



THE YANGGUANZHAI NEOLITHIC ARCHAEOLOGICAL PROJECT, CHINA

Course ID: ARCH 380A

June 14 -July 18, 2020

Academic Credits: 8 Semester Credit Units (Equivalent to 12 Quarter Units)

School of Record: Connecticut College

PROJECT DIRECTORS:

Dr. Richard Ehrich, Northwest University (China) and UCLA (richardehrich@ucla.edu)

Dr. Zhouyong Sun, Shaanxi Provincial Institute of Archaeology, China (sunzhouyong2005@yahoo.cn)

Mr. Yang Liping, Shaanxi Provincial Institute of Archaeology, China (ylp-arch@163.com)



INTRODUCTION

The prehistoric village of Yangguanzhai (YGZ) dates to the Middle to Late Yangshao period (c. 3,500 - 3,000 BCE). It is one of the largest settlements of its kind. The site is located in the Jing River Valley, approximately 25 kilometers north of the ancient city of Xi'an in northwest China. Since 2004, in preparation for a major construction project, the Shaanxi Provincial Institute of Archaeology began to conduct large-scale excavations and exploratory surveys – by means of test trenches and coring with the Luoyang spade – in various parts of the site. More than 18,000 square meters have been excavated to date. These activities revealed a moat, a row of cave dwellings, subterranean houses, child urn burials in the residential areas, and numerous pottery kilns. The quantity and quality of finds were impressive enough for the Chinese authorities to halt commercial development and declare the area a protected archaeological site.

In 2010, as part of the ongoing excavation, a joint UCLA/Shaanxi Province Archaeological Academy/Xibei University project began to operate at the site. This project is shifting the focus from the large-scale exposure of architecture to a more careful and systematic analysis of local stratigraphy and a stronger

emphasis on anthropological interpretations. Most recently, researchers from the Shaanxi Province Archaeological Academy have discovered an extensive cemetery at the site, the only known cemetery so far dating to the mid-4th millennium BCE in this region.

In its initial five seasons (2010-2014), the YGZ project excavated the northeastern portion near the moat, exposing multiple layers of domestic architecture. Like the other excavated sections of the YGZ site, no clear pattern of planning or coherent arrangement of habitation spaces is evident, as compared to other known Neolithic villages in the region. Many features were found either adjacent or at very short distance from the moat. In 2016, the field project excavated several house foundations and hearths, as well as a potential pottery kilns and a child urn burial, adjacent to a large artificial reservoir in the south central part of the site. In 2017, field school work returned to the northeastern section of the site. There, students discovered additional pits, a possible dwelling, and the inhumation burial of an infant inside the fill of a pit - an unusual feature for the Miaodigou Period. In 2018, we once again investigated the area surrounding the central reservoir of the site, continuing some of the work of 2016. The students excavated several pits that intersect with dwellings or with each other. The complicated internal stratigraphy of these pits indicates that even when used as refuse dumps, the pits would be modified to walk or even build upon. In addition, our teams uncovered the partial remains of a disturbed child urn burial and worked in a portion of the reservoir itself to further determine how it was structured and maintained. In 2019, a new area was opened for investigation: A south-eastern section of the moat. We excavated the top strata of the moat fill as well as pits and a house foundation constructed next to or on top of the filled-in moat.

Although full understanding of Yanggouzhai still eludes us, a clearer picture has begun to emerge. Based on research into the formation processes of the moat and one of the pits excavated by the IFR field school, preliminary site formation models have been formulated. Results from the analysis of micromorphological samples suggests that the function of the moat has changed from “potentially defensive or symbolic in nature” (M. Fox 2016) to a garbage dumping place. Both environmental (mostly by water) and anthropogenic actions were responsible for such change, however, reasons behind the changes in human behavior throughout the occupation history of the site are still unclear.

The testing results and newly available ¹⁴C dates indicate the existence of a long-lasting farming community at Yanggouzhai. The community subsisted on millet cultivation, husbandry of pigs, wild animal hunting, fishing, and wild plant gathering. Yanggouzhai’s inhabitants also invested heavily in ceramic manufacture, demonstrated not only by the enormous amount of pottery sherds discovered at the site, but the remaining kilns found in all seven excavated sectors at Yanggouzhai. Unlike earlier Neolithic villages where ceramic manufacturing was separated from the village in adjacent locations, the ceramic kilns found in Yanggouzhai are next to or built within residential areas. Imported ceramics such as white paste rings, either plain or painted with red colored patterns, attest to the fact that long distance contacts with other regions was commonplace.

What makes Yanggouzhai and other contemporary sites stand out in the Neolithic Period is the fact that about 90% of all uncovered features are pits. We aim not only to discover the reasons for this phenomenon, but also to make use of it in order to challenge the traditional notions of “pits” in Chinese archaeology. Up to now, settlement pits in China are commonly designated *huikeng*, literally meaning “ash pit”, but better translated as “refuse pit”. However, this describes only the last function in the use life of a pit, whereas many of the pits at Yanggouzhai are much too large to have started off as mere garbage dumps. One of the main purposes of our research is thus to elucidate the initial function of these pits, as potential pit dwellings for example, through careful excavation and documentation as well as micromorphological analysis to study their formation in depth. This is supplemented by the typology of artifacts that have not entered the pit as refuse and the analysis of botanical remains from the pits.

This way, we attempt to replace the simplistic concept of “refuse pits” in Chinese archaeology with a more nuanced idea of what functions settlement pits may have had.

In the 2020 season, excavation will continue in the south-eastern area of the moat. Work will resume in the trenches begun in the 2019 season, but new trenches can be opened as well if the situation warrants it. The outline of the moat itself is still in many places obscured by later features and intrusions. Determining it will be among the first objectives. In addition, by investigating Neolithic features that are stratigraphically located on top of the moat fill, the usage of the site after the abandonment of the moat can be elucidated. Together with the scale and structure of the moat itself, this might yield further evidence as to its function and the reason for the construction, use, and abandonment of such a massive construct. Furthermore, the continued excavation of the moat fill, stratum by stratum, will provide a large amount of samples to be researched in micromorphology, paleoethnobotany, zooarchaeology, geochemistry, and artifact statistics, adding a rich data set to our knowledge of Neolithic occupation at Yangguzhai.

The Yangguzhai project provides not only training in field excavation, but also a full exposure to Chinese archaeology through lectures and visits to museums and archaeological sites of various periods. In addition, it provides opportunities for students to interact on a daily basis with Chinese students and to work closely with highly experienced Chinese archaeologists.

ACADEMIC CREDIT UNITS & TRANSCRIPTS

Credit Units: Attending students will be awarded 8 semester credit units (equivalent to 12 quarter credit units) through our academic partner, Connecticut College. Connecticut College is a private, highly ranked liberal arts institution with a deep commitment to undergraduate education. Students will receive a letter grade for attending this field school (see grading assessment and matrix). This field school provides a minimum of 160 direct instructional hours. Students are encouraged to discuss the transferability of credit units with faculty and registrars at their home institution prior to attending this field school.

Transcripts: An official copy of transcripts will be mailed to the permanent address listed by students on their online application. One more transcript may be sent to the student home institution at no cost. Additional transcripts may be ordered at any time through the National Student Clearinghouse: <http://bit.ly/2hvurkl>.

PREREQUISITES

There are no prerequisites for participation. This course will focus on hands-on, experiential learning. Students will study onsite how to conduct archaeological research. Excavation involves physical work and exposure to the elements as well as a certain amount of improvisation, and it requires a willingness to adapt to new situations and an ability to react to unforeseen developments in a creative and flexible manner. An archaeological field school like ours is therefore rather different from the typical university learning experience. Furthermore, excavations are a team effort requiring cooperation and willingness to discuss and compromise.

You will encounter unfamiliar situations and people who think very differently from yourself, which can be a challenge but also a great adventure. You will get sweaty and tired and have to work outdoors, so please be sure that you are physically able to do so.

Students are required to come equipped with sufficient excitement and adequate understanding that the archaeological endeavor requires real, often hard work – in the sun, on your feet, and with your trowel.

We will use mountain bikes every day to get to the site and back. The ride is about 10 to 15 minutes long, on asphalt and dirt roads. The ability to ride a bicycle is required for this project. In addition, it will help if you know how to eat using chopsticks.

DISCLAIMER – PLEASE READ CAREFULLY

Our primary concern is with education. Traveling and conducting field research involves risk. Students interested in participating in any IFR program must weigh whether the potential risk is worth the value of education provided. While risk is inherent in everything we do, we take risk seriously. The IFR engages in intensive review of each field school location prior to approval. Once a program is accepted, the IFR reviews each program annually to make sure it complies with all our standards and policies, including student safety.

Archaeological work involves physical work in the outdoors. You should be aware that conditions in the field are different than those you experience in your home or college town. This program operates during the summer. During the day, temperatures in the shade can exceed 90°F and humidity is high. Our excavation units will be covered by partial-shade tarps but we are still working in the outdoors. Sturdy shoes, a hat, and work clothes are mandatory. Appropriate attire includes loose clothing that protects skin. Long pants and closed toe shoes are required for excavation work. Avoid dangling jewelry. Sunglasses with UV protection are recommended. Mosquito repellent and sun block lotion are also needed.

The IFR does not provide trip or travel cancellation insurance. We encourage students to explore such insurance on their own as it may be purchased at affordable prices. Insuremytrip.com or Travelgurad.com are possible sites where field school participants may explore travel cancellation insurance quotes and policies. If you do purchase such insurance, make sure the policy covers the cost of both airfare and tuition. See this [Wall Street Journal article about travel insurance](#) that may help you with to help to decide whether to purchase such insurance.

We do our best to follow schedule and activities as outlined in this syllabus. Yet local permitting agencies, political, environmental, personal or weather conditions may force changes. This syllabus, therefore, is only a general commitment. Students should allow flexibility and adaptability as research work is frequently subject to change.

If you have medical concerns, please discuss them with your doctor. All other concerns may be discussed with project directors – as appropriate.

COURSE OBJECTIVES

This field school is a collaboration between the Institute for Field Research, UCLA, the Shaanxi Province Archaeological Academy, and Northwest University in Xi'an, China. The course will begin on June 16 and will meet daily until July 19. Students will be able to depart for onward travel or return home on July 20.

Students will spend the first week in Xi'an for four days of lectures and instructional museum tours. The classroom lectures will focus on questions of archaeological method and theory on the one hand and the particularities of Chinese archaeology on the other hand. The students will be introduced to some of the most important archaeological finds in the Wei River Valley, as well as to various anthropological themes related to the Yangshao culture and the Yangganzhai site. Important topics covered in the class include the history of Chinese archaeology, the origins of agriculture and animal domestication, sedentary villages, ritual, and craft specialization.

Following this initial week of preliminary instruction, three weeks will be spent in the field performing survey, excavation, and lab work at the Yangguanzhai Station near the Yangguanzhai site.

ARTIFACT IDENTIFICATION

Students will learn the basic artifact types found at the YGZ site. These include pottery sherds, lithics, and ceramic tools. Students will also learn to excavate and identify human and animal bones. Student will learn how archaeologists use artifacts to reconstruct the layout of an ancient site, in order to learn about activities and ways of life in antiquity.

SOILS, STRATIGRAPHY, AND GEOARCHAEOLOGY

An archaeological site cannot be interpreted without an understanding of how the layers of sediment at the site became deposited over time, both by natural and human processes. Students will learn how archaeologists identify different soil and sediment types and then use this information to help reconstruct a chronology of the archaeological strata, as well as to clarify the relationships between different parts of the site and excavated artifacts.

In addition, students will learn about the geoarchaeological method of micromorphology. This technique consists in extracting samples of sediment from archaeological features for further analysis in a laboratory, which can reveal the specific composition of the earthen matrix and the history of its deposition. These insights are of tremendous help in understanding how certain features were formed and how they were impacted by the environment. Students will learn about the extraction and preparation of samples first hand, while the laboratory part of the analysis will be covered in lecture by a specialist.

ASSEMBLAGE ANALYSIS

Once the excavation of a site has begun, archaeologists must have a clear understanding of the spatial relationships of various parts of the site. Vertical and horizontal stratigraphy provide critical contexts for understanding the function and use of artifacts, as well as determining the occupation history of the site, including how its major and minor features relate to each other. Students will gain an understanding of this interpretive process as the excavation proceeds. They will thereby learn how spatial analysis creates a framework for excavation planning and post-excavation analyses.

SURVEY TECHNIQUES

Students will be introduced to a survey technique that is unique to Chinese archaeology: the Luoyang spade. Students will work together with YGZ field technicians and learn how to identify soil samples from natural and cultural deposits.

FLOTATION

Archaeological flotation involves using water to process soil or archaeological deposits to recover tiny artifacts, specifically botanical remains. At the Yangguanzhai site, students will use simple techniques in flotation to extract plant seeds for later analysis.

GRADING MATRIX

Grading will be based on two different components: Fieldwork and presentations. The following is the grade breakdown:

Fieldwork (60%): Students are required to participate in excavation activities at the site every working day and to keep field records, which will be checked regularly. This grade also reflects the ability to work well in a team.

Two presentations (2 x 10%): Each team of students is required to prepare two PowerPoint presentations - a mid-season and a final presentation –informing their teammates, the instructors, and Chinese collaborators about the progress of their work and any results they have obtained. The presenters will draw on their own experience in the field as well as materials from lectures and readings. Grades will be assigned for each team member based on the grade assigned to the team and individual performance.

Final report (20%): Every student is required to submit a short report about three weeks after the end of the field season. The exact deadline will be announced by the instructors. The report consists of 3-5 written pages summarizing the content of their work at Yangguanzhai and putting it into a wider context. With the approval of the instructors, the report can also focus on a specific subject relating to the work at Yangguanzhai that the student is particularly interested in.

ACCOMMODATIONS

During the first week of the field school, students will live in a hotel at Northwest University in the city of Xi'an. While in the field, students will reside at the Wufulinmen Hotel near the site.

Food is provided Monday to Saturday (breakfast, lunch, and dinner). Students are responsible for their own meals on Sundays. While students are free to obtain their own breakfast and lunch with a daily allowance we provide, all dinners are taken together, since we will use this opportunity to get the whole team together and catch up on the progress of the day. The daily diet in North China is heavily based on rice, noodles, and vegetables. Specialized diets (vegan, kosher, etc.) are difficult to maintain in this location. Vegetarians may find options somewhat limited and should be prepared to be flexible when eating the local food, or should bring supplemental food (e.g. protein bars) if they think it will be necessary.

TRAVEL & MEETING POINT

We suggest you hold purchasing your airline ticket until six (6) weeks prior to departure date. Natural disasters, political changes, weather conditions and a range of other factors may require the cancelation of a field school. The IFR typically takes a close look at local conditions 6-7 weeks prior to program beginning and make Go/No Go decisions by then. Such time frame still allows the purchase deeply discounted airline tickets while protecting students from potential loss if airline ticket costs if we decide to cancel a program.

Students will be met at the Xi'an airport or train station or may travel themselves directly to the H Shuijing Hotel on June 14. Students may travel to X'ian by train or may fly into the Xi'an-Xianyang international airport (XIY). Please note that train tickets often sell out in summer and should be purchased well in advance through a website such as English.Ctrip.com or through a local travel agent. From Beijing to Xi'an, high speed trains leave every 1 to 2 hours throughout the day. If you are unable to purchase the ticket you desire, you can always take a slower train. There are also many domestic flights to Xi'an from other points of entry into China such as Hong Kong, Shanghai, and Beijing, and some international flights go directly to Xi'an.

To make it easier for the program coordinators to meet you at the airport, arrange to arrive on June 14 between 11 AM and 2 PM and email the specific time of your arrival to the instructors beforehand. Those who miss the meeting time can take the public transportation or a taxi to the Northwest University Hotel.

The address of the Northwest University Hotel is: 229 Taibai Beilu, On the Taibai campus of Northwest University, Xi'an

西北大学宾馆

西安市碑林区太白北路 229 号

西北大学太白校区

From the airport, take the shuttle bus to Nanshaomen (7 天酒店西安小雁塔南稍门机场大巴店, 25 RMB), then take a taxi to the Northwest University Hotel, (14 to 16 RMB), or you can take a taxi at the airport directly to the hotel (106-116 RMB).

From Xi'an North Station (high speed railway station): Take Subway Line 2, to Yongningmen (永宁门), take Exit C, walk about 170 meters, to the Nanmen stop of Bus 701; the fourth stop is Xinan Chengjiao (西南城角), get off, cross the street (please take the crosswalk!!), and you will arrive at the north gate of Xibei University (XibeiDaxue). Enter and keep going straight until you find the university hotel at the left-hand side.

From Xi'an West Station (station for non-high speed trains): walk 400 meters to the West station stop of Bus 900 or Bus 21, the fifth stop is the Xibei Daxue stop.

More information will be provided to all enrolled students in the pre-departure online orientation.

VISA APPLICATION

Non-Chinese participants are required to secure a tourist visa to China prior to arrival. You should apply for the visa at least one month ahead of time. You can download your visa application [here](#).

All students should apply for a Tourist visa (L visa) for **60 days, unless you plan to stay in China longer**. On Section 2 of the form, please fill in the fields using the following options:

- 2.1: mark: Tourism
- 2.2: mark: One entry valid for 3 months, unless you want to come back to China multiple times this year.
- 2.5: write down the days you plan to stay in China: at least 40 days--our program is 34 days.
- 2.6: 06/16 – 07/19; Shaanxi, Xi'an; Northwest University Hotel, No. 229 TaibaiBeilu
- 2.7: myself

There is no need to fill out field 2.8. We will provide all enrolled students with the hotel reservation, which you have to submit along with the visa application form and a copy of your flight ticket.

EQUIPMENT LIST

- Passport
- Entry visa to China
- Close-toed shoes
- Sunscreen
- Mosquito repellent
- Wide brim hat
- Sunglasses
- Rehydration powder
- Imodium or PeptoBismol
- Medications or prescriptions that you need
- Preferred feminine hygiene products
- A few pairs of work pants and shirts

Alert your credit card company and ATM bank that you will be abroad so they don't think your cards have been stolen and cancel your access.

If you want to use your phone, alert your carrier that you will be abroad and ask about rates, or plan to obtain a local SIM card.

Electrical adapters to the Chinese electrical system – have a look [here](#) to see what you need for China as compared to what you may already own.

COURSE SCHEDULE

All IFR field school begins with safety orientation. This orientation includes proper behavior at the field area, proper clothing, local cultural sensitivities and sensibilities, potential fauna and flora hazards, review IFR harassment and discrimination policies and review of the student Code of Conduct.

PART ONE: Lectures and Museum Tours (June 16-21)

June 14, 2020 (Sunday)

6:00 PM: Participants meet at H Shuijing Hotel for dinner and program briefing.

June 15, 2020 (Monday)

The first week of classroom lectures focuses on three topics: the history of Chinese archaeology; a brief review of Shaanxi archaeology with emphasis on Wei River Neolithic archaeology and the YGZ site; theory and method of archaeology. Students need to pay attention to the keywords of each lecture. The full citations of the required readings are at the end of this syllabus.

Breakfast **7:30AM** at the hotel, 3rd floor

Orientation **8:30-8:45AM**

Program safety briefing; review of IFR policies including sexual harassment, discrimination, and code of conduct

Lecture I **8:45-10:15AM**

Richard Ehrich: An Introduction to Archaeological method

Keywords: definition of archaeology, context, excavation, documentation

Required readings: Schiffer 1972

Discussion: 10:00-10:30

Break: 10:30-10:45

Lecture II **10:45-11:45AM**

Zhang Hongyan: Introduction to Chinese archaeology

Keywords: Geographical overview, chronology, cultures, features, key sites in Shaanxi (Paleolithic, Neolithic, Bronze Age, Qin to Tang dynasties)

Required readings: Yan 2000

Discussion: 11:45AM-12:00PM

Lunch break **12:00-2:30PM**

Lecture III **2:30-4:30PM**

Zhang Hongyan: Neolithic Cultures of the Wei River Valley

Keywords: Laoguantai culture (8000-7000 BP), Yangshao culture (7000-5000 BP), Longshan culture (5000-4000 BP)

Required readings: Li 2013

June 16, 2020 (Tuesday)

Breakfast **7:30AM** at the hotel, 3rd floor

Tour 8:30AM-12:00PM

Zhang Hongyan: Laboratory and Xibei University Museum visit

Lunch break 12:00-2:30PM

Lecture IV 2:30PM-3:30PM

Mathew L. Fox: Introduction to Geoarchaeology

Required readings: Schiffer 1987

Lecture V 3:30-5:00PM

Elizabeth Berger: Human Osteology

Handout: Introduction to human osteology, selection from physical anthropology handbook

June 17, 2020 (Wednesday)

Breakfast 7:30AM at the hotel, 3rd floor

Lecture VI 8:30-9:45AM

Professor Qian Yaopeng: Settlement Archaeology in China

Keywords: Neolithic settlement in the Yellow River region, Settlement remains analysis, Settlement pattern analysis, Settlement relationships

Required readings: Lee 2007, Peterson and Shelach 2012

Discussion: 9:45-10:00AM

Break: 10:00AM-10:15AM

Lecture VII 10:15-11:45 AM

Yang Liping: Important discoveries at Yanggouzhai

Key words: Miaodigou phase, Banpo IV phase, archaeological features

Required readings: Wang et al. 2009 (It's in Chinese, but look at the figures.)

Discussion: 11:45AM-12:00PM

Lunch break 12:00-1:00PM

Tour 1:00-5:00PM Qian Yaopeng: Banpo Museum visit

June 18, 2020 (Thursday)

Breakfast 7:30AM at the hotel, 3rd floor

Lecture VIII 8:30-9:45AM

Lothar von Falkenhausen: Brief History of Chinese Archaeology

Keywords: *Jinshixue* tradition, modern archaeology in China, methodology, research questions, recent topics in Chinese archaeology

Required readings: von Falkenhausen 1995, Liu and Chen 2012

Discussion: 9:45-10:00AM

Break: 10:00-10:15AM

Lecture IX 10:15-12:00PM

Kirie Stromberg and Andrew MacIver: Musical archaeology and an Introduction to Archaeological Survey

Lunch break 12:00-1:00PM

Tour 1:00-5:00PM

Shaanxi Province History Museum visit

June 19, 2020 (Friday)

Breakfast 7:30AM at the hotel, 3rd floor

Leave at 9:00AM from Xibei University. Bring all your belongings.

Tour to the Terracotta Warriors

12:30PM: Lunch at the Terracotta Warriors Museum or on the way to the hotel

3:00PM: Check-in at the Wufulinmen Hotel.

7:00PM: Dinner, meet at the lobby of Wufulinmen Hotel

June 20, 2020 (Saturday)

8:00AM: Breakfast at the Wufulinmen Hotel

9:00AM: Visit to the Yangguanzhai site, discussion of this year's excavation plan in the field, safety briefing

12:30PM: Lunch

2:30PM: Visit of the Yangguanzhai Field Lab

Lecture:

Yang Liping: Yangguanzhai recording system

Handout: field journal

7:00 PM: Dinner, meet at the lobby of the Wufulinmen Hotel

June 21, 2020 (Sunday)

Free time, optional outing to supermarket

PART TWO: Fieldwork (June 22-July 17, 2020)

Intensive excavations and lab work at the Yangguanzhai site and the Yangguanzhai field research station. Students may return to Xi'an for organized field trips on the weekends, staying Saturday night at the Xibei University dorms at your own expense, and returning to the site on Sunday before 5 pm.

Project directors and scholars who visit the site will give lectures on site or at the hotel where we are staying. The times are not fixed yet, since it depends on their availability, but we will announce them to the team as soon as we know. We expect to have lectures on the following topics:

- 1) Geoarchaeology (stratigraphy, site formation, soils and sediments)
- 2) Mortuary Archaeology
- 3) Experimental Archaeology

Detailed assignment of each week's tasks will be explained at the site.

In addition, we will make tours to other sites and museums, including the local base of the Shaanxi Province Archaeological Academy, the Hanyangling Museum (Han Dynasty imperial tomb), and the Xuechi site (Qin and Han Dynasty sacrificial site).

Notice: The monsoon season starts mid-June in northern China, so our lab work (washing pottery sherds, flotation, cataloging) is usually arranged on rainy days.

Daily schedule (Monday through Saturday):

6:40AM: Breakfast

7:00-11:30AM: Work (morning)

11:30AM-3:00PM: Lunch break

3:00-6:30PM: Work (afternoon)

7:30PM: Team Meeting and Dinner

July 4, 2020 (Saturday)

2:00PM: Mid-Season Presentation

Students present their research results and further questions at this stage in the season, 20 minutes per group. Professors from collaborating institutions will comment on the presentations.

July 17, 2020 (Friday)

2:00PM: Final Presentation

Same procedure as the mid-season presentation.

7:00PM: Farewell Party

July 18, 2020 (Saturday)

Students depart

REQUIRED READINGS

All reading materials will be provided as PDF files to students through a shared Dropbox folder.

Falkenhausen, Lothar von (1995). The Regionalist Paradigm in Chinese Archaeology. In, *Nationalism, Politics and the Practice of Archaeology*, edited by P. Kohl and C. Fawcett. New York: Cambridge University Press. Pp. 198-216.

Lee Yun-Kuen (2007). Centripetal Settlement and Segmentary Social Formation of the Banpo Tradition. *Journal of Anthropological Archaeology* 26: 630-675.

Li Xinwei (2013). The Later Neolithic Period in the Central Yellow River Valley Area, c. 4000-3000 BC. In *A Companion to Chinese Archaeology*, edited by A. Underhill. Chichester: Wiley-Blackwell. Pp. 213-235.

Liu Li and Xingchan Chen (2012). *The Archaeology of China, from the late Paleolithic to the Early Bronze Age*. Cambridge: Cambridge University Press. Chapter 1 "Chinese archaeology: past, present, and future," pp. 1-21.

Peterson, Christian and Gideon Shelach (2012). Jiangzhai: Social and economic organizations of a Middle Neolithic Chinese village. *Journal of Anthropological Archaeology* 31(2012): 265-301.

- Schiffer, Michael B. (1972). Archaeological context and systemic context. *American Antiquity* 37 (2):156-65.
- Schiffer, Michael B. (1987). *Formation Processes of the Archaeological Record*. Part I. An Introduction to Formation Processes. Albuquerque: University of New Mexico Press.
- Underhill, Anne P. (2002) *Craft Production and Social Change in Northern China*. New York: Kluwer Academic / Plenum Publishers. Chapter 1: Craft production and the development of complex societies in ancient China. Pp. 1-18.
- Underhill, Anne P. and Junko Habu (2006). Early Communities in East Asia: Economic and Sociopolitical Organization at the Local and Regional Levels. *Archaeology of Asia*, edited by M. T. Stark. Malden, MA: Blackwell. Pp.121-148.
- Wang Weilin et al. (2009). "Shaanxi Gaoling Yangguzhai xishiqishidai yizhi (The Yangguzhai Neolithic Site at Gaoling County, Shaanxi Province)," *Kaogu* 2009: 3-9.
- Yan Wenming (2000). "Neolithic Settlements in China: Latest Finds and Research." *Journal of East Asian Archaeology* 1(1-4): 131-148.

RECOMMENDED READINGS

- An, Cheng-Bang, Zhao-Dong Feng, and Loukas Barton (2006). Dry or humid? Mid-Holocene humidity changes in arid and semi-arid China. *Quaternary Science Reviews* 25(3-4): 351-361.
- Chen Zhuhai (1986). Field Investigation of the Prehistoric Methods of Pottery Making in Yunnan. *Scientific and Technological Insights on Ancient Chinese Pottery and Porcelain*, edited. Shanghai: Shanghai Institute of Ceramics. Pp.27-34.
- Crawford, Gary W., Anne P. Underhill, et al. (2005). Late Neolithic Plant Remains from Northern China: Preliminary Results from Liangchengzhen, Shandong. *Current Anthropology* 46(2): 2005.
- Huang Chun Chang (1989). The Loess and Environmental Changes of Holocene in the Weihe River Basin. *Geographical Research* 8: 20-31.
- Falkenhausen, Lothar von (1993). On the Historiographical Orientation of Chinese Archaeology. *Antiquity* 67:839-849.
- Falkenhausen, Lothar von (1999). Su Bingqi (b. 1909). *Encyclopedia of Archaeology: The Great Archaeologists*, edited by T. Murray. New York: Garland. Pp. 591-600.
- Falkenhausen, Lothar von (1999). Xia Nai (1910-1985). *Encyclopedia of Archaeology: The Great Archaeologists*, edited by T. Murray. New York: Garland. Pp. 601-614.
- Fitzgerald-Huber, Louisa G. (1999). The Yangshao Culture: Banpo. *The Golden Age of Archaeology: Celebrated Discoveries from the People's Republic of China*, edited by Yang Xiaoneng. Washington: National Gallery of Art. Pp.54-77.
- Flad, Rowan K., Yuan Jing, and Li Shuicheng (2007). Zooarchaeological Evidence for Animal Domestication in Northwest China. In *Late Quaternary Climate Change and Human Adaptation in Arid China*, edited by David B. Madsen, Chen FaHu, et al. Amsterdam: Elsevier Press. Pp. 163-199.
- Flad, Rowan Kimon, Shuicheng Li, Xiaohong Wu, and Zhijun Zhao (2010). Early wheat in China: Results from new studies at Donghuishan in the Hexi Corridor. *The Holocene* 20(6): 955-965.
- Gao Qiang and Yun Kuen Lee (1993). A Biological Perspective on Yangshao Kinship. *Journal of Anthropological Archaeology* 12: 266-298.

- Li F, Wu N, Lu H, Zhang J, Wang W, et al. (2013) Mid-Neolithic Exploitation of Mollusks in the Guanzhong Basin of Northwestern China: Preliminary Results. *PLoS ONE* 8(3): e58999. doi:10.1371/journal.pone.0058999
- Liu, Li. (2003). "The Products of Minds as Well as of Hands": Production of Prestige Goods in the Neolithic and Early State Periods of China. *Asian Perspectives* 42(1):1-40.
- Liu, Li. (2004). *The Chinese Neolithic, Trajectories to Early States*. London: Cambridge University Press. Chapter 3: "Household subsistence and ritual," pp. 33-72; Chapter 4: "Spatial organization and social relations in communities," pp. 73-113.
- Lu, Houyuan, Jianping Zhang, Kam-biu Liu, Naiqin Wu, Yumei Li, Kunshu Zhou, Maolin Ye, Tianyu Zhang, Haijiang Zhang, Xiaoyan Yang, Licheng Shen, Deke Xu, and Quan Li (2009). Earliest domestication of common millet (*Panicum miliaceum*) in East Asia extended to 10,000 years ago. *Proceedings of the National Academy of Sciences* 106(18): 7367-7372.
- Rosenswig, Robert M. (2009). Ceramic and Daub Discard Patterns from Cuauhtemoc, Soconusco, Mexico *Journal of Archaeological Method and Theory*, Vol. 16, No. 1(Mar. 2009), pp. 1-32.
- Xu Anwu, Wang Changsui, Chi Jinqi, Li Mingchuan, Zhang Maosen, L. Holmes, L. Harbottle, S. Koshimizu, K. Manabu, and K. Koichi (2001). Preliminary Provenance Research on Chinese Neolithic Pottery: Huating (Xinyi County) and three Yellow River sites. *Archaeometry* 43(1): 35-47.
- Yuan Jing and Rowan K. Flad (2002). Pig Domestication in Ancient China. *Antiquity* 76(293): 724-732.
- Zhang Dongju, Chen Fahu, Robert L. Bettinger, Loukas Barton, Ji Duxue, Christopher Morgan, Wang Hui, Cheng Xiaozhong, Dong Guanghui, T. P. Guilderson, and Zhao Hui (2010). Archaeological records of Dadiwan in the past 60 kya and the origin of millet agriculture. *Chinese Science Bulletin* 55(16): 1636-1642.
- Zhang, J., Lu, H., Wu, N., Li, F., Yang, X., Wang, W., Ma, M. & Zhang, X. (2010, July). Phytolith evidence for rice cultivation and spread in Mid-Late Neolithic archaeological sites in central North China. *Boreas*, Vol. 39, pp. 592–602.
- Zhao, Hui, Fa-Hu Chen, Sheng-Hua Li, Ann G. Wintle, Yu-Xin Fan, and Dun-Sheng Xia (2007). A Record of Holocene Climate Change in the Guanzhong Basin, China, based on optical dating of a loess-paleosol sequence. *Holocene* 17(7): 1015-1022.