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Ataruz Archaeological Field School Preparation Class

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Master's Design Project Report
Instructional Psychology & Technology, Brigham Young University

Purpose

The purpose of this project was to prepare students who will participate in an archeological excavation in Ataruz, Jordan. Typically, the directors invite anywhere from five to eight BYU students to go on the excavation, which takes place in July during the summer term of Brigham Young University. The client for the project is a professor in the Ancient Scripture Department at Brigham Young University and a co-director of the dig. Normally, the students who participate have had no experience or formal training in archeological fieldwork. The time to work on the excavation is usually limited to two to four weeks. Time is limited and students need to quickly learn and adjust to their responsibilities and required procedures in order to optimize the progress that can be made in a single season of fieldwork. The sponsor for the project wanted students to feel more confident about their ability to perform their responsibilities going into the experience. While the primary concern of the director was for students to be able to perform their responsibilities on the dig, the director was also interested in helping students to have a meaningful spiritual experience, facilitating positive group dynamics, and improving students' understanding of the historical context for the site.

Course Learning Outcomes
1. Students will know basic archaeological terminology and processes as they pertain to their responsibilities. 2. Students will have greater historical context for the significance of the work they are participating in. 3. Students will have greater historical context for the sites they will visit outside the dig. 4. Students will develop a collaborative working relationship with other participants.

Project Needs and Constraints

The training for this archeological excavation, prior to being onsite in Jordan, was

limited because many students were not able to gather in person consistently prior to departure and no effort was made to create an online curriculum, save the sharing of some files for review. Many students travel during the spring term and requiring them to be on-campus for a preparatory course was an obstacle in recruiting otherwise interested and capable students. This was reflected in interviews conducted with prospective participants, several of whom had signed up to participate in another study abroad during the spring term. A primary concern of the stakeholder was that the class could be completed asynchronously and remotely.

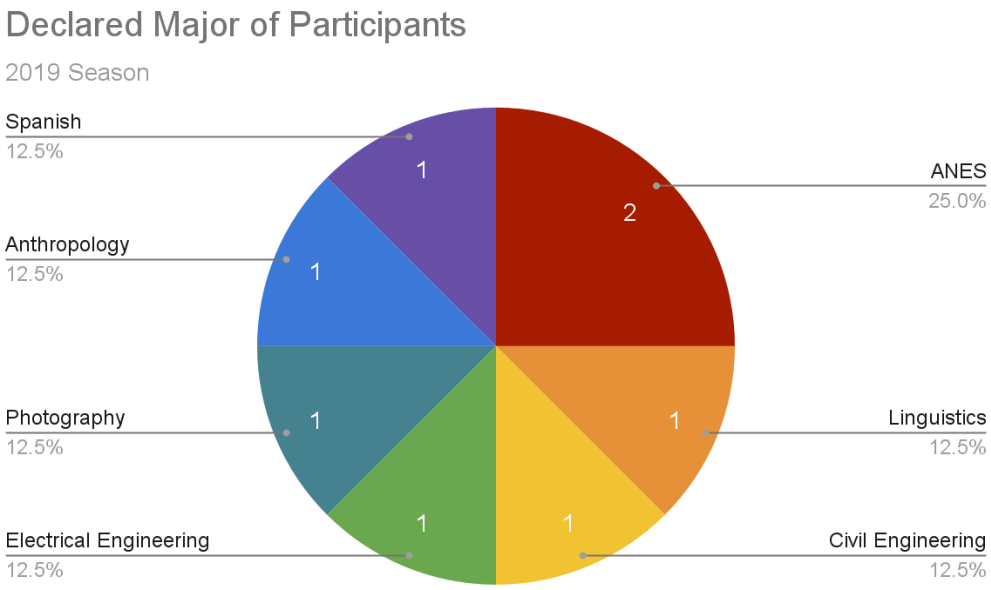
Through interviews, observations, demographic information, and my own experience participating in the dig the last time it was offered, I conducted a learner analysis and developed a set of personas. What follows is a general summary of the learners and their needs (insights from interviews can be found in Table 1).

Table 1: Insights from Interviews

Major Themes from Interviews	Notes/Quotes
Professional/academic curiosity	Student 2 is hoping to learn if she enjoys archaeology. Student 1 is hoping to learn if he enjoys archaeology to see if he wants to pursue a graduate degree in it.
Concern for workload	Student 1 is getting married and is worried about the time commitment for the course. Student 2 is traveling in spring term and wants a break after a long year of intense school.
Interest in other cultures	Student 1 has lived abroad and hopes to learn about another culture. Student 2 has never been outside the US and Canada and is looking forward to international travel to experience a different culture.
Spiritual growth is a nice addition and supplement, primary interest is historical	Student 1 and 2 both expressed that they would like to have some religious, faith-based conversation intertwined with the historical

Table 1: Insights from Interviews	
Major Themes from Interviews	Notes/Quotes
	information of the sites that will be visited. However, the main appeal is that they are present at the site and want to understand the additional context that the academic historical research brings.
General understanding of schedule and historical context.	When asked, both students provided an accurate generic summary of the typical daily schedule. They have both worked as research assistants for the director of the dig and they have a basic understanding of general historical principles at play in the history of the site.
Participants have completed training to various degrees up until this point.	The director of the dig has noted on several occasions that he has observed that participants have not completed the readings that were assigned as required prep work. He also admits to not being very strict about the completion of readings because he didn't want to risk losing participants. When I participated in the program, several of the participants shared with me that they had not completed the readings. Several of the participants spent a portion of the plane ride to Jordan reading through the material. This was a cursory review at best.

Student participants have come from majors ranging from psychology and photography to history and engineering. The students come in on an even playing field, as none of them have participated in an archaeological excavation before, except for a rare returning participant. There are often participants who study Ancient Near Eastern Studies (ANES) and have greater historical context for the research being done at Ataruz.



Unless participants are returning to the experience from a previous year, they have no real exposure to archeological methodology or the specific history of the site. Participants are often found through referrals from returning students or through personal invitations from the professor.

The project needed to be completed by the end of winter semester 2022. Students will enroll in the course during the Spring term in preparation to go on the program in summer term. There was no budget allotted for the development of this course. The director did not use allotted development time to work on this course and it will not count on his list of taught courses for the spring term, meaning that he had little time to dedicate to creating materials and managing the course while it is happening. This constraint influenced many of the design decisions, including assessment, content delivery, and grading.

Through my own experience participating in the dig, and the observations of the professor, it is understood that participants normally arrive at the dig in Jordan unprepared. The previous training, in the form of readings, was unstructured and went incompleted by most participants. Enrollment in the program has been limited because few students have been

willing to dedicate the entire summer (May–August) to participate in training and the program itself. Thus, the director had a need for a remote option for training students in preparation for the program. The solution, this project, needed to be available online, remotely, and asynchronously because of the demanding schedules of the study abroad programs. It is also important to the client and participants to build relationships with each other virtually to improve the group camaraderie before beginning the program.

Learner Personas

<<Rachel Finnegan>>

Student name: Jacob Fuge

DEMOGRAPHICS
Age: 22
Gender: Female
Marital status: Single
Location: Provo

PERSONAL AND/OR PROFESSIONAL DETAILS
College student working part-time. Studies Statistics. She spends most of summer at home in Connecticut visiting family and earning money for the coming school year.

INTERESTS
Rachel loves to be outside and enjoy nature, read, and watching BYU sports. She loves to play strategy games.

LEARNER ENVIRONMENT
When Rachel is not on campus for class and studying, she spends most of her time in her small, old college apartment.

PREVIOUS EDUCATIONAL SUCCESSES
Rachel is a high school graduate.

OTHER DETAILS
Rachel wants to go to graduate school and is striving to get as much out of her college experience as possible.

PRIOR LEARNING EXPERIENCES
Time volunteering as a missionary. Learned another language that way. She loved learning about the culture of Mexico from the people she worked with.

END GOALS
Rachel will be comfortable going into a foreign experience and have a sense for how to carry out her responsibilities.

SCENARIO
"One of my favorite movies is Indiana Jones. Archaeology always seemed so adventurous so when my friend told me about the opportunity, I couldn't pass it up!"

"I've wanted to do a study abroad for a long time, but I need time to take a break from school and be home. I can't spend the whole summer away."

<<Steven Brown>>

Student name: Jacob Fuge

DEMOGRAPHICS
Age: 23
Gender: Male
Marital status: married
Location: Provo, Utah

PERSONAL AND/OR PROFESSIONAL DETAILS
College student studying civil engineering. He is close to graduating.

INTERESTS
Loves sports, cooking, and watching movies. He was a history major when he first came to college and still loves it.

LEARNER ENVIRONMENT
He spends most of his time in the engineering building. During the summer he is in Provo but spends most of his time working two jobs to pay for school and living expenses.

PREVIOUS EDUCATIONAL SUCCESSES
Steven is a high school graduate. He did a study abroad for his capstone engineering project last year.

OTHER DETAILS
Steven is looking forward to graduating and getting a full-time job but wants to have unique experiences in school before he spends his days working.

PRIOR LEARNING EXPERIENCES
Served a mission where he was a leader for a year. He trained missionaries on how to teach more clearly. He also received his food handler's certificate online for a previous job.

END GOALS
Steven will know how to properly document a new locus.

SCENARIO

"I love history. I listen to a lot of historical podcasts and think it is fascinating trying to understand the past through documents and objects. Even though I've read and listened to a lot of history content, I don't really understand how archaeology works."

"I'm fascinated to learn how to make conclusions about ancient life based on the artifacts and material that we'll find and sift through. I'm a little unsure of how it will be to work with other people, particularly the native workers. I hope I understand what I'm doing enough to guide them."

Summary of Findings:

- Students want the flexibility to not be in Provo for spring term, but still participate in the program in summer term. This influenced our decision to develop an asynchronous remote course. We knew that an asynchronous remote course would be the only option flexible enough to meet each student's situation.
- Students who are Ancient Near Eastern Studies (ANES) majors are interested in the program for the opportunity to explore archaeology as a career possibility, which meant that we needed to give them context into the discipline through the content. For that reason, we chose a reading that introduces the history of archaeology as a discipline and provides them the chance to read several reports written about the site at Ataruz.
- Non-ANES students are more interested in the program because of the opportunity to travel internationally and have a unique experience. They also have an interest in the subject of biblical history; this led us to provide some material on unique tourist opportunities in Madaba, where students will be staying, and help them have enough

context for the impact they will make during their digging season for it to be more meaningful.

- Students want to be prepared for the experience but don't want to be overwhelmed by schoolwork. This insight was an important factor in narrowing the content. Our goal was that students could complete each week's material in 1–1.5 hours. We originally had about 2–3 hours' worth of content for each week that, but that was narrowed to 1–1.5 hours.

Environmental Analysis

The stakeholders for this project were the director of the dig (who is also the professor for the course), the students who will participate in the experience, and, more generally, the Kennedy Center, Ancient Scripture Department, and BYU. The dig director cared about this project because he wanted students to be as prepared as possible for the dig so they can make meaningful progress during the short time that they have on site. He also wanted students to enjoy their experience and learn from it. The students cared about this project because they wanted to feel confident going into a foreign environment and experience. They also wanted to capitalize on a unique learning opportunity. The departments and other academic institutions are invested in the project because the course reflects them and their standards. They wanted to be represented well and help the students to have a meaningful experience.

This class is an online experience with interaction among the students. Most of the time spent working through the material will be independent or through collaborative annotation. Students learn together and develop relationships through asynchronous video chat through the EdConnect platform. LearningSuite will be the LMS used to deliver the content. Most students will be familiar with LearningSuite, which will help them to be successful. However, other tools, like Perusall and EdConnect, will require some introduction for students. The platforms are not

challenging to navigate but require acclimation nonetheless. That guidance and introduction is provided through videos and Q&As provided by the companies that create the tools.

Stakeholder	Quote or note from interview
Student 1 and 2	Both student 1 and student 2 want the experience to go well because they are considering this as a career opportunity. This trip will provide them a genuine experience for a field they are interested in pursuing.
Dig Director	"Even if we can help them be just a little bit more prepared, I think the experience will be much more meaningful for them."

Students will be using computers to complete the course for the most part. Some students may elect to use their phones for certain portions like watching videos or responding to asynchronous video chats. One challenge is that many students will be on a busy travel schedule during the Spring term as they participate in various study abroads. One student who will be conducting research throughout rural regions of Morocco may not have great internet access. The flexible due dates and asynchronous nature of the course allows the student to complete the course in the first few weeks of the term before they leave. Several of the other students will be going on a study abroad across Europe. They will have more regular access to quality Wi-Fi during hotel stays, train rides, and as they fly through airports. All the students will have their laptops with them as they go about their travels. While it is not ideal for students to complete the whole course in a condensed amount of time, it was important to intentionally provide the opportunity for students to do so to meet each student's particular circumstances.

Content or Task Analysis

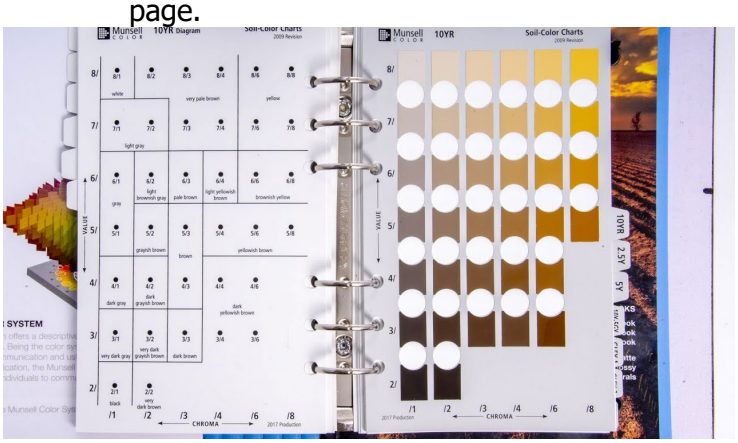
Below is an outline of the content that needs to be included in the course. Words highlighted in **blue** indicate knowledge and words in **orange** indicate skills.

Outline of content that needs to be included:

1. Articles and Site History
    a. Students will be able to summarize the historical background of the site and relevant civilizations and time periods including:
        i. Moab
        ii. Israel
        iii. Satellite temples as they relate to Ataruz
    b. Students will be able to identify Ataruz and other relevant sites on a map:
        i. Ataruz
        ii. Machaerus
        iii. Jerusalem
        iv. Madaba
        v. Dead Sea
        vi. Amman
    c. Students will know the connection between Ataruz and the Mesha Inscription:
        i. It is mentioned on the stone (include photo highlighting where it is mentioned)
        ii. Connect with the history of residency of the Moabites.
2. Spiritual Preparation
    a. Students are familiar with nearby religious sites and the connections with biblical scripture.
        i. Machaerus - John the Baptist was imprisoned and beheaded here
        ii. Amman - home of the Ammonites
        iii. Jordan River - Jesus was baptized by John the Baptist here
    b. Students know significant events and characters that have occurred at nearby sites.
3. Dig Methodology
    a. Students will know basic archaeological terms and their function:
        i. Munsell chart
        ii. Square
        iii. Locus Sheet
        iv. Installation
        v. Abutment
        vi. Pottery bucket
        vii. Pottery Tag
        viii. Pickaxe
        ix. Broom
        x. Sift
        xi. Trowel
        xii. Balk
        xiii. Total station
        xiv. Elevation measuring rod
        xv. Tire Schlepp
    b. Students will be able to fill out locus sheets and identify only pertinent fields.
        i. Students know how to use a Munsell chart to identify soil color.
            1. Scan the pages of color pallets
                a. Identify which color pallet generally matches the color of

the soil you are sampling.

2. Put dirt on backing page
3. Ensure page is entirely in direct sunlight
4. Identify which color patch most closely matches the color of the soil sample
5. Match the soil color patch with its code on the 10YR color code page.



6. Record the color code on the locus sheet.

ii. Pertinent fields are:
   1. Site, season, field, square, date, locus #, description, rationale, soil color, hardness, elevations, and particle size.

c. Students will know the difference between different types of loci and how to fill out their various sheets.
   i. Soil
      1. Texture
      2. Color
      3. Consistency
   ii. Architectural
      1. Installations
      2. Walls - structures
      3. Sketching
      4. Labeling Loci
   iii. Over/Under Locations
      1. Abutments
      2. Next to/= to
      3. over/under

d. Students will know when and how to create a pottery tag.
   i. Create a pottery tag and new pottery bucket for each new locus to prevent contamination.

e. Students will be able to differentiate the various types of sketches and when they should be created.
   i. Top-down sketches are done every morning to show incremental progress throughout the dig.
   ii. Balk sketches done at the end of a dig to capture the final state of the square.

f. Students can complete basic sketches.
   i. Top down and balk sketches.

g. Students will be able to explain the principle of contamination and what steps are taken to prevent it.
    i. Contamination is when a data point (piece of pottery or information) is incorrectly associated with other data points.
h. Students will be able to identify everything that needs to be done to close a locus and in what order they should be done.
    i. Take a picture of the layer and move the pottery bucket from the sifter.
i. Students will know how to open a new locus.
    i. Take a picture of the locus, create the locus sheet, take elevations, create a new pottery bucket, instruct the sifter which bucket it belongs in.
j. Students will know when to open a locus.
    i. Questions that experts ask themselves as they are excavating:
        1. Is there a change in soil color?
        2. Do these rocks seem organized or have any consistency in their placement or characteristics (size, smoothness, shape, etc.)?
        3. Have I removed a substantial amount of dirt without significant change in the earth?
            a. Archaeologists like to break up the data points into smaller portions so even if there is no substantial change that would warrant a new locus, they create one anyway to document and break down the data.
        4. Is there a change in hardness of the soil?
        5. Are there pockets of ash that could indicate a fire?
        6. Are there bones or other artifacts?

The nature of this project is very introductory. The goal is to build a basic familiarity with processes and the ability to identify different elements that are important to archaeology. The expectation is that there will be follow-up instruction and training in the field. For example, the students will all learn together and be guided through how to create a locus sheet the first time they have to do it in the field. Thinking as an archaeologist is more about considering how to weave together various loci or "layers" of data including the artifacts found within the various loci into a coherent narrative that represents the history of the site in that particular 5x5 meter area. That level of expertise is outside the scope of the course. Most of the material will focus on functional tasks like documentation and sketching. This focus means that it is valuable to provide job aides, images of forms, and walk-throughs that can be referenced at other times.

Product Design

Design Details

An asynchronous online course was created to meet the needs of the director. It consists of seven weeks of content. Each week the content is organized into a single content page within LearningSuite. Each week there is some combination of videos, readings, asynchronous video discussion, and a quiz. Week One starts with a link to the pre-course survey and instructions on how to setup Perusall and Volley, the platforms used for collaborative readings and asynchronous discussions respectively. The rest of the page serves as a template for the other weekly content pages. The learning objectives for the week are listed, followed by instructions and links to videos, collaborative and non-collaborative readings, and a quiz which is also linked. Over the term of the course, students will have twelve videos to watch, six collaborative annotation readings, five non-collaborative readings that are short guides, three assignments, seven asynchronous video discussions, and seven quizzes. Each week is designed to take 1–1.5 hours of work. The "Weekly Course Content Summary" table below shows the titles of each week of work.

Weekly Course Content Summary	
Week	Content Summary
1	A General History of Ancient Jordan
2	Ataruz and its History
3	Intro to Archaeological Methodology
4	Squares, Loci, and Drawings
5	Your Daily Work
6	Spiritual Preparation and other Sites

7	Some Notes Before You Go

The videos are embedded in the content page, if possible. Some videos are hosted through Zoom, which requires students to log into their student account to access them. All of the links for the collaborative readings take students to the reading in another tab on Perusall, where they work with their peers to annotate the reading. The non-collaborative readings are downloaded by students. The quizzes have multiple choice questions that are derived from the readings or video content of the week. The quizzes are automatically graded to limit the time demand of the instructor. Similarly, the assignments are automatically graded upon submission. The purpose of the assignments was to simply walk them through some of the processes they would have to complete as part of their daily work, like sketching or opening a new locus sheet, not assess their understanding of different principles. For that reason, we elected for auto-graded assignments.

This course was designed to implement various frameworks and research to improve engagement, build community among students, and prepare them for their responsibilities as square supervisors. The frameworks that guided this work the most were the Community of Inquiry (COI) (CoI Framework (n.d.) framework and Universal Design for Learning (UDL) (CAST ,2018). Research on effective online (especially blended) instruction from the K12 Blended Teaching textbook (Graham, C. R., Borup, J., Short, C. R., & Archambault, L., 2019) also guided many of the decisions made in this design. For a summary of how these theories/texts influenced the design of the course, see the "Learning Theories and Impacted Decisions" table below.

Learning Theories and Impacted Decisions	
Community of Inquiry	We decided to use asynchronous video discussions rather than text-based digital discussions to help students build better rapport before leaving for the dig. The instructor is

	more comfortable with text-based instructions, but we felt it was worth it to improve the social connectedness of the group. Similarly, we elected to use Perusall as a collaborative annotation tool, which added some complexity to the implementation of the course. We did this with the aim of improving the social learning experience and to help the students to learn from each other rather than rely on the instructor (who has limited time).
Universal Design for Learning	Typically, the instructor designs his courses by making everything an assignment. This can create confusion, as not all the material requires a submission. To implement the principle of "minimize threats and distractions," we used a very simple course structure where all the required activities for a week are located on the content page. Each activity is clearly marked as a reading, video, assignment, or quiz. The UDL principle of "optimize relevance, value, and authenticity" led us to restrict the number of readings and assignments. Rather than focus on specialized skills, we brought a broader introductory approach to the course and the selected content. We chose the material that would be most pertinent to every dig participant.
Effective online teaching practices	The instructor considered using several hour-long lectures that he recorded to teach some of the content. I encouraged him to keep videos as close to eight minutes as possible (Hsin, W., & Cigas, J.F.,2013 & Guo, P. J., Kim, J., & Rubin, R.,2014, March) to improve engagement and learning. We discussed at length how flexible we wanted to make this course. The K12 Blended Teaching Textbook discusses at length what it means for a course to be personalized and how time and place are elements of personalization (Graham, C. R., 2019). These principles led us to leave all content open from the start of the term through the end to allow students as much flexibility as possible. The book also helped us to consider how students could interact while totally asynchronous and remote. This, paired with the Community of Inquiry theory, led us to adopt asynchronous video and collaborative readings.

Precedent and Consulted Products

Universities have been doing archaeological preparation courses for a long time. However, because universities have strict copyright rules, the content of those courses is often hard to access. A summary of the courses can be found in the "Precedent Summary" table below. One course is a three-credit introduction to archaeology that goes through the process of selecting a site, beginning data collection, and writing reports. There is also an intriguing online archaeological field school where a professor teaches the basic methodology of archaeological excavation virtually and students practice the methods at their home or another site nearby. One program has a seven-credit course that gives students intense exposure to archaeological practices in the context of the southwestern United States. Another course designed for students who already have field experience centers around giving credit for further work and archaeological training. Most of the learning activities center around written reflection and presentations on the work done. One intriguing course uses virtual reality to provide students greater accessibility to an authentic field school experience.

Precedent Summary	
Precedent Course Link	Description/impact on my course
Archaeology of College Hill	This syllabus helped us to consider what we could include and how we could structure the course.
Backyard Archaeology	This course pushed the bounds of what we thought could be done remotely. Students excavate an area in their yard or nearby. While that was beyond the scope of our project, we did include some assignments to practice sketching and documenting as a result of this course.
Archaeology Southwest	This course was much larger in scope than ours, which was helpful in encouraging us to narrow in on what was most essential for us to teach our students.
University of Edinburgh	This course allowed continuation credit for students that

	had already met initial requirements for archaeology training. It invited discussion into how we could involve returning participants in having a meaningful preparation experience. We saw the asynchronous video discussions and collaborative annotation as an important opportunity for them to answer the questions of peers.
VR Archaeological Experience	Caused us to consider how we could use a large library of high-quality images to help students interact with the site.
Dr. Grey's readings course for the Huqoq excavation	Dr. Grey, a professor at BYU that directs a dig in the Galilee region of Israel, provided a description of what his course looks like and suggested how we might adapt it to our situation. His structure was very simple and matched the scope of our own project very well, leading us to adopt his structure with a few adjustments.

Video Walkthrough

A brief video walkthrough showing the final product can be seen at the following link:

https://youtu.be/BUHvWwQWuoA

Design Process and Evolution

The idea for this project came at the very beginning of joining the IP&T department as a student. I had participated the summer before in the excavation and recognized the lack of training. I had also had several conversations with the director of the dig about the challenges he had experienced in developing a training course. In summer of 2021, I had an initial scoping call with the stakeholder and committed to the project. In the initial call I thought I had an idea of what the course would look like, but much of that changed throughout the proposal and investigation phase. This project can loosely be broken down into four phases: brainstorming, research, planning, and development and implementation.

Throughout most of the project, the professor and I were the primary contributors. In the brainstorming phase, we talked through how we might get access to additional resources.

We explored hosting the class as an official BYU Online course and worked with some administrators to get our proposal submitted for that. We were ultimately rejected from our proposal; this meant that all the work would fall squarely on the professor and I with our limited resources. During this phase, we planned to host the course in the Canvas LMS, which is a requirement for any BYU Online courses. Our rejection prompted me, as the designer, to reconsider that choice. I realized that although it would be less comfortable for me to build the course in LearningSuite because of my background in Canvas, LearningSuite would make the course work better over the long term and is where the professor is much more comfortable working. As part of the brainstorming phase, we came up with all sorts of topics that could be helpful. Many did not make it into the course, like how to use a total station (a surveying tool), basic Arabic phrases to aid in communicating with workers, and basic photography skills to aid in capturing quality photos on-site.

As we were brainstorming, I began investigating the needs of learners more intentionally and from their own perspectives. I had gone through the experience myself and interacted with peers and heard their experiences, but I knew I needed to validate some of my thoughts with students who would be participating this summer. I was able to interview two of the eight students that would be participating. Our conversations confirmed much of what I had expected. The students wanted flexibility— one was getting married and would be busy preparing for that during school, and another would be traveling some during spring. One learning from these interviews that I didn't expect was the concern students had for how intense the class would be. Both students interviewed were finishing a hard year of school and wanted to have some respite during the spring term. This was a tension we navigated throughout the project; we needed to create meaningful content that would prepare them sufficiently without overwhelming them. I also learned through interviews that the students had

no prior experience in archaeology. They had learned about it some in their coursework in the Ancient Near Eastern Studies material, but lacked any real experience. Once we understood their needs better, we were able to narrow our content and redefine the scope of the project to be manageable.

Brainstorming and research continued as we moved into the planning phase, just to a lesser extent. In the planning phase, I created an outline of content (see the brainstormed outline snippet), learning objectives, and activities, and then asked for the professor's help in collecting materials and content (see the preliminary reading list snippet). As we gathered this, we presented it to students to get their perspective on if it seemed helpful and doable within the time frames they had in mind. Managing the amount of work was challenging; the original list contained close to fifteen articles or chapters, some 20–30 pages long. Another challenge was finding pertinent material that was available to the students for free; we didn't want money to become a reason a student didn't participate. Through several iterations and exploring for material, we narrowed our material to six lengthy readings to provide context for the excavations at the site, the history of Jordan, and archaeology generally. This content was supplemented with videos created by the professor and me. In the end, all of the content was available to students without cost. We estimated that the work will take 1–1.5 hours each week to complete.

Outline:

1. Articles and Site History
    a. Selection (use Perusall?)
        i. Historical Background (Moab)
        ii. Archaeological history - Ataruz
        iii. Mesha Inscription
2. Spiritual Preparation
    a. Sites
        i. Nebo
        ii. Machaerus
        iii. Bethany
        iv. Madaba Map
    b. Readings
        i. Scriptures
        ii. articles(?)
    c. Videos
    d. Maps
    e. Visuals
    f. Onsite Discussion

A snippet of a brainstormed outline

Ataruz readings and notes

Lesson 1

Possible readings

1. My article from the JC textbook on Ammonites, Moabites, Phoenicians, and Arameans (I have an article that I think contains more information which was cut before the final edits). I am not sure we can cover the entire ANE. This article is a little more focused in the region and pretty broad. I would have to add the Edomite section that I was asked to add at the last minute. Would could also use the following if we have access to BAR through the library: Burnett, Joel S. "Ammon, Moab and Edom: Gods and Kingdoms East of the Jordan," *Biblical Archaeology Review* 42, no. 6 (2016): 26–40, 66.
2. We could also be more concentrated on an article like Stenier's Moab During the Iron II Period. This is however, a bit specific to just one time period. That is its setback.
3. "Politics of Mesha" is a definite one I want to use here. It is a good introduction to the MI and the ramifications for the site.

I would lean towards 1 and 3. I am open for suggestions. Questions and assessments for each chapter. We could read all 3 if you feel it appropriate.

Reading #1 Questions

1. Identify Ammonites on a map
2. Their emergence during the Iron Age
3. How did the Ammonites factor into Biblical episodes during the Iron Age (a few examples)
4. Identify Moabites on a map
5. Moabites and biblical relevance (a few examples)
6. How the Mesha Inscription fits into the equation
7. Identify major Phoenician cities on a map
8. Famous Phoenician figures and interactions in the Bible
9. Identify general Aramaean kingdoms or city-states on a map
10. A few biblical highlights between the Arameans and the Israelites

A preliminary reading list with quiz questions

Once we had decided what we wanted to include, we moved into the development and implementation phase. The professor went to work recording his videos to cover how the material connected to the site at Ataruz specifically. I focused my time on taking the collected material and organizing it into a structure that was prototyped during the planning phase. The structure was challenging, given the flexibility we gave students to work through the material at their own pace. Originally, we had planned to cover other sites students would visit after introducing the general history of Jordan. After formatting the course this way, I realized that the history of Jordan led naturally into the history of Ataruz and the archaeological work done there. The other sites students visit have a focus on the spiritual connections from the bible and we felt that fit better towards the end of the course where the focus shifts to activities outside their responsibilities in the field.

Up until this point in the project, I had continued to advocate for some sort of synchronous interaction between the professor and the students, even if it was just once or twice over the seven-week period. Two pieces of information came to light late in the project that changed this. The professor shared that he wouldn't be able to get teaching credit for the course during spring, meaning that he would have limited time to dedicate to the course. Additionally, approximately half of the students participating in the course would either be on study abroad visiting 5+ countries over a month or completing an internship in Morocco. It would be virtually impossible to coordinate the schedules of students to make it possible to share a synchronous experience. That led us to put extra emphasis on meaningful asynchronous interactions for students.

Throughout the project, the professor and I worked together, him acting as the subject matter expert and I as instructional designer. Our partnership worked well because of the relationship we had developed when I participated on the dig. We both knew how great the

experience could be and we wanted to work together to make it better.

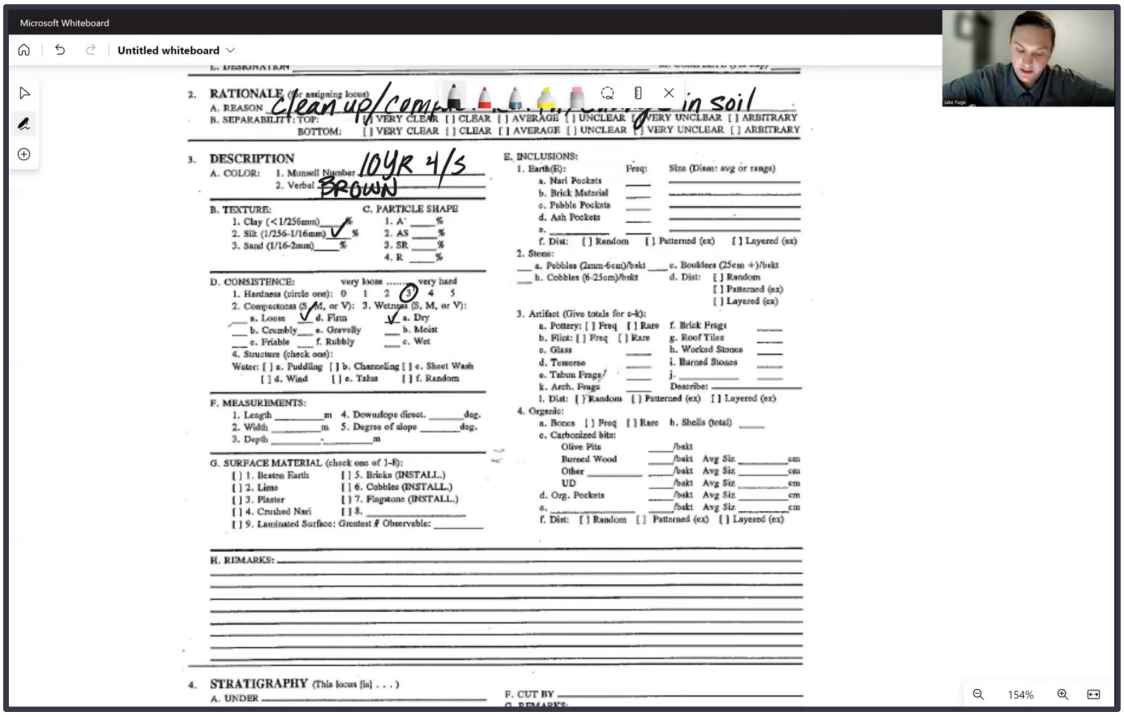
Design Representations/Prototypes

Prototype or example videos:

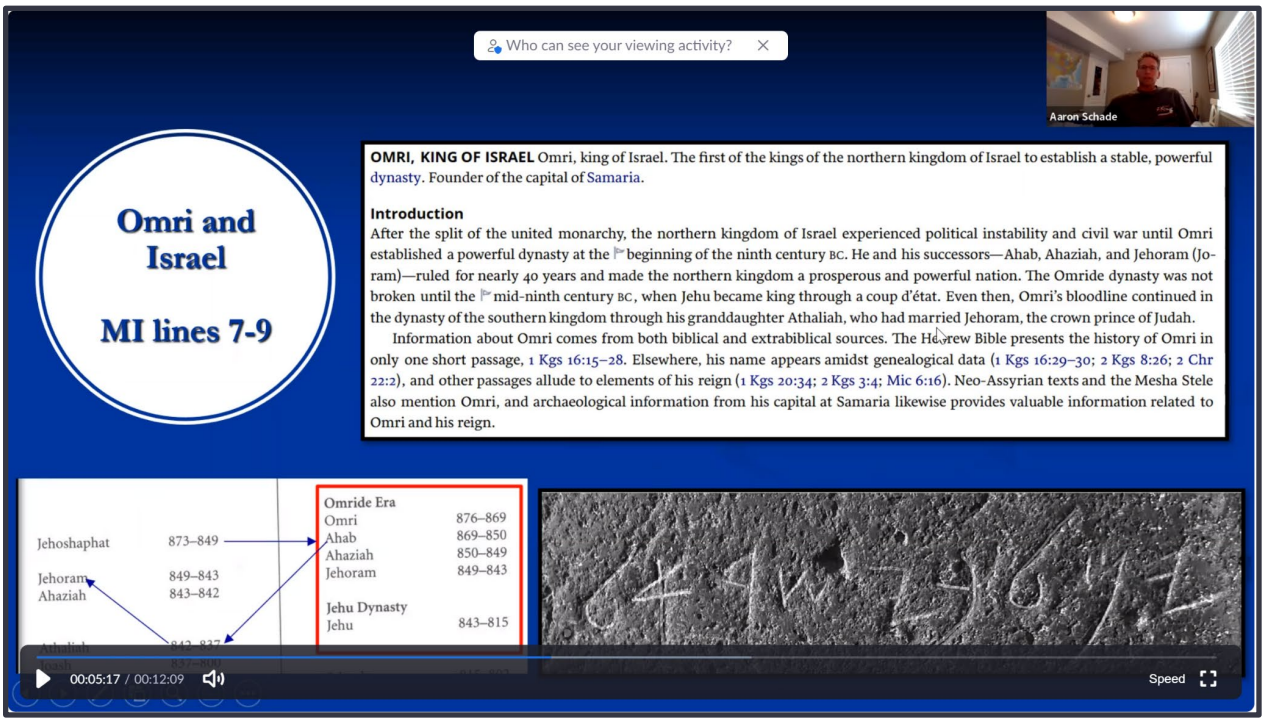
Video on the history of Machaerus

Video on the history of Mt. Nebo

Screenshot of the video, "How to use a Munsell Chart"



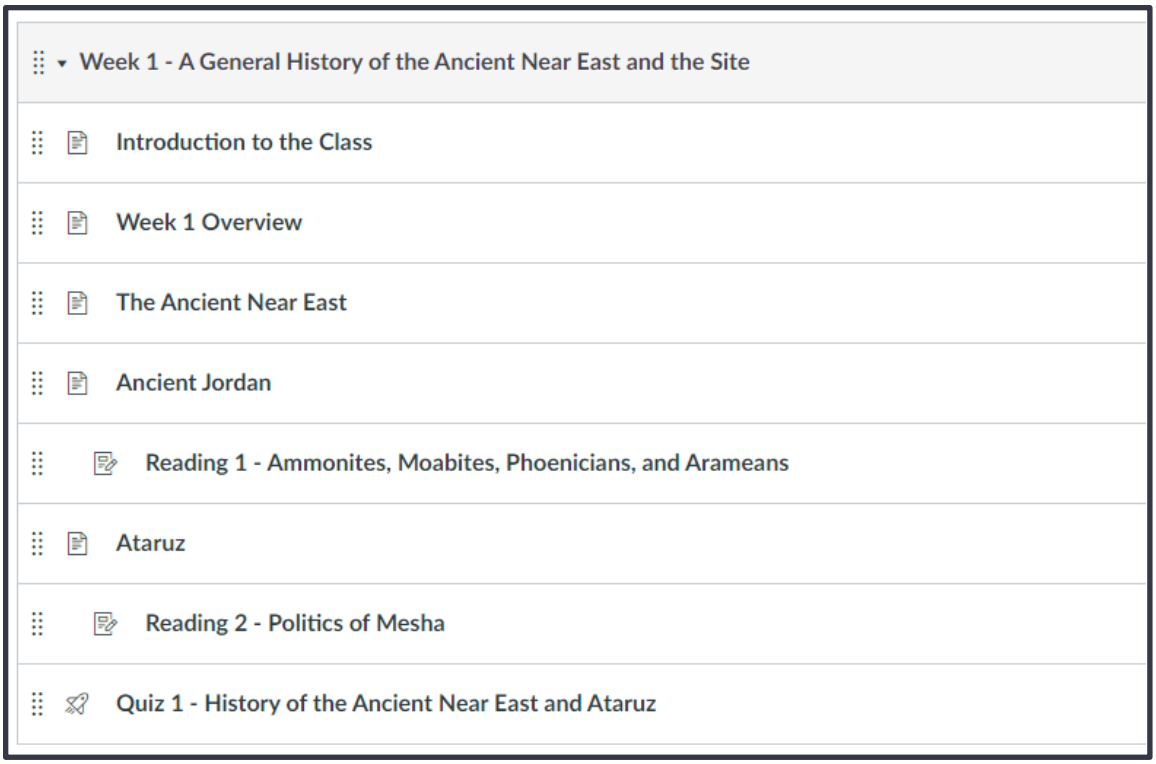
Video on how to fill out a locus sheet



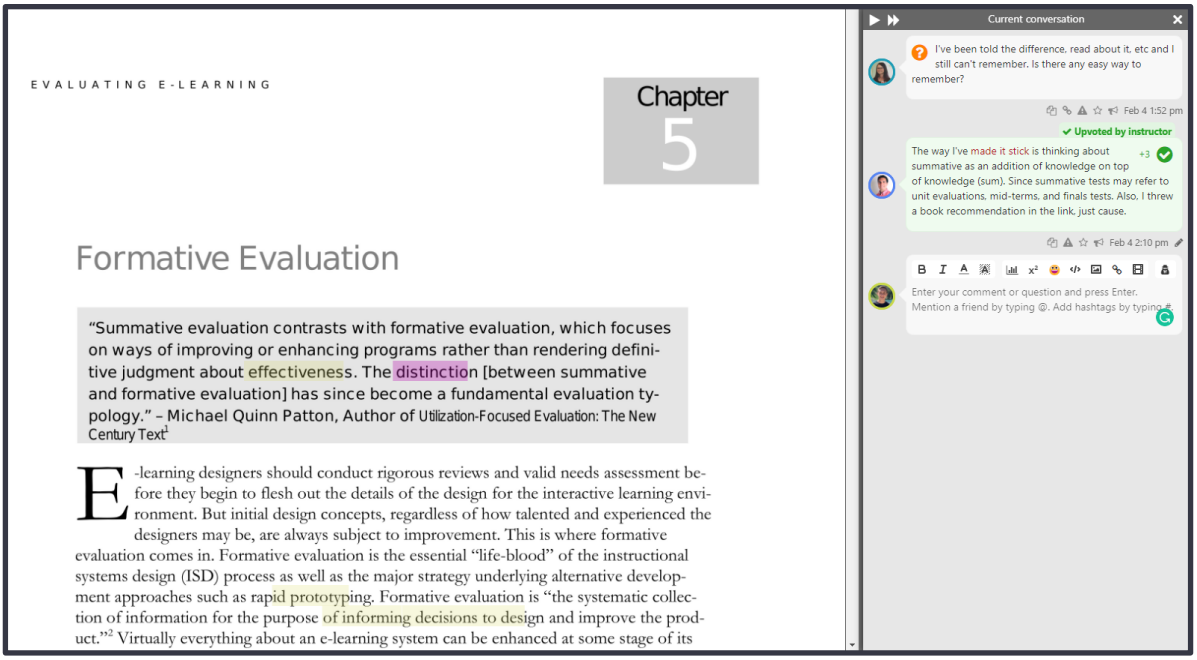
Video on the [Mesha inscription and how it relates to Ataruz]

Tue - Apr 26	**Week 1 - A General History of the Ancient Near East and the Site** Welcome to the Class! ● **Politics of Mesha Reading** ● **The Ancient Near East - Introductory Reading**
Sat - Apr 30	
Tue - May 03	
Fri - May 06	
Sat - May 07	**Week 2 - Deep Dive into Ataruz and its History** ● **Temple Building and Temple Cult - Reading** ● **Mesha Inscription Interpretation (Schade) - Reading** ● **Ataruz, a Preliminary Report - Reading**
Fri - May 13	
Sat - May 14	**Week 3 - Spiritual/Scriptural Connections** Video on Machaerus Read the following scriptural passages: Example 1: Example 2: Example 3: Video on Mt. Nebo Video on Bethabara

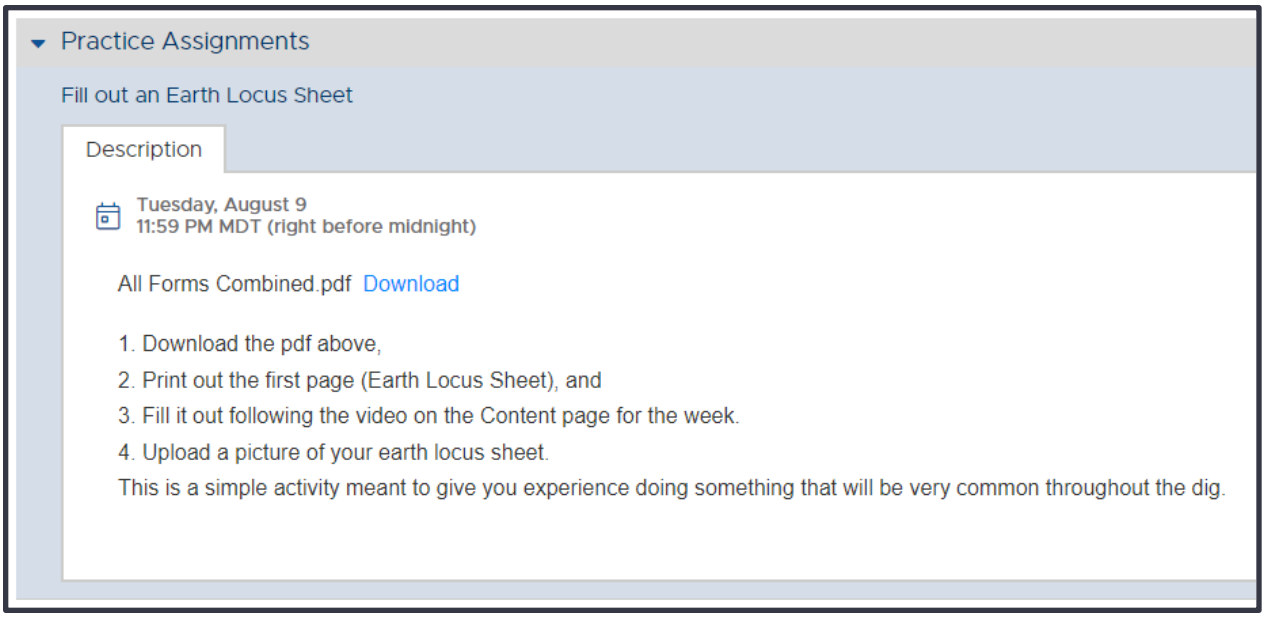
Prototype LearningSuite Schedule Layout



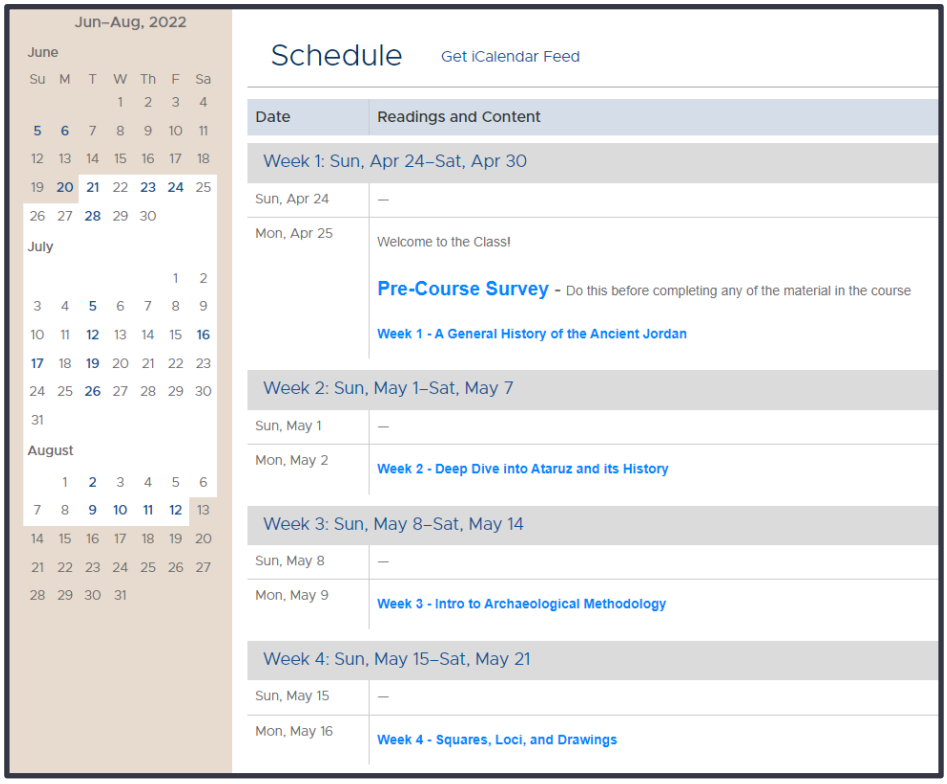
Prototype Canvas module layout



Screenshot of Perusall from another course, where students have left comments



Example Assignment



LearningSuite Schedule

Product Implementation

The following will be required for the program to be successful:

- Students will need:
    - A computer that can connect to the internet
    - A basic understanding of LearningSuite
    - Login credentials for BYU
    - The computer will need to be able to run instructional videos.

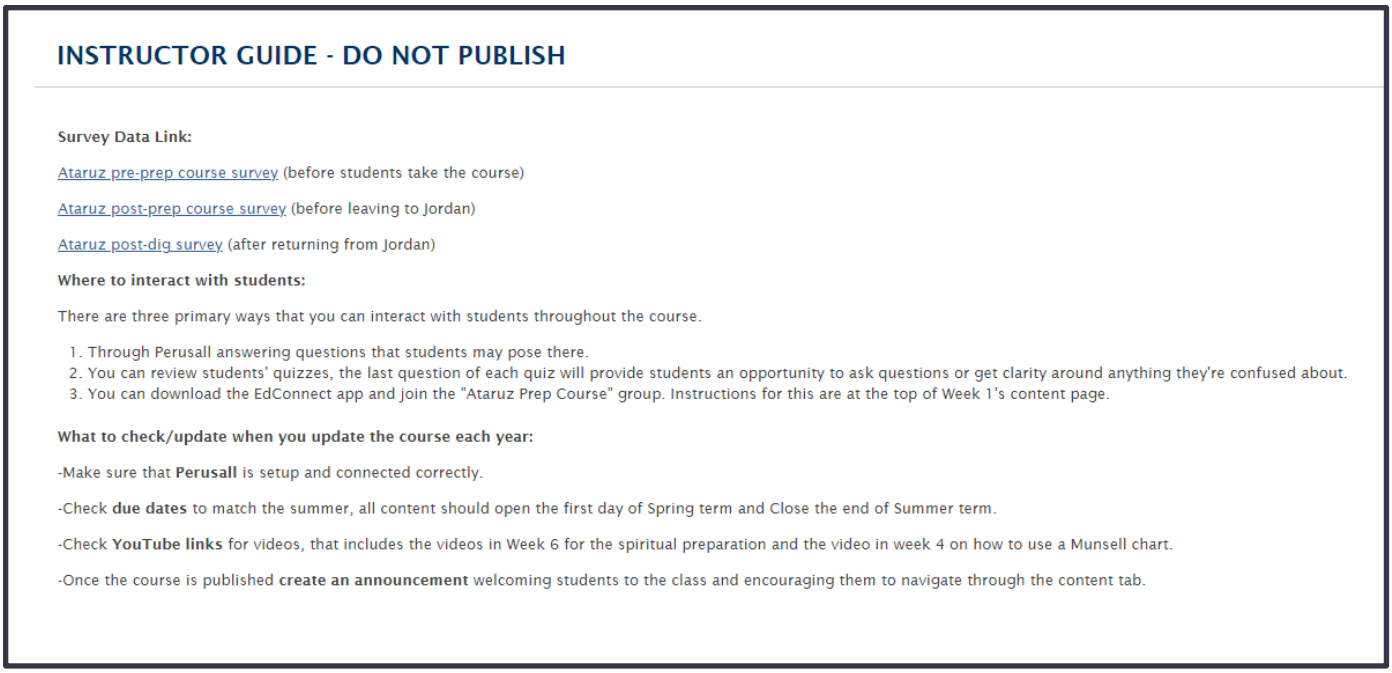
Several of the students who will be attending the program are research assistants for the dig director and have already agreed to participate in testing the program. They will enroll in the course early and I will ask them to provide feedback on the flow of the course, the tools (like Perusall) used throughout the course, and if they feel the workload of the course is appropriate. Some testing was conducted during the building of the project, but it was limited because of the short timeline for the project. The project was completed over an eleven-day span, between March 28th and April 7th. A few things were presented to students like the schedule and an outline of the flow. At one point in the implementation, I needed to include some instructions on how to setup the asynchronous collaborative annotation and the asynchronous video discussions. I didn't want the content to be overwhelmed with lengthy instructions, but I wanted to make sure students would be aware of the instructions. I invited a student to review the page and navigate through it as if they were taking the course. I realized that I needed to be more explicit about how to expand a collapsible section with the instructions, which helped to refine the design. Though there was limited testing during development of the product, I have been an active participant in getting feedback from participants and updating the course in real time, where appropriate.

Working closely with the dig director helped to ensure that the course will be useful and used appropriately. Originally the course was going to be built in the Canvas LMS, but after talking with the dig director and weighing the various strengths of the platforms, LearningSuite

was adopted as the LMS for the course because the dig director has little understanding of the Canvas platform. His lack of understanding would have led to a lower likelihood that the course could be maintained and updated as necessary.

This course will be piloted in full during the spring term of 2022. A preliminary pilot with one student was conducted to verify that students would be able to navigate the course with ease and that some key elements of the course functioned for the students. The student that participated in the pilot has been at BYU for several years and is familiar with LearningSuite. No introduction was given to the course other than what she already knew about it, which is that there would be a simple prep course to help prepare for the fieldwork she would be doing in Jordan. Several important changes that needed to be made were brought to light through this including adjusting where some elements of the course are housed and warning students that they would need to print some materials. The best outcome of the pilot was the validation that the course was easy to navigate. As the student was navigating the various materials she said, "this seems to make perfect sense" and, later, "everything is all connected, I love that!"

Communication about the course is largely going to be covered by the professor. As he recruits students, he will ensure they know that the prep course is mandatory. Throughout the course there are little indicators to help students know what they need to do. This is accomplished through announcements and text to prompt students on the calendar and on content pages. To help the director manage and navigate the course, I have prepared an instructor guide that will include links to live survey data, a list of what he needs to check/update each year, and how to interact with the students throughout the course.



INSTRUCTOR GUIDE - DO NOT PUBLISH

Survey Data Link:

Ataruz pre-prep course survey (before students take the course)

Ataruz post-prep course survey (before leaving to Jordan)

Ataruz post-dig survey (after returning from Jordan)

Where to interact with students:

There are three primary ways that you can interact with students throughout the course.

1. Through Perusall answering questions that students may pose there.
2. You can review students' quizzes, the last question of each quiz will provide students an opportunity to ask questions or get clarity around anything they're confused about.
3. You can download the EdConnect app and join the "Ataruz Prep Course" group. Instructions for this are at the top of Week 1's content page.

What to check/update when you update the course each year:

-Make sure that **Perusall** is setup and connected correctly.

-Check **due dates** to match the summer, all content should open the first day of Spring term and Close the end of Summer term.

-Check **YouTube links** for videos, that includes the videos in Week 6 for the spiritual preparation and the video in week 4 on how to use a Munsell chart.

-Once the course is published **create an announcement** welcoming students to the class and encouraging them to navigate through the content tab.

Instructor guide on a content page only visible to the instructor in LearningSuite

Assessment of Student Learning

Using surveys, weekly quizzes, asynchronous video discussions, a few assignments, and observations students will be assessed on their understanding of historical context, excavation procedures and skills (this is summarized in the "Learning Outcomes and Correlated Assessment" table below). Data from Likert scale questions will be analyzed using descriptive statistics, as well as looking at the median and mode. These align with the stakeholder's primary interests and desired outcomes.

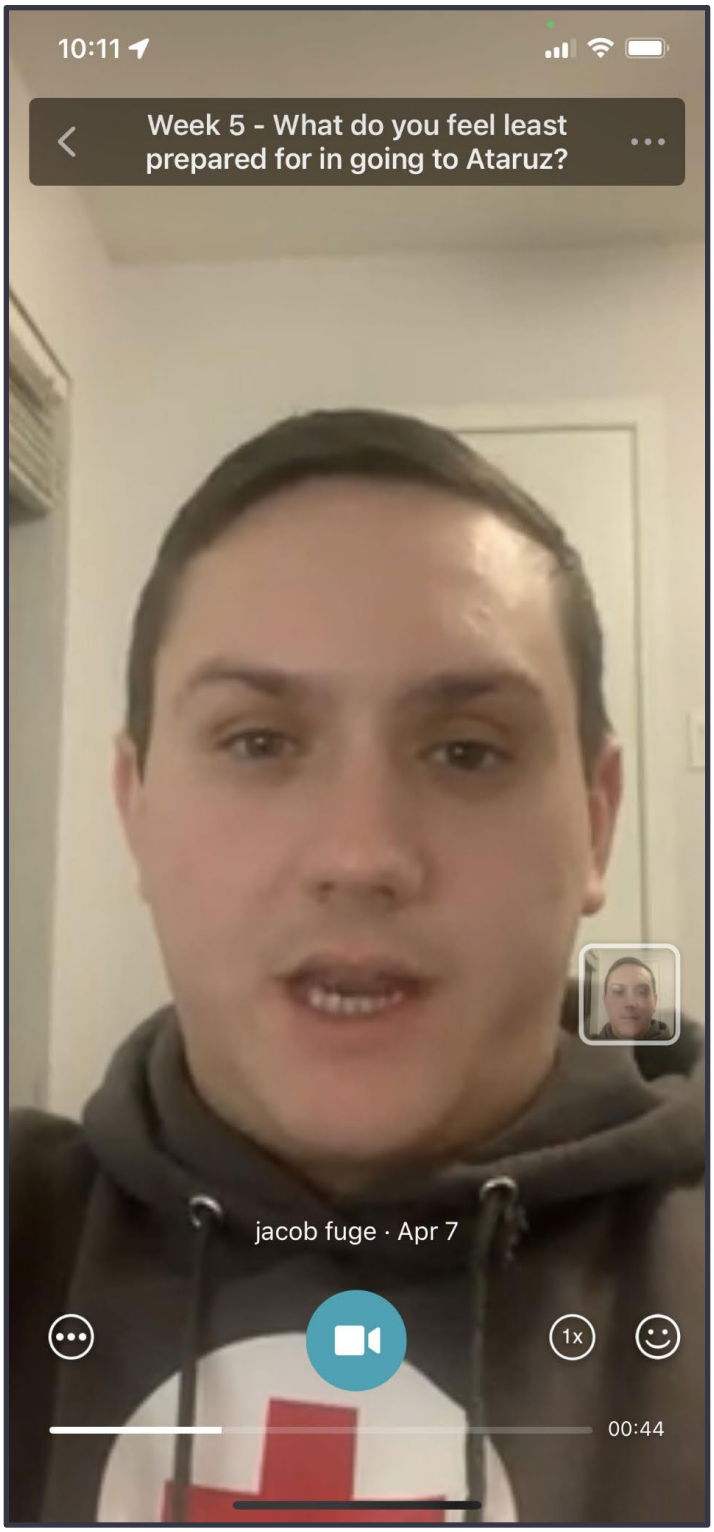
Assessment will consist of the following:

- Weekly quizzes to assess knowledge of key terms, basic processes, and archaeological principles. They also provide an opportunity for students to provide feedback on the material and experiences for that week and ask any questions that they may have related to the material.
- A few assignments focused on key responsibilities including sketching and locus

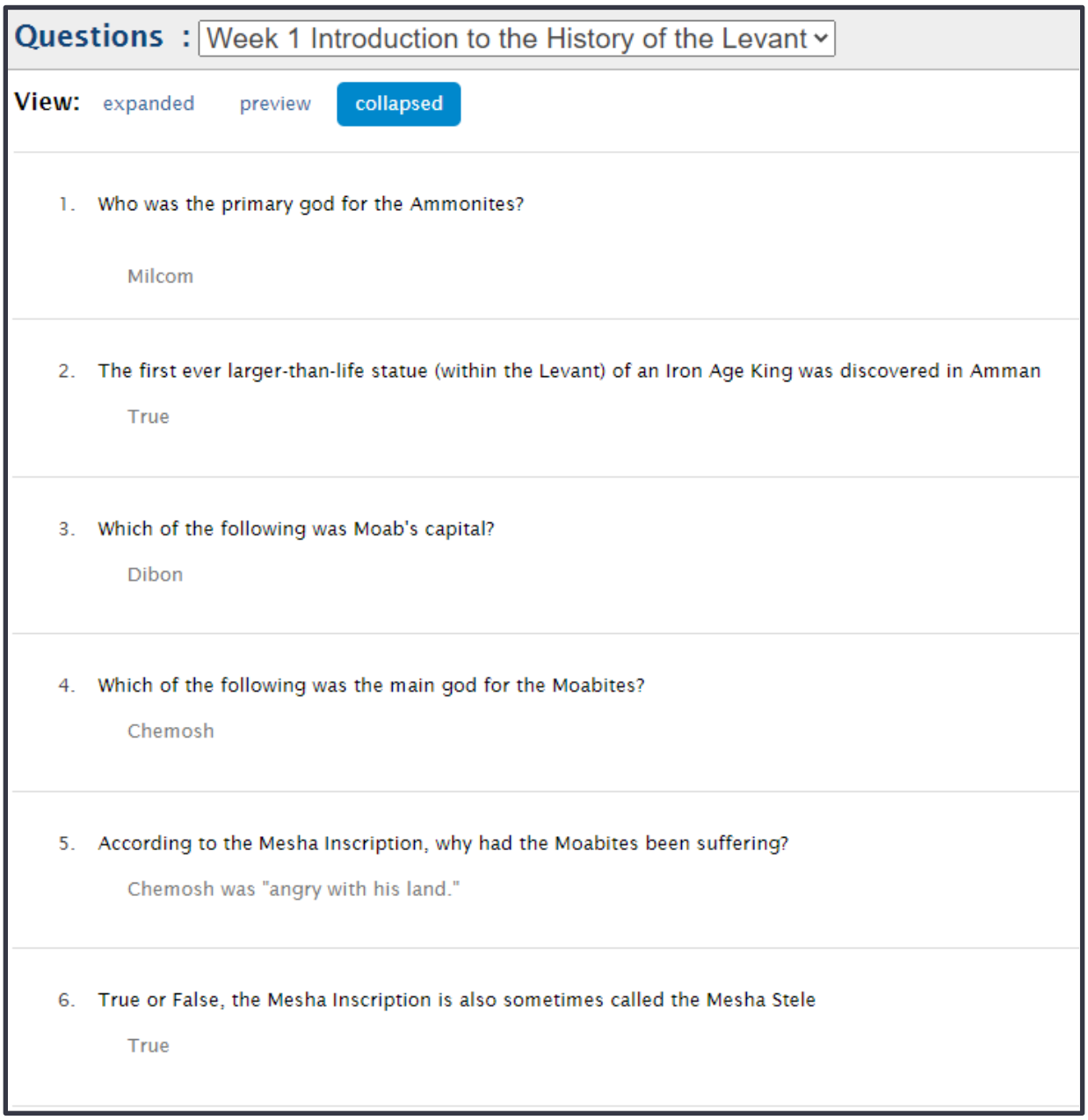
documentation.

- Group discussions to see how students synthesize their understanding of historical context and archaeological principles. Some of the asynchronous video discussion prompts allow students to get to know each other and build camaraderie.
- Surveys will also be used before the course, after the course, and after the dig experience in Jordan. These surveys will provide students the opportunity to report how confident they feel in completing the responsibilities that they will be accountable for in the field. This data will be assessed mostly comparing mode across the three surveys. Other analysis will likely be done in conjunction as well. Survey data will be available live to the stakeholder. An example of the survey can be seen below in the "Evaluation" section.

Learning Outcomes and Correlated Assessment	
Course Learning Outcomes	**How the Outcome is Assess**
1. Students will know basic archaeological terminology and processes as they pertain to their responsibilities.	• Pre- and post-course surveys • Weekly quizzes • Weekly discussions • Instructor observations in the field
2. Students will have greater historical context for the significance of the work they are participating in.	• Pre- and post-course surveys • Weekly quizzes
3. Students will have greater historical context for the sites they will visit outside of the dig.	• Pre- and post-course surveys • Weekly quizzes
4. Students will develop a collaborative working relationship with other participants.	• Weekly discussions • Collaborative annotative readings • Instructor observations in the field



Example asynchronous video chat prompt



Example quiz

Evaluation

The most important stakeholder in terms of evaluation is the director for the dig. For more details on feedback from the stakeholder and my response see the table "Feedback."

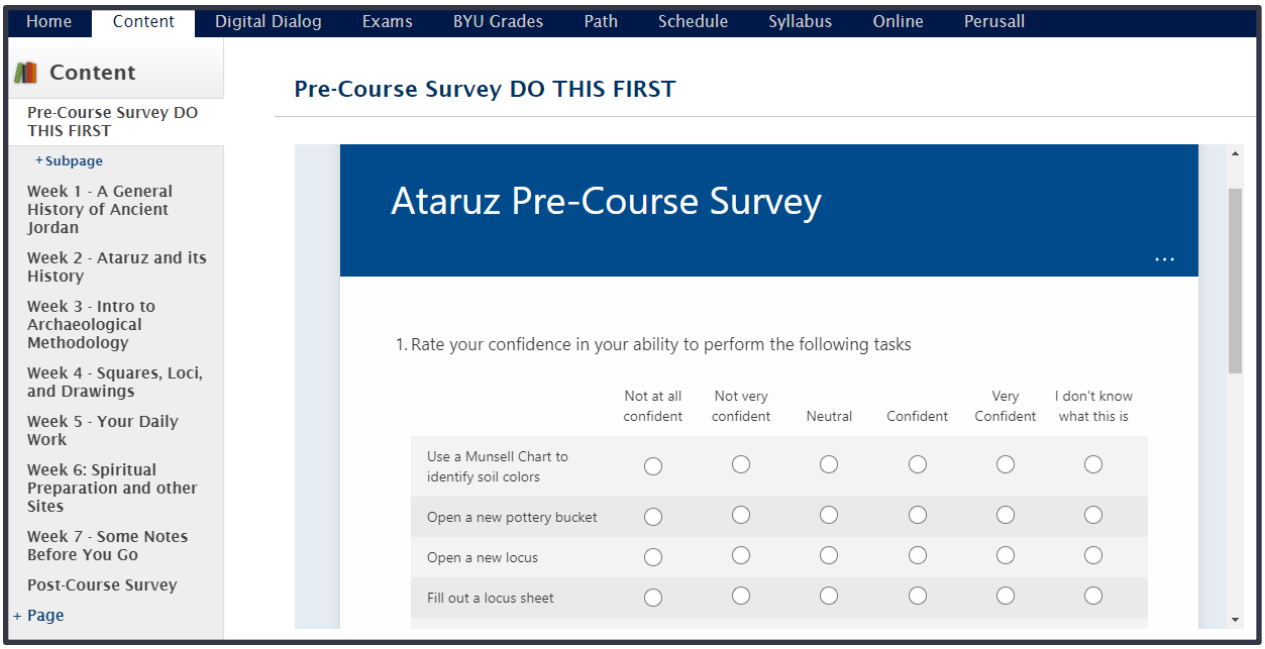
Throughout the development of the course, I met with the professor and presented what I had designed to ensure it met his expectations. His primary outcome for the class was that it would help students to have a meaningful experience and that they would feel more confident about fulfilling their responsibilities in the field. To measure and communicate the influence of the course on these outcomes, students respond to surveys before class, after class, and after fieldwork asking them to rank their confidence in completing essential tasks. These surveys will also provide an opportunity for students to share feedback on the course, what they are hoping to learn from it (pre-course survey), what could be improved (post-course survey), what was especially helpful (post-course survey), and what helped prepared them the most for their fieldwork (post-dig survey). The director also requested the collection of testimonials in the post-dig survey from students to use in acquiring additional funding. The data from these surveys will be available live and a link to them will be included in the instructor guide for easy access.

Feedback		
Source	Feedback/Concern	Response
Instructor	"Stop adding readings; I don't want the course to feel like more than a one-credit class."	I limited the readings and switched some of the readings to shorter ones so that the work would only be 1–1.5 hours per week.
Instructor	The instructor was concerned about maintaining the course in Canvas because he was less familiar with the platform, and he uses LearningSuite for the rest of his courses	After initially planning to host the course in Canvas, we pivoted to LearningSuite, a platform that I had never designed a course in previously.
Instructor	Some YouTube videos made by others share political perspectives about the Middle East that we don't want students to think represent the views of the university. Instructor's feedback: add a disclaimer to clarify that the videos do not represent the views of the university.	I raised this challenge to the instructor and added a disclaimer for the videos that had potentially political messages.

Instructor	The instructor tried to get approval to count this course as a class towards his teaching requirement, but was denied, meaning he would have little to no time to dedicate to facilitating the course.	I set up the grading so that the teacher wouldn't have to spend any time reviewing material. I also provided chances for feedback from students that would be easy for him to access periodically.
Instructor	I originally designed a few synchronous Zoom meetings between the instructor and students throughout the semester, but, due to the instructors limited time and the fact that most students would be on study abroad programs during the term, the instructor advised against that.	I eliminated the synchronous zoom sessions and elected to include the asynchronous video discussions and collaborative readings to replace the interaction.
Student	"I wouldn't watch the introductory videos for the Perusall and Volley platforms unless the interface was hard to use."	On the First Week content page are some resources to help students navigate the new platforms being used in the course. I put them in a collapsible container so that the students wouldn't have to go through them unless they needed it.
Student	"I am confused why the videos are in the assignment section in the gradebook. Do I need to turn something in for those?"	I moved the videos out of the gradebook because the students aren't being graded for them and it helped to simplify the navigation.
Student	"Because I will be in Morocco over the summer, I may not be able to get these assignments printed. You should add a warning at the start of the class."	I added a message at the beginning of the class so that as soon as students joined the course, they would know that some materials would need to be printed. I also added an option to allow for a fully-digital response so they could complete the assignment with internet if they had no printer.
Student	"It looks like there are some repeat assignments in Week 4 and 5."	I removed the assignments from Week 4 and kept the assignments in Week 5.
Student	"In Week 4, there is a video link that takes you to YouTube in a new tab. It would be easier for me if it was just embedded in the page so I didn't have to navigate away."	I embedded the video (and all other videos that I could) directly into the content page to limit navigation outside of LearningSuite.
Student	"Who is supposed to start the conversation	I started the prompt in Week 1 of

	in Volley?”	the asynchronous video discussions, but failed to invite the students to the other weeks where I had already created a prompt video. I invited the students to the rest of the weeks after talking with the student.
Student	Misunderstood how to access instructions on how to use the Perusall and Volley platforms.	In a pilot with a student, I wanted to test if they would understand how to open the collapsible menus with instructions on the new platforms. Without any prompting, the student didn’t see any instructions. To address this, I added some text calling attention to the navigation and explaining how to open the instructions. The pilot showed a student figured out the navigation with the additional instruction.

The course is assessed at a variety of levels. Formatively, students share feedback each week about the material that they completed through the weekly quiz as well as ask any questions that they may have. Cumulatively, the post-course survey and post-dig survey allow them to reflect on the impact of the entire class on their overall experience. Because the course has not been piloted yet, data has not been collected. Analyzing the mode of the responses will be the most important method of analyzing the survey Likert data. Qualitative analysis will also be conducted on their comments regarding how the course can be improved. This will be done by coding the data, sorting by themes, and making inferences from the themes that emerge. Once data is collected and analyzed, it will be summarized and reported to the stakeholder in a presentation.

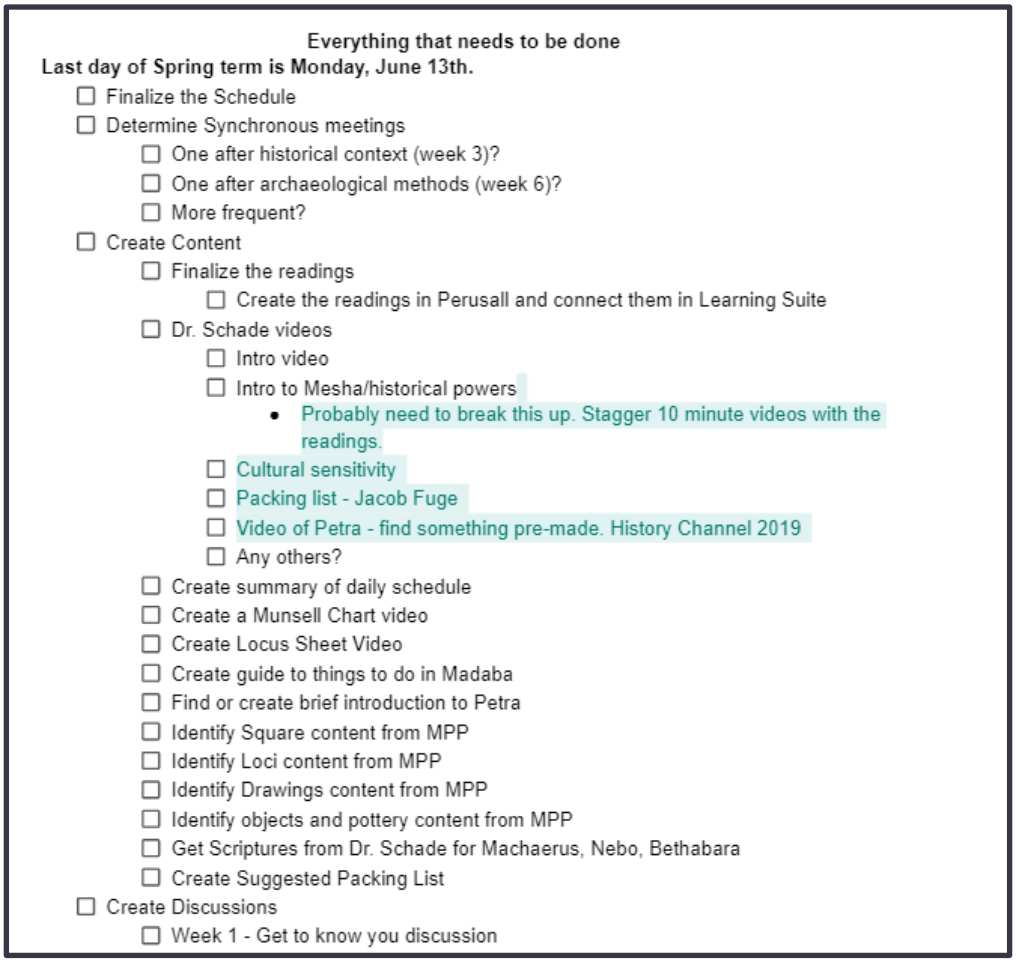


Pre-course survey embedded into the LearningSuite LMS

Evaluation Questions and Associated Plan	
Question/Concern of Stakeholder	How will it be evaluated?
Did the course help students to feel more confident about fulfilling their responsibilities as square supervisors going into the experience?	Weekly quizzes, pre-course survey, after-class survey, post-dig survey.
Did the course improve their time to proficiency in the field?	There is no historical data for this except for what will be collected in the pre-course survey. The results from the pre-course survey will serve as a baseline compared against the results from the post-course survey and post-dig survey. Additionally, the director will collect and share observations from their time on the dig.
How did students enjoy the experience spiritually? Did they grow from it?	End of course survey and weekly quizzes.
Do students understand the historical context of the work they are doing?	Weekly quizzes and asynchronous video discussions.
Testimonials	Post-dig survey.

Budget and Timeline

I did not receive pay for work on this project. If I was being paid as an instructional designer, my rate would be $32/hr. Assuming that the project would take nine hours a week for 14 weeks (one semester), the cost for the project would come out to $4,032. To manage this project, I created a to-do list that served as a backlog of sorts. I would work through the list and update it as I went. When I met with the stakeholder each week, we would occasionally review it and make sure that we understood who was responsible for what, it was a good tool in keeping us accountable.



Everything that needs to be done

Last day of Spring term is Monday, June 13th.

- ☐ Finalize the Schedule
- ☐ Determine Synchronous meetings
  - ☐ One after historical context (week 3)?
  - ☐ One after archaeological methods (week 6)?
  - ☐ More frequent?
- ☐ Create Content
  - ☐ Finalize the readings
    - ☐ Create the readings in Perusall and connect them in Learning Suite
  - ☐ Dr. Schade videos
    - ☐ Intro video
    - ☐ Intro to Mesha/historical powers
      - Probably need to break this up. Stagger 10 minute videos with the readings.
    - ☐ Cultural sensitivity
    - ☐ Packing list - Jacob Fuge
    - ☐ Video of Petra - find something pre-made. History Channel 2019
    - ☐ Any others?
  - ☐ Create summary of daily schedule
  - ☐ Create a Munsell Chart video
  - ☐ Create Locus Sheet Video
  - ☐ Create guide to things to do in Madaba
  - ☐ Find or create brief introduction to Petra
  - ☐ Identify Square content from MPP
  - ☐ Identify Loci content from MPP
  - ☐ Identify Drawings content from MPP
  - ☐ Identify objects and pottery content from MPP
  - ☐ Get Scriptures from Dr. Schade for Machaerus, Nebo, Bethabara
  - ☐ Create Suggested Packing List
- ☐ Create Discussions
  - ☐ Week 1 - Get to know you discussion

Project to-do list from the beginning stages of the development process

I originally spoke with the stakeholder in Fall of 2020 to discuss the possibility of completing this project for the excavation. For a summary of the project timeline, see the "Actual Timeline" table below. I formally committed to working on this project in early 2021. The original timeline was to work on it throughout the summer and fall of 2021 and the winter of 2022 so the course would be ready for spring 2022. At the time, the idea was that the class would be three-credits and more expansive. We had considered teaching basic Arabic phrases, more intense historical context, and more detailed archaeological theory and methodology. We also had preliminary discussions around providing specialized training in how to use survey equipment and basic photography skills to aid in documentation for the site. Some initial work began in the summer and fall, but ultimately we opted to make the course more introductory and limit its scope to a one-credit introductory course.

This shift in scope was driven by student needs and resource availability. Both the stakeholder and I had less time available for development than anticipated. We had also explored the chance of more resources through BYU Online, but our application was rejected. Those additional resources could have provided the opportunity to expand the scope of the course.

The actual timeline for the project consisted of some work from February 2021 to December 2021 and then more focused intense work January 2022 to April 2022. The work completed in 2021 was focused on defining scope, developing empathy for the learners, and developing preliminary design ideas. The project was formally approved for my master's project in the middle of March 2022, and intense development and implementation went from the end of March to the middle of April 2022. The course opened to students April 25th, 2022.

Actual Timeline	
Project Progress	Date/Timeline

Preliminary discussion of the idea for the project with the stakeholder	Fall 2020
I formally committed to the stakeholder that I would complete the project	February 2021
Began exploring the option to work with BYU Online to get access to additional resources.	April 2021
Application to BYU Online submitted	June 2021
Received notice that our application was rejected and we would have fewer resources available to us.	August 2021
Brainstormed general content and structures for the course	September 2021
Met with and interviewed two learners	October 2021
Stakeholder and I begin meeting weekly	January 2022
Prototypes, evaluation plans, initial collection of potential content, course structure drafts refined, some testing with users, and other extensive design work completed.	January–March 2022
Intense course development including final selection of readings, final course design, building the course in Learning Suite, finalizing assessments, testing with users, and video development	March 24th–April 8th 2022
Minor refinements	April 9th–April 25th 2022
Course launches	April 25th 2022

Annotated Bibliography

Domain Knowledge

- Madaba Plains Project Excavation Manual: https://byu.box.com/s/izp4cgs69q7hpj55vugffiynrw1fx2gs
    - This is a very dense manual that outlines the typical procedures and methodology for archaeological excavations that take place in the Madaba Plains region of Jordan. This manual is specific to three archaeological sites—namely Jalul, Hisban, and Umayri. These procedures are not exactly the same as the ones used in the dig at Ataruz; however, they serve as a very in-depth introduction to general principles of archaeology.
- Moab during the Iron-age II period https://byu.box.com/s/xsl6v0ieadyretf9refftbf4cg579mj0
    - This document provides the historical, geographic, and archaeological context for

the greater region, which is important for being able to understand the artifacts that may be uncovered and the narrative within which the data fits. States and fortresses started to be developed in Moab in the mid-nineteenth century BC. The Mesha Inscription is an important artifact that helps to establish the time period of the region and the political players involved. It also helps to corroborate some of the information and names found in the Old Testament record.

- Ammonites, Moabites, Phoenicians, and Arameans: https://byu.box.com/s/vebuve1wjawamr0zwqlfiranqge1n93y
    - This document provides the historical context for several different communities in and around the Jordanian plateau, as well as other communities that are involved in the overall political environment. The Moabites were a people who, according to the Bible, originated from the incestuous relationship of Lot and his daughters. They resided in the Madaba Plains in Jordan. Though the people inhabited the region beginning in the Bronze age, most of what is known about them comes from material from the Iron Age. The Moabites were involved in a variety of industries, including sheep herding, textiles, and ceramics. They were also active cultically as they built and maintained several temples in the area.
- Preliminary Report of Khirbet Ataruz: https://byu.box.com/s/ef7zkzwkyphlutkevxlfksb1oli1h3vu
    - This document provides a summary of the fieldwork done at the site up until 2012. Khirbet Ataruz is an ancient temple site and city that sat at the intersection of roads connecting the ancient towns of Madaba, Machaerus, and Libb. Inhabitance at the site began in the Iron Age period and continued through the Hellenistic period. The most significant period of inhabitance was during the Iron Age period, during which a large temple complex was built and expanded.

Learning Theories and instructional strategies

- Effective instructional videos:
    - Guo, P. J., Kim, J., & Rubin, R. (2014, March)
        - Instructional videos have become important to instruction throughout the world. Videos can be more engaging if used appropriately. Shorter videos are better; after six minutes, student engagement and attention tend to drop. Khan Academy-style tablet drawing videos are more engaging. There are other ways to improve the utility of videos, including creating labeled chapters in the video. This is especially helpful when creating videos that serve as tutorials so students can reference important sections quickly and easily later.
    - https://cft.vanderbilt.edu/guides-sub-pages/effective-educational-videos/
        - Considering cognitive load in the development of instructional videos can help to make them more impactful and helpful for students. Signaling important information by using text on screen can help students know what to focus on. Simply keeping the information presented in the video totally focused on what is need-to-know, fun facts can distract from what is most important. Including interactive features like quiz questions and guiding questions can help students engage more and know what information is most important.
    - Cakir, I., (2006) - The use of video as an audio-visual material in foreign

language teaching classroom
    - This article reviews various techniques that help improve student engagement when video is used, including posing questions before viewing. These may be helpful particularly if, in the next iteration of the course, teaching basic Arabic phrases is adopted.
  - deKoning, B., Tabbers, H., Rikers, R., and Paas, F. (2009).
    - This article explores the value of using cues in video and animations. This is helpful as the instructor and I both worked on developing instructional videos and used cues as a way to indicate to students what information was most important which helps to improve learning outcomes.
- Blended learning best practices
  - Effective Blended Learning Principles: https://docs.google.com/presentation/d/1RucEOJDGJzzYLNUGFN1JldIfplfodr9T/edit#slide=id.p1
    - This resource is a summary of principles that can guide the development of blended learning and instruction. Thinking about the relationship between a learner and content, a learner and other learners, and a learner and the instructor. Providing opportunities for personalization are one of the strengths of blended learning settings that can be taken advantage of. Personalization can manifest itself in many ways—allowing students to choose when, where, how, and what they learn are all ways that personalization can be built into a course. It is important for students in this course to have flexibility and where and when they participate in the class and go through material.
  - Other blended and learning strategies and best practices: https://cft.vanderbilt.edu/guides-sub-pages/blended-and-online-learning/
    - These are additional sources of information regarding blended online teaching and learning. These sources can help to guide the way that material is presented and how the course is structured.
  - Angelino, L. M., Williams, F. K., & Natvig, D. (2007) Strategies to engage online students and reduce attrition rates. The Journal of Educators Online, 4(2), 1-14.
    - This article examines how to improve social connection in online courses, particularly to reduce attrition rates. This was helpful for the course as we decided to include video discussions to help students get to know one another and learn together. The practical suggestions from this article proved helpful in guiding our efforts to connect learners.
  - Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2009). Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies.
    - This meta-analysis reveals many important insights about how to improve online learning. The study provided a host of significant insights, including that collaborative online learning courses show improved learning outcomes. It also reveals that giving students control over video controls improves the effectiveness of videos. These insights were important to consider in developing student interactions with each other as well as course content.

Instructional Design approaches

- UDL

    - https://udlguidelines.cast.org/
        - This will be helpful because there will be varying cultural backgrounds among students as well as various levels of exposure to archaeological methodology and biblical history. Designing the course for every student, not just those students who are already somewhat familiar with the content, will be important to the course being successful over the long term.
    - https://cft.vanderbilt.edu/guides-sub-pages/understanding-by-design/
    - Backwards Design
        - Backwards design is changing the order in which we plan lessons. Rather than starting with learning activities that we are comfortable with, we begin designing our courses by considering the learning outcomes and then thinking backwards what activities and content students will need to engage in to meet those outcomes. This is helpful because it forces a strong correlation between learning activities and outcomes if done well. It also forces intentionality in the design process.
    - Finnegan, L. A., Miller, K. M., Randolph, K. M., & Bielskus-Barone, K. D. (2019). Supporting student knowledge using formative assessment and universal design for learning expression. The Journal of Special Education Apprenticeship, 8(2), 7.
        - This article examines the application of the principle of expression in UDL as a means of gathering formative assessment of student understanding. This was helpful as we had unique requirements in grading. The instructor had little time to dedicate to grading, so we had to rely on multiple choice quizzes. However, we also chose to use collaborative annotation readings and asynchronous discussions as a way for the instructor to assess the students' understanding of the course content.
- Communities of Inquiry
    - https://teaching.utoronto.ca/wp-content/uploads/2016/05/Community-of-Inquiry.pdf
        - This is a one-page resource that summarizes at a high level what communities of inquiry are. They also provide a table with some general principles of how to design intentionally to capture the benefit of communities of inquiry.
    - https://coi.athabascau.ca/coi-model/
        - This resource provides a more in-depth description of the three primary elements of the community of inquiry, social presence, cognitive presence, and teaching presence. This framework helps to meet the various needs of this prep course of helping students to bond and develop understanding of the material.
    - purdue.edu/innovativelearning/supporting-instruction/portal/files/4_Community_of_Inquiry_Framework.pdf
        - This document provides answers to high level questions around the community of inquiry, including the following:
            - What is it?
            - Why is it important?
            - How do I do it?
            - What are other resources?
    - https://files.eric.ed.gov/fulltext/EJ1320679.pdf

        - This peer-reviewed study found that while students prefer text-based discussions, they felt greater social presence when using video discussions. This helped to inform the decision of using asynchronous video discussions rather than text-based discussions through LearningSuite.
    - Honig, C. A., & Salmon, D. (2021). Learner Presence Matters: A Learner-Centered Exploration into the Community of Inquiry Framework. Online Learning, 25(2), 95-119.
        - This article examines the community of inquiry in an MBA cohort. They give particular focus to learner presence. The findings of this article were important in helping us examine the role of teacher presence and learner presence. While the instructor has limited involvement in the course in its current form, considering the ways he could participate were important.

For information on how these frameworks and models were used to shape the course and design decisions that were made, go to the "Design Details" section.

Design Knowledge and Critique

Though the result of this project was a relatively simple asynchronous online course, the design knowledge gleaned from the course was deep and impactful. I will share some of my learnings here. Understanding constraints, working with stakeholders, communication, managing scope, and simplicity were among the most important learnings.

Constraints

The constraints initially presented to me by the stakeholder represented his understanding of what could be done and how. This was largely defined by what he had always done, but those constraints stretched with time—I was only able to fully define the constraints as I pushed against them. The director wanted the group to develop a sense of community and camaraderie to help the experience be enjoyable for everyone. That desire was in tension with the lack of availability from the professor and students being unable to work through the course simultaneously. As I pushed on the constraint, it led me to explore more options and consider

important questions like, "how do we get students to interact in meaningful ways on very different schedules?" This led to the implementation of asynchronous video chat and collaborative annotation.

The decision of which learning management system to use was another good example of coming to understand constraints. As a designer, I prefer and have more experience in Canvas. During the first months of this project, I was planning to use Canvas, which he had some exposure to but little understanding of. Through our time meeting together, I realized that the professor is slow to adopt new technology and learn it largely because he lacks time. Understanding that he would likely have limited time to work on and maintain this course, I realized that in order for the course to be implemented successfully and used for years to come I would need to accommodate the unspoken constraint of the professor's lack of time to learn a new platform. This created some extra work for me in learning to design in a platform I had never used before. That small sacrifice of my time will make the impact of this course far-reaching. Asking over time what would make this course the most successful led me to gain clarity around the constraint. I could see that if I would work with him on the platform he was used to, we could accomplish more together.

Working with Stakeholders

Persistently asking questions or advocating for learners in small ways overtime is a powerful tool in working with stakeholders. Important to any job as an instructional designer is working with stakeholders. This aspect of the job can often be very challenging. Stakeholders have strong opinions and limited resources that don't always align with what would be best for the learner. It is our job to navigate this complex dynamic. The best word I can think of for my strategy in doing this is "massaging" stakeholders. I found that ideas that the director was unwilling to consider at the beginning of the project ended up being accepted as I gradually

and persistently pressed them into our conversations. I'll use the student interaction as an example—at first mention, the professor wasn't open to or didn't know how to help students interact besides a simple discussion online. He may have also been worried about the time it may take from him to manage the conversation. I knew that this would be important to helping learners feel comfortable and have the best experience in the course. As we met consistently, I would approach the concern from different angles, asking if he could count the course towards his teaching allotment and thus have more time for it. He explored that and found he could not. Then, I approached it from the standpoint of auto-grading collaborative annotated readings; he was open to exploring that option and it made it into the course. In another meeting, I suggested that only having text-based interactions between students may deprive them of a level of community. He was unsure of other options. As I brought examples to him and showed how it could work, he became accepting. This "massaging" came through persistent and gradual questioning, encouraging, and assuaging.

Communication

This consistency was only possible because of the communication system I had established with the director. Knowing that he was busy and that I would need him to create and collect content for me because of his expertise, I suggested that we have a weekly, thirty-minute meeting in addition to any emails, texts, or phone calls we might exchange throughout the week. Many times in those meetings we both had little progress to report, but it provided an opportunity for me to raise an issue or concern or plant a seed for him to think through. The consistency of communication brought a depth to the course that would have been lost otherwise.

Managing Scope

From archaeobotanists to drone photography pilots, there can be many different roles

on an archaeological excavation. Obviously, it was impossible to train everyone deeply on their responsibilities. This truth was exacerbated by the constraints on time and availability of students. In early brainstorming for the course outcomes, some of the ideas included training participants in how to use surveying tools, the basics of photography, an introduction to Arabic, and a 3D modeling software used to create a high-resolution image of the entire site. To effectively narrow and manage the scope of the project, my understanding of the term Minimum Viable Product (MVP) had to be refined. Because there was so much that we *could* address, I learned to ask, "what would participants need in order to just be functional?" The answer to that defined our scope. Luckily, we were able to do a little more than just show them their basic responsibilities and included some meaningful historical and spiritual context to enrich their experience. That enrichment was only possible once we had defined what *had* to be done.

Simplicity

A well-defined scope enabled the course to be very simple both in the content and its presentation. The course was organized into very simple chunks by week. All that is required for a particular week can be seen in one page, usually no longer than half a screen. The actions that need to be taken are bolded and typically in the same order each week. You can also navigate through the course three different ways. In one observation with a student who will take the course, she remarked, "this seems to make perfect sense" and "everything is all connected, I love that!" The clear definition of scope and intentional structuring led to a simple course structure that will help students have a meaningful experience.

The design knowledge developed throughout this project brings to mind Vygotsky's theory of the Zone of Proximal Development (ZPD). Understanding constraints through careful questioning and pushing helps to define what stakeholders feel can be done. This feeling of

what can be done is often stuck (initially) in what they typically do or have done. A well-managed scope helps to set the bounds of the zone of what can be done together. "Massaging" the stakeholder through consistent communication and co-discovery helps to uncover what simple actions can be taken to grow into the defined ZPD. It is fitting that the design knowledge gained from this project relates so well with the theory of the Zone of Proximal Development because the course itself is an attempt to stretch participants' ZPD so it can be quickly grown into when they enter the field.

Conclusion

Dig directors often have very limited seasons within which to further the work of excavating ancient sites. The Ataruz excavation season is typically three to four weeks long. Students have struggled to commit to an experience that limits the opportunity to travel and take a meaningful break during the entire summer. This seven-week online and asynchronous course allows students to participate in and be prepared for the short season in which work is done so they can maximize the work and their experience. Many lessons were learned during this project. One such lesson was the importance of maximizing the longevity and ease of maintenance of the course for a director with limited time. The limited time and availability of students and the professor showed the importance of creating flexible experiences where a connection could still be developed between participants. A well-defined minimum viable product was essential in finding the balance between sufficient preparation while not overwhelming students. Through a close relationship and consistent communication with participants and the stakeholder, we were able to prepare students for a much more meaningful experience.

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