ANT4187-20Spring 0001 And ANT5188

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Paleoethnobotany

Instructor Contact

- Instructor: **Dr. Neil Duncan**
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- Office Hours: 10:30- Noon Tuesdays and by appointment, meet in rm 355 Research One Building
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Course Information

- Course Name: Paleoethnobotany
- Course ID & Section: ANT4187/ANG5188
- Credit Hours: 3
- Preequisites: ANT2140, Junior Standing
- Semester/Year: Spring 2020
- Meeting time: Th 3:00pm-5:50pm
- Meeting place: MSB0149

Course Description:

Catalog description: Provides students with knowledge and understanding of paleoethnobotany sufficient to understand, interpret, and evaluate plant data in archaeological, paleoecological, and contemporary research. Odd Spring.

Paleoethnobotany studies the interrelationships between humans and the plant world through the archaeological record. This course will provide students with knowledge and understanding of paleoethnobotany sufficient to understand, interpret, and evaluate plant data in archaeological, paleoecological, and contemporary research. The course will cover the major approaches paleoethnobotany uses in the study of archaeobotanical remains: charred wood and plant macro-remains, pollen, phytoliths, and starch grains and explore how these data can be integrated with each other and with other dietary and environmental indicators. Laboratory sessions will provide hands-on experience in sampling and identification techniques of plant materials.

Student Learning Outcomes:

- To help students interested in the archaeological use of plants, diet, and past environments gain the

knowledge needed to understand and critique archaeobotanical data and paleoethnobotanical interpretations.
- To provide hands-on experience working with, analyzing and interpreting archaeobotanical remains.
- To appreciate multidisciplinary and collaborative research in modern archaeology.
- To obtain first-hand research and/or grant-writing experience in paleoethnobotany.

Class info:

This course is a split level course, meaning both undergraduate and graduate students may receive credit. This class will be conducted as informal lecture/discussion with weekly laboratory sessions in which you will experience archaeobotanical techniques including identification procedures and microscopy. You should come to class having read ALL the assigned readings for the day and be prepared to add to the discussions. Your participation is essential.

Grading and Course Requirements

Undergrads and Grads

There will be 4 take-home quizzes distributed throughout the semester. These are designed to give you a chance to interpret an archaeobotanical dataset. Your work will be your own. For each discussion reading, a student will be assigned to lead the discussion for that reading. The number of opportunities is limited by class size, but expect to have around three discussions to lead. Also, be prepared to turn in a minimum of 1 discussion question per reading. In addition, an abstract a will be prepared for each of the *Discussion Readings* assigned each week. Abstracts will be compiled and turned in at the end of the semester. These will enhance class discussions of the readings and help you have an archive of the material you read. You will also lead discussions of multiple articles throughout the course. Participation is expected and evaluated.

Graduate Students Only

In addition to the above, graduate students will be assigned as group leaders during lab sessions. You will be responsible for overseeing group work and completion, making sure proper procedures are followed, and qualitatively assessing group participation. This will be part of your participation grade

In addition to the above requirements, you will have two options to prepare a project proposal for paleo- or ethnobotanical research in your area of graduate research or to conduct original research with materials from your own research.

Option 1: The goal of this 15-20 page research proposal is to assess your understanding of the potential contribution of paleoethnobotany to answering archaeological and anthropological questions including, but not limited to, diet, subsistence, environment and ritual. Guidelines for writing a research proposal will be distributed during the first week of class, but your proposal will generally include an abstract, an introduction that outlines your research questions, background research and theoretical approach that will inform your proposed research, the methods you intend to use to answer your research questions, and, finally, a statement of the significance of your proposed work (or, why this proposed work is important). Finally, you will present your proposal to class in a 15 minute “powerpoint” presentation at the end of the semester. 100 points.

Option 2: This option is available to graduate students who are interested in conducting original research in their own areas of interest with materials that they have obtained (soils, artifacts, etc. or data) as part of their graduate projects. While I encourage graduate students to take this option, you should be aware that it may require a significant amount of personal time to complete. In addition, Laboratory Safety Training through UCF Environmental Health & Safety may also be required. The research will be written up as paper or poster of a quality to be presented at a professional meeting. Lastly, you will present the paper or poster at the end of the semester. 100 points.

Points:

Undergraduates

Quizzes: 4 x 50 = 200

Abstracts: 50

Discusion Questions:

Class Participation: 50

Discussion Leadership: 30

Total for undergrads: 330

Graduates:

Quizzes: 4 x 50 = 200

Abstracts and discussion questions: 50

Class Participation: 50

Discussion Leadership: 30

Proposal or paper: 100

Presentation: 25

Total for grads: 450

Name:	Range
A	100 % to 94.0%
A-	< 94.0 % to 90.0%
B+	< 90.0 % to 87.0%
B	< 87.0 % to 84.0%
B-	< 84.0 % to 80.0%
C+	< 80.0 % to 77.0%
C	< 77.0 % to 74.0%
C-	< 74.0 % to 70.0%

Name:	Range
D+	< 70.0 % to 67.0%
D	< 67.0 % to 64.0%
D-	< 64.0 % to 60.0%
F	< 60.0 % to 0.0%

A Note on Grading

If you dispute a grade on any part of your essays or tests, you have three days after the grade is posted to bring the matter to my attention. It is your responsibility to examine your graded material within a reasonable time after I return the material to you. Do not wait until the end of the semester to dispute your grades. Also, please do not request that your grade be rounded up at the end of the semester. I will not reply to any requests for rounding up, so don't take it personally.

Required Textbook and Readings

Deborah Pearsall's *Paleoethnobotany: A Handbook of Procedures* 3rd Edition, 2015, Left Coast Press ISBN-10: 1611322995 will be our main text and referred to as "DMP" in the schedule below. Discussion readings will be provided as PDFs. Discussion readings are subject to change.

Attendance/Participation and Missed Assignments

Class attendance is crucial and expected. It is strongly advised that you not miss a scheduled exam or assignment. I understand that life can be unpredictable, BUT scheduling make-up exams, quizzes, or assignments is a great inconvenience and will only be given in the following extenuating circumstances with written documentation of said circumstance:

1) Religious holiday. Students must notify their instructor in advance if they intend to miss class for a religious observance. For more information, see the **UCF policyLinks to an external site.** **(http://catalog.ucf.edu/content.php?catoid=2&navoid=17#attendance-absences-or-unsatisfactory-work)** .

2) Participation in official university activity. Students who represent the university in an authorized event or activity (for example, student-athletes) and who are unable to meet a course deadline due to a conflict with that event must provide the instructor with documentation *in advance* to arrange a make-up. No penalty will be applied. For more information, see the **UCF policyLinks to an external site.** **(http://catalog.ucf.edu/content.php?catoid=2&navoid=17#attendance-absences-or-unsatisfactory-work)** .

3) Illness of yourself or dependent – a doctor's note is required.

4) Jury duty – copy of jury summons is required.

5) Extenuating circumstances with prior notification and documentation but excluding oversleeping, forgetfulness, and alien abduction. Active duty military please see section below. Please note that previously scheduled personal appointments or social functions (weddings, cruises, trips to Disney) do not constitute an emergency and are not considered extenuating circumstances.

Please note that late assignments will suffer a point reduction.

Policy Statements

Academic Integrity

Students should familiarize themselves with **UCF's Rules of Conduct** (http://osc.sdes.ucf.edu/process/roc) . According to Section 1, "Academic Misconduct," students are prohibited from engaging in:

- *Unauthorized assistance*: Using or attempting to use unauthorized materials, information or study aids in any academic exercise unless specifically authorized by the instructor of record. The unauthorized possession of examination or course-related material also constitutes cheating.
- *Communication to another through written, visual, electronic, or oral means*: The presentation of material which has not been studied or learned, but rather was obtained through someone else's efforts and used as part of an examination, course assignment, or project.
- *Commercial Use of Academic Material*: Selling of course material to another person, student, and/or uploading course material to a third-party vendor without authorization or without the express written permission of the university and the instructor. Course materials include but are not limited to class notes, Instructor's PowerPoints, course syllabi, tests, quizzes, labs, instruction sheets, homework, study guides, handouts, etc.
- *Falsifying or misrepresenting* the student's own academic work.
- *Plagiarism*: Using or appropriating another's work without any indication of the source, thereby attempting to convey the impression that such work is the student's own.
- *Multiple Submissions*: Submitting the same academic work for credit more than once without the express written permission of the instructor.
- *Helping another violate* academic behavior standards.

For more information about Academic Integrity, students may consult **The Center for Academic Integrity.** (http://www.academicintegrity.org/icai/assets/FVProject.pdf)

For more information about plagiarism and misuse of sources, see "**Defining and Avoiding Plagiarism: The WPA Statement on Best Practices** (http://wpacouncil.org/node/9) "

Responses to Academic Dishonesty, Plagiarism, or Cheating

Students should also familiarize themselves with the procedures for academic misconduct in UCF's student handbook, **The Golden Rule.** (http://goldenrule.sdes.ucf.edu/docs/goldenrule.pdf) UCF faculty members have a responsibility for students' education and the value of a UCF degree, and so seek to prevent unethical behavior and when necessary respond to academic misconduct. Penalties can include a failing grade in an assignment or in the course, suspension or expulsion from the university, and/or a "Z Designation" on a student's official transcript indicating academic dishonesty, where the final grade for this course will be preceded by the letter Z. For more information about the Z Designation, see **http://goldenrule.sdes.ucf.edu/zgrade** (http://goldenrule.sdes.ucf.edu/zgrade) .

Course Accessibility Statement

The University of Central Florida is committed to providing access and inclusion for all persons with disabilities. Students with disabilities who need disability-related access in this course should contact the professor as soon as possible. Students should also connect with **Student Accessibility Services (http://sas.sdes.ucf.edu/)** (Ferrell Commons 185, **sas@ucf.edu (mailto:sas@ucf.edu)**, phone (407) 823-2371). Through Student Accessibility Services, a Course Accessibility Letter may be created and sent to professors, which informs faculty of potential access and accommodations that might be reasonable. Determining reasonable access and accommodations requires consideration of the course design, course learning objectives and the individual academic and course barriers experienced by the student.

Unexpected Course Changes

To stay informed about emergency situations, students can sign up to receive UCF text alerts by going to **ucf.edu (http://my.ucf.edu/)** and logging in. Click on “Student Self Service” located on the left side of the screen in the toolbar, scroll down to the blue “Personal Information” heading on the Student Center screen, click on “UCF Alert”, fill out the information, including e-mail address, cell phone number, and cell phone provider, click “Apply” to save the changes, and then click “OK.”

Students with special needs related to emergency situations should speak with their instructors outside of class.

Emergencies may occur that could affect this course's schedule.

Deployed Active Duty Military Students

If you are a deployed active duty military student and feel that you may need a special accommodation due to that unique status, please contact your instructor to discuss your circumstances.

Campus Safety Statement

Emergencies on campus are rare, but if one should arise during class, everyone needs to work together. Students should be aware of their surroundings and familiar with some basic safety and security concepts.

In case of an emergency, dial 911 for assistance. Every UCF classroom contains an emergency procedure guide posted on a wall near the door. Students should make a note of the guide’s physical location and review the online version at <http://emergency.ucf.edu/emergency_guide.html>.
Students should know the evacuation routes from each of their classrooms and have a plan for finding safety in case of an emergency.
If there is a medical emergency during class, students may need to access a first-aid kit or AED (Automated External Defibrillator). To learn where those are located, see <http://www.ehs.ucf.edu/AEDlocations-UCF> (click on link from menu on left).
To stay informed about emergency situations, students can sign up to receive UCF text alerts by going to <https://my.ucf.edu> and logging in. Click on “Student Self Service” located on the left side of the screen in the toolbar, scroll down to the blue “Personal Information” heading on the Student Center screen, click on

“UCF Alert”, fill out the information, including e-mail address, cell phone number, and cell phone provider, click “Apply” to save the changes, and then click “OK.”
Students with special needs related to emergency situations should speak with their instructors outside of class.
To learn about how to manage an active-shooter situation on campus or elsewhere, consider viewing this video (<https://youtu.be/NIKYajEx4pk>).

Campus Safety Statement for Students in Online-Only Courses

Though most emergency situations are primarily relevant to courses that meet in person, such incidents can also impact online students, either when they are on or near campus to participate in other courses or activities or when their course work is affected by off-campus emergencies. The following policies apply to courses in online modalities.

To stay informed about emergency situations, students can sign up to receive UCF text alerts by going to <https://my.ucf.edu> and logging in. Click on “Student Self Service” located on the left side of the screen in the toolbar, scroll down to the blue “Personal Information” heading on the Student Center screen, click on “UCF Alert”, fill out the information, including e-mail address, cell phone number, and cell phone provider, click “Apply” to save the changes, and then click “OK.”
Students with special needs related to emergency situations should speak with their instructors outside of class.

Copyright

This course contains copyright protected materials such as audio or video clips, images, text materials, etc. These items are being used with regard to the Fair Use doctrine in order to enhance the learning environment. Please do not copy, duplicate, download or distribute these items. The use of these materials is strictly reserved for this online classroom environment and your use only. All copyright materials are credited to the copyright holder.

Third-Party Software and FERPA

During this course you might have the opportunity to use public online services and/or software applications sometimes called third-party software such as a blog or wiki. While some of these could be required assignments, you need not make any personally identifying information on a public site. Do not post or provide any private information about yourself or your classmates. Where appropriate you may use a pseudonym or nickname. Some written assignments posted publicly may require personal reflection/comments, but the assignments will not require you to disclose any personally identity-sensitive information. If you have any concerns about this, please contact your instructor.

Course Schedule:

SCHEDULE IS SUBJECT TO CHANGE

Part 1: Paleoethnobotany; Plant-Macroremains Analysis in Archaeology

1) Week 1/9

Introduction to the class.

Syllabus and expectations

2) Week 1/16

Historical overview and general principles of paleoethnobotany. DMP Ch 1

Discussion Readings:

Ford, R. I. (1979). Paleoethnobotany in American Archaeology *Advances in Archaeological Method and Theory* (Vol. 2): Academic Press.

Marston, J., C. Warriner, and J. D'Alpoim Guedes (2014) Paleothnobotanical Method and Theory in the Twenty-First Century. In *Method and Theory in Paleoethnobotany,* J. Marston, J. D'Alpoim Guedes, C. Warinner, eds. Boulder: University Press of Colorado.

van der Veen, Marijke (2014) The materiality of plants: plant–people entanglements. *World Archaeology* 46(5):799-812.

Lab: Flotation

3) Week 1/23

Sampling for Macroremains; Issues and Directions in Recovery of Macroremains. DMP Ch 2

Discussion Readings

Chapman, J., & Watson, P. J. (1993). The Archaic Period and the Flotation Revolution. In C. M. Scarry (Ed.), *Foraging and Farming in the Eastern Woodlands* (pp. 27-38). Gainesville: University Press of Florida.

Wagner, G. E. (1988). Comparability among recovery techniques. In C. A. Hastorf & V. S. Popper (Eds.), *Current Paleoethnobotany. Analytical Methods and Cultural Interpretations of Archaeological Plant Remains.* (pp. 17-35). Chicago: University of Chicago Press.

Lab: Flotation

4) Week 1/30

Presenting and Interpreting Results. DMP Ch 3:97-141

Discussion Readings

Lopinot, N. and W. Woods (1993) Wood Overexploitation and the Collapse of Cahokia. In *Foraging and Farming in the Eastern Woodlands*, ed. by C. M. Scarry, pp. 206-231

Beresford-Jones, D. G., Whaley, O., Ledesma, C. A., & Cadwallader, L. (2011). Two millennia of changes in human ecology: archaeobotanical and invertebrate records from the lower Ica valley, south coast Peru.

Vegetation History and Archaeobotany. doi: 10.1007/s00334-011-0292-4

Lab: *Sorting flotations, wood identification*

5) Week 2/6

In-text Case Studies; Issues and Directions in Macroremain analysis. DMP Ch 3:141-182

Disscussion Readings

Case study 1 page 170 DMP Dung Fuel or Broad-spectrum revolution

Case study 2 page 177, Diet and social change

Miksicek,C. (1987) Formation Processes of the Archaeological Record. In Advances in Archaeological Method and Theory 10, ed. by M. Schiffer, pp. 211-248.

Reddy, Seetha N. and Jon M. Erlandson. 2012. Macrobotanical food remains from a trans-Holocene sequence at Daisy Cave (CA-SMI-261), San Miguel Island, California. *J Arch Sci* 39:33-40

Sheets, P., et al. (2011) Manioc Cultivation at Ceren, El Salvador: Occasional Kitchen Garden Plant or Staple Crop? *Ancient Mesoamerica* **22**(01): 1-11.

Ugent, D., et al. (1982) Archaeological Potato Tuber Remains from the Casma Valley of Peru. *Economic Botany* **36**(2): 182-192.

Lab: Identifying fruits and roots, seeds.

Take home Quiz 1 assigned

Part 2: Pollen in Archaeology

6) Week 2/13

Nature and Production of Pollen; History of Pollen Analysis. DMP Ch 4, pp185-225

Discussion Readings

Barton, H. and R. Fullager 2006 Microscopy. In *Ancient Starch Research,* pp47-52. Robin Torrence and Huw Barton, eds. Left Coast Press. (slanted toward starch but useful overview of microscope techniques)

First Take-home Quiz Due (no discussion readings this week)

Lab: Pollen

7) Week 2/20

Presenting and Interpreting Results DMP Ch 4, pp 226-251

Discussion Readngs

Bryant, V.M**.** and R G. Hollloway (1983). The role of palynology in archaeology. Advances in archaeology

Method and Theory. 6: 191-224.

Hase, Yoshitaka, Akiko Iwauchi, Utako Uchikoshiyama, Eri Noguchi and Naoko Sasaki (2012) Vegetation changes after the late period of the Last Glacial Age based on pollen analysis of the northern area of Aso Caldera in central Kyushu, Southwest Japan. *Quaternary International* 254:107-117.

Kozáková, Radka, Petr Pokorný, Vladimír Peša, Alžběta Danielisová, Katarína Čuláková and Helena Svitavská Svobodová (2015) Prehistoric human impact in the mountains of Bohemia. Do pollen and archaeological data support the traditional scenario of a prehistoric “wilderness”? *Review of Palaeobotany and Palynology* 220:29-43.

Lab: Presenting and Interpreting Results

8) Week 2/27

Take home quiz 2 assigned

Issues and Directions in Pollen Analysis. DMP Ch 4

Disscussion Readings

Case study:

Fearn, M. L., & Liu, K.-b. (1995). Maize pollen of 3500 B.P. from southern Alabama. *American Antiquity, 60*(1), 109-117.

Eubanks, M. (1997). Reevaluation of the identification of ancient maize pollen from Alabama. *American Antiquity, 62*(1), 139-145.

Fearn, M. L., & Liu, K.-b. (1997). Identification of Maize pollen: Reply to Eubanks. *American Antiquity, 62*(1), 146-148

Pearsall, D (2019) The Paleoethnobotany of Maize. Chapter 6 in Case Studies in Paleoethnobotany, pp112-145

Lab: Pollen

Part 3: Opal Phytoliths in Archaeology

9) Week 3/5

Second Take-home Quiz Due

Lecture:

Nature and Occurrence of Phytoliths. DMP Ch 5, pp 253-279

Discussion Reading:

Ball, T., , Karol Chandler-Ezell, Ruth Dickau, Neil Duncan, Thomas C. Hart, Jose Iriarte, Carol Lentfer,

Amanda Logan, Houyuan Lu, Marco Madella, Deborah M. Pearsall, Dolores R. Piperno, Arlene M. Rosen, Luc Vrydaghs, Alison Weisskopf and Jianping Zhang (2015) Phytoliths as a tool for investigations of agricultural origins and dispersals around the world. *Journal of Archaeological Science*.

Liu, Li., Duncan, N.A., Chen, X., Ji, P. (2016). Plant-based subsistence strategies and development of complex societies in Neolithic Northeast China: Evidence from grinding stones, Journal of Archaeological science: Reports 7, 247-261.

Lab: Phytoliths

10) Week 3/19

Field Sampling; Laboratory Analysis. DMP Ch 5, pp280-313

Scanning and Counting Procedures; Presenting and Interpreting Results. DMP Ch 5

Discussion Readings

Harvey, E. L. and D. Q. Fuller (2005). "Investigating crop processing using phytolith analysis: the example of rice and millets." *Journal of Archaeological Science* **32**(5): 739-752.

Iriarte, J. (2003). "Assessing the feasibility of identifying maize through the analysis of cross-shaped size and three-dimensional morphology of phytoliths in the grasslands of southeastern South America." Journal of Archaeological Science **30**(9): 1085-1094.

Piperno, D. R., et al. (2000). "Phytoliths in Cucurbita and other Neotropical Cucurbitaceae and their occurrence in early archaeological sites from the lowland American tropics." *Journal of Archaeological Science* **27**(3): 193-208.

Lab: Phytoliths

11) Week 3/26

Third Take home quiz assigned

In-text Case Studies; Issues and Directions in Phytolith Analysis. DMP Ch 5, pp214-340

Discussion Readings

Pearsall, D. M., K. Chandler-Ezell, A. Chandler-Ezell (2003) Identifying maize in neotropical sediments and soils using cob phytoliths. Journal of Archaeological Science 30:611-627.

Rover, Irwin (2004) On transparent blindfolds: Comments on identifying maize in Neotropical sediments and soils using cob phytoliths JAS 31:815-819

Pearsall, Deborah M., Karol Chandler-Ezell, Alex Chandler-Ezell

(2004) Maize can *still* be identified using phytoliths: response to Rovner JAS 31:1029-1038

Case study in DMP: How Common was Maize at Real Alto? p326

Lab: Phytoliths

Part 4: Starch Grains Analysis in Archaeology

12) Week 4/2

Third Take-home Quiz Due

Starch grain analysis. DMP Chp 6, pp341-374

Discussion Readings

Gott, B., H. Barton, D. Samuel, and R. Torrence (2006) Biology of Starch. In *Ancient Starch Research,* pp 35-45. Robin Torrence and Huw Barton, eds. Left Coast Press.

Piperno, Dolores R., A. J. Ranere, I. Holst, and P. Hansell (2000) Starch grains reveal early root crop horticulture in the Panamanian tropical forest. Nature 407(6806):894-897.

Perry, L. (2004) Starch analyses reveal the relationship between tool type and function: an example from the Orinoco valley of Venezuela. *Journal of Archaeological Science* 31:1069-1081.

Hardy, K., T. Blakeney, L. Copeland, J. Kirkham, R. Wrangham, M. Collins
(2009) Starch Granules, dental calculus and new perspectives on acient diet. JAS 36(2):248-255

Lab: *Starch*

13) Week 4/9

DMP Chp 6, pp 375-384

Discussion Readings

Babot, M. Pilar (2003) Starch grain damage as an indicator of food processing. *Phytolith and starch research in the Australian-Pacific-Asian regions: the state of the art*: 69-81.

Lu, H., X. Yang, M. Ye, K. B. Liu, Z. Xia, X. Ren, L. Cai, N. Wu and T. S. Liu (2005) Culinary archaeology: Millet noodles in Late Neolithic China. *Nature* 437(7061):967-968.

Ge, W. E. I., L. I. Liu, Xingcan Chen and Zhengyao Jin (2011) Can Noodles Be Made from Millet? An Experimental Investigation of Noodle Manufacture Together with Starch Grain Analyses. *Archaeometry* 53(1):194-204.

Mercader, J., T. Bennett and M. Raja (2008) Middle Stone Age starch acquisition in the Niassa Rift, Mozambique. *Quaternary Research* 70(2):283-300.

Lab: Starch

The final part: Multiple indicators and integrating paleoethnobotanical data

14) Week 4/16

Take home Quiz 4 Assigned

Discussion Readings

Pearsall, D (2019) Plants and healin/health. Chapter 9 in Case Studies in Paleoethnobotany, pp112-145

Kennett, Douglas J., Dolores R. Piperno, John G. Jones, Hector Neff, Barbara Voorhies, Megan K. Walsh and Brendan J. Culleton (2010) Pre-pottery farmers on the Pacific coast of southern Mexico. *Journal of Archaeological Science*37(12):3401-3411.

Whitney, B. S., R. Dickau, F. E. Mayle, J. H. Walker, J. D. Soto and J. Iriarte (2014) Pre-Columbian raised-field agriculture and land use in the Bolivian Amazon. *The Holocene* 24(2):231-241.

Morehart, Christopher T. and Shanti Morell-Hart (2013) Beyond the Ecofact: Toward a Social Paleoethnobotany in Mesoamerica. *Journal of Archaeological Method and Theory*.

Lab: TBA

4/23 Final Exam Day *Fourth Take-home Quiz Due, Presentations*

MEETING TIME 1-3:50

Course Summary:

Date	Details
	Abstracts and discussion questions (https://webcourses.ucf.edu/courses/1347192/assignments/6480466)
	Class participation (https://webcourses.ucf.edu/courses/1347192/assignments/6480469)
	Discussion Leadership (https://webcourses.ucf.edu/courses/1347192/assignments/6480468)
	Quiz 1 (https://webcourses.ucf.edu/courses/1347192/assignments/6480413)
	Quiz 2 (https://webcourses.ucf.edu/courses/1347192/assignments/6480414)

Date	Details
	Quiz 3 (https://webcourses.ucf.edu/courses/1347192/assignments/6480425)
	Quiz 4 (https://webcourses.ucf.edu/courses/1347192/assignments/6480465)