofunctional") approaches. The course is organized around a "life cycle" perspective that begins with the selection of clay and temper and follows the manufacture, use, discard, and recycling trajectories of alternative vessel technologies. We will focus on topics such as the mechanical performance of fabrics (pastes), design specifications, vessel forms, use alteration, and assemblage formation processes. Ethnoarchaeological and experimental research provide the criteria for understanding the decisions and behaviors linked to pottery. As a complement to our focus on technology and function, we will also review a variety of analytical techniques commonly used to characterize pottery fabrics, and discuss a series of case studies that use pottery data to interrogate the organization and structure of past societies.

### COURSE OBJECTIVES AND STUDENT GOALS

The overall goal of the course is to familiarize you with pottery analysis and interpretation so that you can conduct independent research of pottery assemblages. Accordingly, you are required to either have access to an assemblage of potsherds for analysis (ideally from a context that is relevant to your research interests), or to review a body of literature outside of the class assignments and concerning the technology and function of pottery. Analysis will take a considerable amount of time, so you are strongly encouraged to begin working on an assemblage early in the semester. In this term project, we will employ a vessel unit of analysis and gather data on variables such as temper, wall thickness, vessel profile, orifice diameter, use alteration, and breakage patterns. The actual data you collect will be determined by the question(s) you pose. Our readings and class discussions will provide inspiration for the sorts of

questions you might address and will also form the basis for inferences that bridge the gap between your data and the practices that created your assemblage. Your product should be a publication-quality paper, which means that you should present new data from your analysis of a ceramic assemblage or offer a novel view of an archaeological problem based on your synthesis of existing literature.

## **REQUIRED TEXTS**

Rice, Prudence M. (2015) *Pottery Analysis: A Sourcebook*, Second Edition. University of Chicago Press, Chicago.

# Recommended:

Skibo, James M. (2013) Understanding Pottery Function. Springer, New York.

Additional readings as specified below. All are available within the modules on Canvas.

### **COURSE FORMAT**

We meet Mondays, Wednesdays and Fridays from 12:50-1:40 pm. The format of the course consists of a mixture of lectures, laboratory demonstrations, discussions, and an occasional film. For laboratory exercises, students enrolled in the online section of the course will be provided with individualized lab kits comprised of sherds from teaching collections. Lab exercises and lectures will be conducted in person and in a concurrent live virtual format (Zoom).

You are required to be prepared to discuss all readings prior to each class meeting. In addition, each student is expected to lead a one-hour class discussion <u>two times</u> during the semester. Responsibilities for leading discussion include: (1) identifying and outlining the issues most relevant for consideration by the class, (2) posing questions that facilitate discussion, and (3) posting these items in Canvas at least 24 hours prior to the class meeting. Discussion leaders also may suggest additional readings (two maximum, please), but this is not required. Topics will be selected on a "first come" basis during the second week of the semester.

Quizzes will be administered during class time through the Canvas course page. These quizzes will be short and have a time limit of 15 minutes. The purpose of the quizzes is to evaluate your familiarity with key concepts. While you are free to consult any resources at your disposal, doing so extensively during the quiz will likely cause you to run out of time before finishing.

## **GRADING**

Your grade for the course will be based on your performance on three lab quizzes (30 percent), a 20 page paper (50 percent), and class participation, including a 15-minute presentation to the class on your research project and leadership of topic discussions (20 percent).

### ACCEPTANCE OF COURSE REQUIREMENTS

By remaining registered in this course, you agree to accept the course requirements and expectations as stated in this syllabus. These are in addition to other general University requirements and codes of conduct as stated in official documents.

#### **SCHEDULE**

Week of January 11 Introduction

Week of January 18 Origins and history of pottery

Rice (2015) Chapter 1

Brown, James A.

1989 The Beginnings of Pottery as an Economic Process. In *What's New? A Closer Look at the Process of Innovation*, edited by S. E. van der Leeuw, pp. 203-224. Unwin Hyman, London.

Garraty, Christopher P.

2011 The Origins of Pottery as a Practical Domestic Technology: Evidence from the Middle Queen Creek Area, Arizona. *Journal of Anthropological Archaeology* 30:220-234.

Rice, Prudence M.

1999 On the Origins of Pottery. Journal of Archaeological Method and Theory 6:1-54.

Week of January 25 Pots to Sherds to Pots

Rice (2015) Chapters 11-12

Braun, David P.

1983 Pots as Tools. In *Archaeological Hammers and Theories*, edited by J. A. Moore and A. S. Keene, pp. 108-134. Academic Press, New York.

Crown, Patricia L.

2007 Life Histories of Pots and Potters: Situating the Individual in Archaeology. *American Antiquity* 72:677-690.

Stark, Miriam

2003 Current Issues in Ceramic Ethnoarchaeology. *Journal of Archaeological Research* 11(3):193-242.

Week of February 1 Life Cycle Perspective

Lab 1: Quantifying Assemblages

Rice (2015) Chapter 15

### Arthur, John W.

2009 Understanding Household Population through Ceramic Assemblage Formation: Ceramic Ethnoarchaeology among the Gamo of Southwestern Ethiopia. *American Antiquity* 74:31-48.

## Beck, Margaret

2006 Midden Ceramic Assemblage Formation: A Case Study from Kalinga, Philippines. *American Antiquity* 71:27-51.

#### DeBoer, Warren R.

1974 Ceramic Longevity and Archaeological Interpretation: An Example from the Upper Ucayali Peru. *American Antiquity* 39:335-343.

# DeBoer, Warren R., and Donald Lathrap

1979 The Making and Breaking of Shipibo-Conibo Ceramics. In *Ethnoarchaeology: Implications of Ethnography for Archaeology*, edited by C. Kramer, pp. 102-138. Columbia University Press, New York.

# Mills, Barbara J.

1989 Integrating Functional Analyses of Vessels and Sherds through Models of Ceramic Assemblage Formation. *World Archaeology* 21(1):133-147.

#### Skibo, James M.

2013 Understanding Pottery Function. Springer, New York. (Chapter 1)

### Sullivan, Alan P.

2008 Ethnoarchaeological and Archaeological Perspectives on Ceramic Vessels and Annual Accumulation Rates of Sherds. *American Antiquity* 73:121-135.

# Week of February 8 Clay Selection and Preparation

\*OUIZ 1

Rice (2015) Chapters 2-3, 5-6

#### Arnold, Dean E.

1985 *Ceramic Theory and Cultural Process*. New Studies in Archaeology. Cambridge University Press, New York. (Chapter 2).

Fowles, Severin W., Leah Minc, Samuel Duwe, and David V. Hill 2007 Clay, Conflict, and Village Aggregation: Compositional Analyses of Pre-Classic Pottery from Taos, New Mexico. *American Antiquity* 72:125-152.

### Gosselain, Olivier P.

1994 Skimming Through Potter's Agendas: An Ethnoarchaeological Study of Clay Selection Strategies in Cameroon. In *Society, Culture, and Technology in Africa*, edited by S. Terry Childs, pp. 99-107. MASCA Research Papers in Science and Archaeology, Supplement to

Volume 11. University of Pennsylvania Museum of Archaeology and Anthropology, Philadelphia.

Stark, Miriam T., Ronald L. Bishop., and Elizabeth Miksa

2000 Ceramic Technology and Social Boundaries: Cultural Practices in Kalinga Clay Selection and Use. *Journal of Archaeological Method and Theory* 7:295-331.

# Week of February 15 Temper

Rice (2015) chapter 4

Bronitsky, Gordon, and R. Hamer

1986 Experiments in Ceramic Technology: The Effects of Various Tempering Materials on Impact and Thermal-Shock Resistance. *American Antiquity* 51:89-101.

Rye, O. S.

1976 Keeping Your Temper Under Control. *Archaeology and Physical Anthropology in Oceania* 11(2):106-137.

Schiffer, Michael B., and James M. Skibo

1987 Theory and Experiment in the Study of Technological Change. *Current Anthropology* 28:595-622.

Skibo, James M., Michael B. Schiffer, and Kenneth C. Reid 1989 Organic-Tempered Pottery: An Experimental Study. *American Antiquity* 54:122-146.

# Week of February 22 Forming Techniques, Classification

Rice (2015) chapters 8, 13

Arnold, Dean E.

1985 *Ceramic Theory and Cultural Process*. New Studies in Archaeology. Cambridge University Press, New York. (Chapter 8).

Blitz, John

2015 Skeuomorphs, Pottery, and Technological Change. *American Anthropologist* 117:665-678.

Week of March 1
Finishing and Firing Techniques

\*OUIZ 2 Lab 3: Surface Treatments

Lab 2: Identifying Aplastics

Rice (2015) chapters 9-10

Gosselain, Olivier P.

1992 Bonfire of the Enquiries. Pottery Firing Temperatures in Archaeology: What For? *Journal of Archaeological Science* 19(3):243-259.

Longacre, William A., Jingfeng Xia, and Tao Yang

2000 I Want to Buy a Black Pot. Journal of Archaeological Method and Theory 7(4):273-293.

Pierce, Christopher

2005 Reverse Engineering the Ceramic Cooking Pot: Cost and Performance Properties of Plain and Textured Vessels. *Journal of Archaeological Method and Theory* 12:117-157.

Smith, A. Livingstone

2001 Bonfire II: The Return of Pottery Firing Temperatures. *Journal of Archaeological Science* 28:991-1003.

Schiffer, Michael Brian, James M. Skibo, Tamara C. Boelke, Mark A. Neupert, and Meredith Aronson

1994 New Perspectives on Experimental Archaeology: Surface Treatments and Thermal Response of the Clay Cooking Pot. *American Antiquity* 59:197-217.

# Week of March 8 Form and Function

Lab 4: Vessel Profiles

Rice (2015) Chapters 18-19, 25

Blitz, John H.

1993 Big Pots for Big Shots: Feasting and Storage in a Mississippian Community. *American Antiquity* 58:80-95.

Frink, Lisa and Karen G. Harry

2008 The Beauty of "Ugly" Eskimo Cooking Pots. American Antiquity 73:103-120.

Hally, David J.

1986 The Identification of Vessel Function: A Case Study from Northwest Georgia. *American Antiquity* 51:267-295.

Linton, Ralph

1944 North American Cooking Pots. American Antiquity 9:369-380.

Reid, Kenneth C.

1989 A Materials Science Perspective on Hunter-Gatherer Pottery. In *Pottery Technology: Ideas and Approaches*, edited by G. Bronitsky, pp. 167-180. Westview Press, Boulder, Colorado.

Skibo, James M.

2013 Understanding Pottery Function. Springer, New York. (Chapter 2)

Arthur, John W.

2002 Pottery Use-Alteration as an Indicator of Socioeconomic Status: An Ethnoarchaeological Study of the Gamo of Ethiopia. *Journal of Archaeological Method and Theory* 9(4):331-355.

Hally, David J.

1983 Use Alteration of Pottery Surfaces: An Important Source of Evidence for the Identification of Vessel Function. *North American Archaeologist* 4:3-26.

Skibo, James M.

2013 Understanding Pottery Function. Springer, New York. (Chapters 3-4)

Skibo, James M., Tamara C. Butts, and Michael Brian Schiffer 1997 Ceramic Surface Treatment and Abrasion Resistance: An Experimental Study. *Journal of Archaeological Science* 24:311-317.

# Week of March 22 Breaking, Discarding, Recycling

Deal, Michael

1985 Household Pottery Disposal in the Maya Highlands: An Ethnoarchaeological Interpretation. *Journal of Anthropological Archaeology* 4:243-291.

Deal, Michael, and Melissa B. Hagstrum

1994 Ceramic Reuse Behavior among the Maya and Wanka: Implications for Archaeology. In *Expanding Archaeology*, edited by J. M. Skibo, W. H. Walker, and A. E. Neilsen, pp. 111-125. University of Utah Press, Salt Lake City.

Senior, Louise M.

1994 The Estimation of Prehistoric Values: Cracked Pot Ideas in Archaeology. In *Expanding Archaeology*, edited by J. M. Skibo, W. H. Walker, and A. E. Neilsen, pp. 92-110. University of Utah Press, Salt Lake City.

Stanislawski, Michael B.

1969 What Good is a Broken Pot? An Experiment in Hopi-Tewa Ethnoarchaeology. *Southwestern Lore* 35(1):11-18.

1978 If Pots Were Mortal. In *Explorations in Ethnoarchaeology*, edited by R. A. Gould, pp. 201-227. University of New Mexico Press, Albuquerque.

### Week of March 29

Analysis of Mineral, Chemical and Physical Properties and Composition

Rice (2015) Chapter 17, 23

Evershed, Richard P.

2008 Organic residues in archaeology: the archaeological biomarker revolution. *Archaeometry* 50: 895-924

Glascock, Michael D. and Hector Neff

2003 Neutron activation analysis and provenance research in archaeology. *Measurement Science and Technology* 14:1516-1526.

Speakman, Robert J. and Hector Neff (editors)

2005 Laser Ablation-ICP-MS in Archaeological Research. University of New Mexico Press, Albuquerque. (Chapter 1 introduction).

Speakman, Robert J., Nicole C. Little, Darrell Creel, Myles R. Miller, and Javier G. Iñañez. 2011 Sourcing Ceramics with Portable XRF Spectrometers? An Example from the American Southwest. *Journal of Archaeological Science* 38:3483-3496.

Stoltman, James B.

1989 A Quantitative Approach to the Petrographic Analysis of Ceramic Thin Sections. *American Antiquity* 54:147-160.

### Week of April 5

Case Studies 1: Community, networks, and social interaction

Rice (2015) Chapter 24

Beck, Margaret E.

2009 Residential Mobility and Ceramic Exchange: Ethnography and Archaeological Implications. *Journal of Archaeological Method and Theory* 16:320–356.

Bowser, Brenda J.

2000 From Pottery to Politics: An Ethnoarchaeological Study of Political Factionalism, Ethnicity, and Domestic Pottery Style in the Ecuadorian Amazon. *Journal of Archaeological Method and Theory* 7:219-248.

Crown, Patricia L.

2016 Secrecy, Production Rights, and Practice within Communities of Potters in the Prehispanic American Southwest. In *Knowledge in Motion: Constellations of Learning across Time and Place*, edited by A. P. Roddick and A. B. Stahl, pp. 67-96. University of Arizona Press, Tucson.

Hegmon, Michelle, Will G. Russell, Kendall Baller, Matthew A. Peeples, and Sarah Striker 2021 The Social Significance of Mimbres Painted Pottery in the U.S. Southwest. *American Antiquity* 86(1):23–42

Mills, Barbara J.

2007 Performing the Feast: Visual Display and Suprahousehold Commensalism in the Puebloan Southwest. *American Antiquity* 72:210-239.

Mills, Barbara J., Jeffery J. Clark, Matthew A. Peeples, W. R. Haas, Jr., John M. Roberts, Jr., J. Brett Hill, Deborah L. Huntley, Lewis Borck, Ronald L. Breiger, Aaron Clauset, and M. Steven Shackley

2013 Transformation of social networks in the late pre-Hispanic US Southwest. *Proceedings of the National Academy of Sciences* 110:5785-5790.

## Sassaman, Kenneth E., and Wictoria Rudolphi

2001 Communities of Practice in the Early Ceramic Traditions of the American Southeast. *Journal of Anthropological Research* 57:407-425.

# Wallis, Neill J., T. Pluckhahn, and M. Glascock

2016 Sourcing Interaction Networks of the American Southeast: Neutron Activation Analysis of Swift Creek Complicated Stamped Pottery. *American Antiquity* 81:717-732.

### Week of April 12

## Case Studies 2: Standardization, Specialization, and Power

Rice (2015) Chapters 21-22

#### Abbott, D. R.

2009 Extensive and long-term specialization: Hohokam ceramic production in the Phoenix Basin, Arizona. *American Antiquity* 74(3):531–557.

### Costin, C. and Hagstrum, M.

1995 Standardization, labour investment, skill, and the organization of ceramic production in late Prehispanic highland Peru. *American Antiquity* 60:619-39.

# Harry, K. G.

2005 Ceramic Specialization and Agricultural Marginality: Do Ethnographic Models Explain the Development of Specialized Pottery Production in the Prehistoric American Southwest? *American Antiquity* 70(2):295-319.

### Longacre, William A.

1999 Standardization and Specialization: What's the Link? In *Pottery and People: A Dynamic Interaction*, edited by J. M. Skibo and G. M. Feinman, pp. 44-58. The University of Utah Press, Salt Lake City.

#### Nash, Donna J.

2019 Craft Production as an Empowering Strategy in an Emerging Empire. *Journal of Anthropological Research* 75(3):328-360.

#### Roux, R.

2003 Ceramic Standardization and Intensity of Production: Quantifying Degrees of Specialization. *American Antiquity* 68(4):768-782.

Stark, Miriam T.

1991 Ceramic production and community specialization: A Kalinga ethnoarchaeological study. *World Archaeology* 23:64-78.

Week of April 19 STUDENT PAPER PRESENTATIONS

April 26
PAPERS DUE

The following information is provided in conformance with University Policy:

## Policy related to class attendance, make-up exams, and other work

Requirements for class attendance, make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at: <a href="https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx">https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx</a>

Accommodations for students with disabilities <a href="https://www.dso.ufl.edu/drc/">https://www.dso.ufl.edu/drc/</a> Students requesting classroom accommodation must first register with the Dean of Students Office, Disability Resource Center. The DRC will provide documentation to the student and instructor. Upon receipt of documentation, the student must meet with the instructor to clarify the accommodation, after which it will be granted. Students with disabilities should follow these procedures as early as possible in the semester.

# Online course evaluation process

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <a href="https://gatorevals.aa.ufl.edu/students/">https://gatorevals.aa.ufl.edu/students/</a>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <a href="https://ufl.bluera.com/ufl/">https://ufl.bluera.com/ufl/</a>. Summaries of course evaluation results are available to students at <a href="https://gatorevals.aa.ufl.edu/publicresults/">https://gatorevals.aa.ufl.edu/publicresults/</a>.

### **Religious Observances**

Students seeking modification of due dates for assignments and exams for religious reasons (e.g., holiday observances) should contact the Professor and request this modification; it will then be granted.

### **Academic Honesty**

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: 'On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (http://www.dso.ufl.edu/sccr/process/student-conducthonor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. Instances of dishonesty include conducting unauthorized research on the internet and failing to cite sources of information on any work submitted, as well as unauthorized collaborating with students or others to determine the answers on assignments and exams (see the full list at url above). All suspected instances of violations of the Honor Code (plagiarism, copying, cheating) will be reported to the Dean of Students Office (DSO). Students who have not committed any prior violations according to the DSO will be sanctioned by the instructor; the usual penalty is a loss of all credit for the plagiarized assignment, or a grade of 0 on an exam. Students with prior violations will be sanctioned according to the Honor Code Resolution Process (http://regulations.ufl.edu/wp-content/uploads/2012/09/4042.pdf)

### **Counseling and Emergency Services**

U Matter, We Care serves as UF's umbrella program for UF's caring culture and provides students in distress with support and coordination of the wide variety of appropriate resources. Contact <a href="mailto:umatter@ufl.edu">umatter@ufl.edu</a> seven days a week for assistance for students in distress.

- the University Counseling and Wellness Center, 301 Peabody Hall, 392-1575
   <a href="http://www.counseling.ufl.edu/cwc/">http://www.counseling.ufl.edu/cwc/</a>
- Student Health Care Center, 392-1161
- Career Connections Center, Reitz Union, 392-1601
- Center for Sexual Assault/Abuse Recovery and Education (CARE), Student Health Care Center, 392-1161
- University Police Department 392-1111 (non-emergency); call 9-1-1 for emergencies

#### **Electronic Course Reserves**

The electronic course reserve service is offered by the George A. Smathers Libraries. Under the Rehabilitation Act and the Americans with Disabilities Act, students with disabilities have the right to equal access, use and benefit of the course materials that have been placed on reserve in the Libraries. Students who have registered with the University of Florida Disability Resource Center should initiate their request for assistance and accommodation in accessing these materials. The Center will work with the Libraries Course Reserve Unit to provide accessible course materials. All information submitted by the student to the Libraries in fulfilling the

request for accommodation will be kept confidential. For more information on services for students with disabilities, contact the Disability Resource Center at 352-392-8565 or at accessuf@dso.ufl.edu.

For general information on course reserves, please contact the Course Reserves Unit at 352-273-2520, or email at eres@uflib.ufl.edu. It is best to use the UF (Cisco) VPN client when accessing electronic materials course reserve materials as well as e-books, on-line journals, databases, etc. offered by the library. The VPN client is easily installed and configured, and provides easy access to electronic materials using off-campus computers. For more information on using the VPN client, go to <a href="http://www.uflib.ufl.edu/login/vpn.html">http://www.uflib.ufl.edu/login/vpn.html</a>

# **Software Regulations**

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate.