



TechTrendsetter Highlight

March 25, 2025

Agenda

Introductions

Tech Trendsetters:
Dr. Samantha Allen
Dr. Abdul Momin
Dr. Shelia Hurley

Q & A

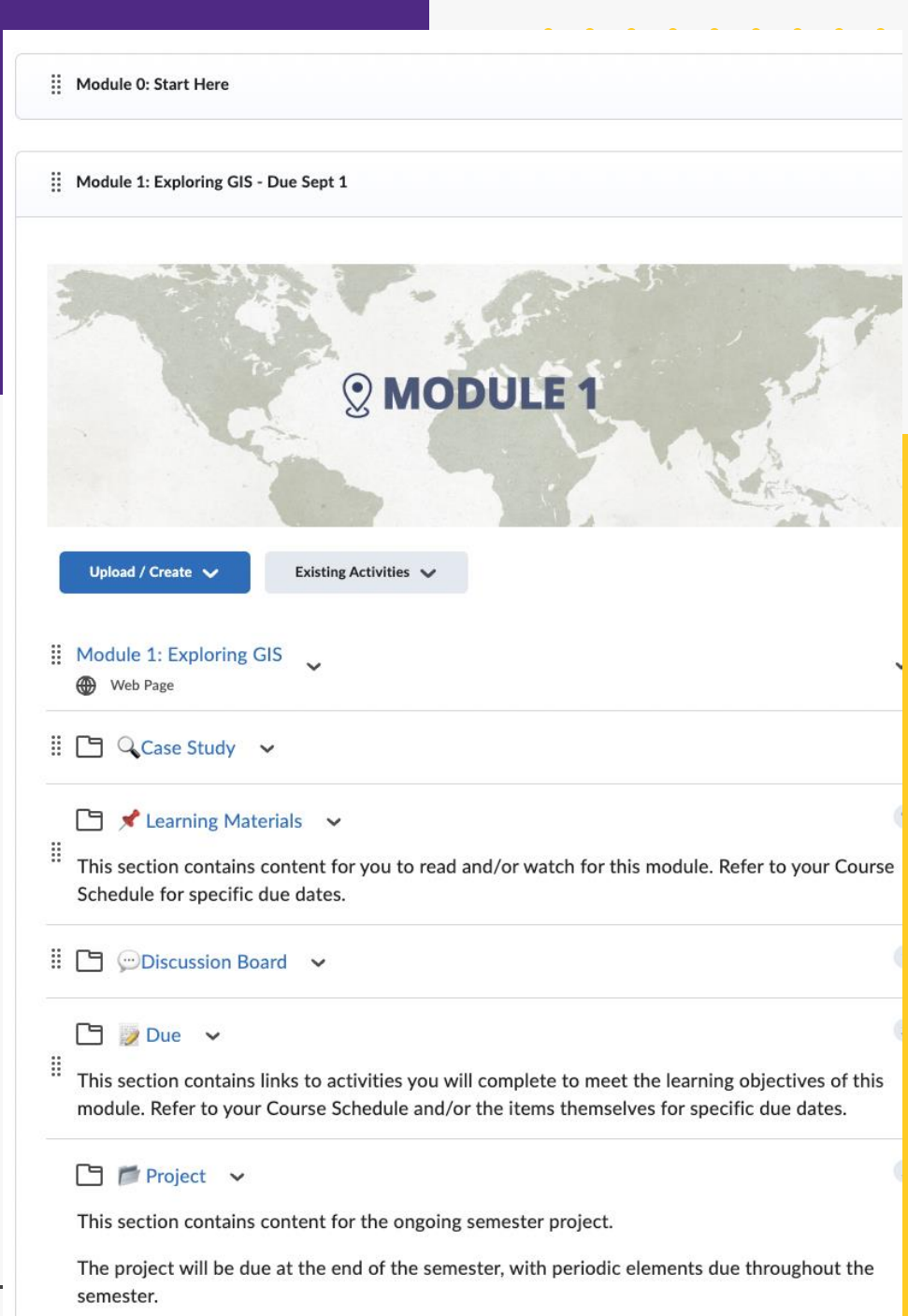
Tech Trendsetter Presentation

Samantha Allen, PhD | Lecturer
ESS 6200 Fundamentals of Environmental
Spatial Analysis



Course Navigation

- Course is divided into 12 Modules, with an additional Module 0 that houses the course syllabus, intro video and links to important university policies and resources
- At the beginning of each module, I reinforce the learning objectives and how the module-specific content aligns with the course objectives
- Predictable course design for each module creates a case study, followed by learning materials, a hands-on tutorial using a real-world scenario and a discussion post



The screenshot displays a course navigation interface. At the top, there are two menu items: "Module 0: Start Here" and "Module 1: Exploring GIS - Due Sept 1". Below the menu is a world map with a location pin icon and the text "MODULE 1" overlaid. Underneath the map are two buttons: "Upload / Create" and "Existing Activities". The main content area lists several course sections:

- Module 1: Exploring GIS** (Web Page)
- Case Study**
- Learning Materials**
This section contains content for you to read and/or watch for this module. Refer to your Course Schedule for specific due dates.
- Discussion Board**
- Due**
This section contains links to activities you will complete to meet the learning objectives of this module. Refer to your Course Schedule and/or the items themselves for specific due dates.
- Project**
This section contains content for the ongoing semester project.
The project will be due at the end of the semester, with periodic elements due throughout the semester.

3-2-1 Discussion Post Format

- The OLC workshop “Increasing Interaction and Engagement” provided meaningful examples of how to increase student engagement, including insight into creating AI-proof discussion questions.
- 3-2-1 Format:
 - **3 things you learned:** Share three new insights or pieces of knowledge you gained from this week's materials or activities. How did these concepts expand your previous understanding?
 - **2 real-world applications:** Identify two ways the concepts from this week can be applied in real-world scenarios in your area of interest or otherwise.
 - **1 question you still have:** Pose one question that remains unanswered or that you're curious about after this week's content. How do you think this question applies to your understanding of spatial analysis concepts?

Learner Support

Meet Your Instructor, Dr. Samantha Allen	Web Page	✓
Course Welcome & Introduction	Web Page	✓
Course Learning Objectives	Web Page	✓
Course Information	Web Page	✓
iLearn Navigation Tips & Tricks	Web Page	✓
Netiquette Guide for Online Courses	Web Page	✓
Course Schedule	PDF document	✓
Meet your TA! - Justin Medley	Web Page	✓

- With the help of Mallory & the CITL, I was able to include helpful resources within the Module 0 of Ilearn
- For course specific help, we hosted in-person and virtual online office hours, as well as an ongoing Q&A discussion board




Learner Assessment

- As part of the OLC, we designed our course schedule, going through each item to align it with the course goals and learning objectives
- It was helpful to focus on having a mix of formative and summative assessments to gauge student learning in case I needed to adjust or review content

- **Formative Assessments**

- Discussion Posts
- Questions on Homework
- Proposal and outline for Class Project

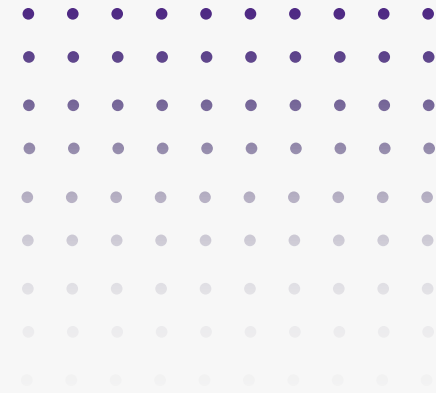
- **Summative Assessments**

- Quizzes
 - Exams
 - Class Project
- 

Rubrics for Assessment

	Excellent	Good	Needs Improvement	Not Present
Content and Insight (12 Points)	Provides thorough analysis with original, insightful ideas; highly relevant and adds substantial value. (6 points)	Offers good analysis with relevant ideas; contributes meaningfully to the discussion. (4 Points)	Minimal analysis; insights are superficial or not well connected. (2 Points)	No relevant content or insight. (0 Points)
Clarity and Organization (3 Points)	Exceptionally clear and well-organized; ideas flow logically with a strong structure. (3 Points)	Generally clear and organized; ideas are mostly logical and structured. (2 Points)	Unclear or poorly organized; ideas are difficult to follow. (1 Point)	Unclear and disorganized; ideas are incoherent. (0 Points)
Engagement with Peers (3 Points)	Actively engages with peers; provides constructive feedback and responds to multiple posts. (3 points)	Engages with peers; provides feedback and responses to some posts. (2 Points)	Limited engagement; minimal feedback or responses. (1 Point)	Minimal or no engagement; lacks feedback or responses. (0 Points)

Technology Use



Fundamentals of Env. Spatial Analysis Vege... Overview Design

10/24/24 - 1/14/25 Filter Report Export Open in Map Viewer

Map labels: W 9th St, Joy Dr, W 8th St, W 7th St, Oakley STEM Center, McCord Hall - Maddux Hall

ntals of Env. Spa...

	Today's date	Tree name	Tree diam
9:07 PM	October 25, 2024	Chinese Elm	21
2:20 PM	October 24, 2024	STEM center parking lot	
2:20 PM	October 24, 2024	SecondTreebackyard	
2:19 PM	October 24, 2024	Ahmad's Tree No. 3	
2:18 PM	October 24, 2024	Medley	
2:17 PM	October 24, 2024	Crepe Myrtle	1

0 of 18 selected



Technology Use

- **Video Note for Announcements and Discussion Posts**

Initial discussion posts are due on Thursdays, and responses are due by Sunday. Major assignments are due on Sunday at midnight CST. Please discuss any necessary accommodations with Dr. Allen. Students may work ahead in the course if there are anticipated absences. For specific due dates, see the Weekly Schedule in Module 0.



Video Note Instructions

Here is the [link](#) for how to record a video note within iLearn. Scroll all the way to the bottom of the Tn Tech webpage for Student Video Presentations for Submitting a Video for a Discussion Topic. For more convenience, I have also listed the simple steps here:

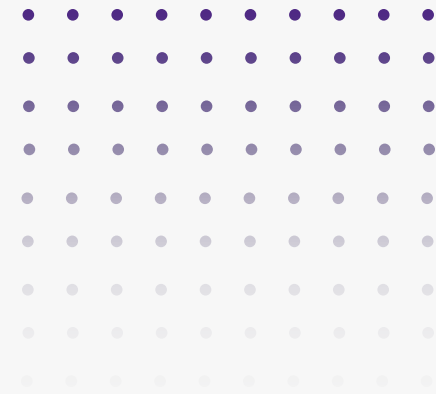
Steps for Recording a Video within iLearn:

- Step 1: Select the Insert Stuff button (see picture below).

Enter a subject

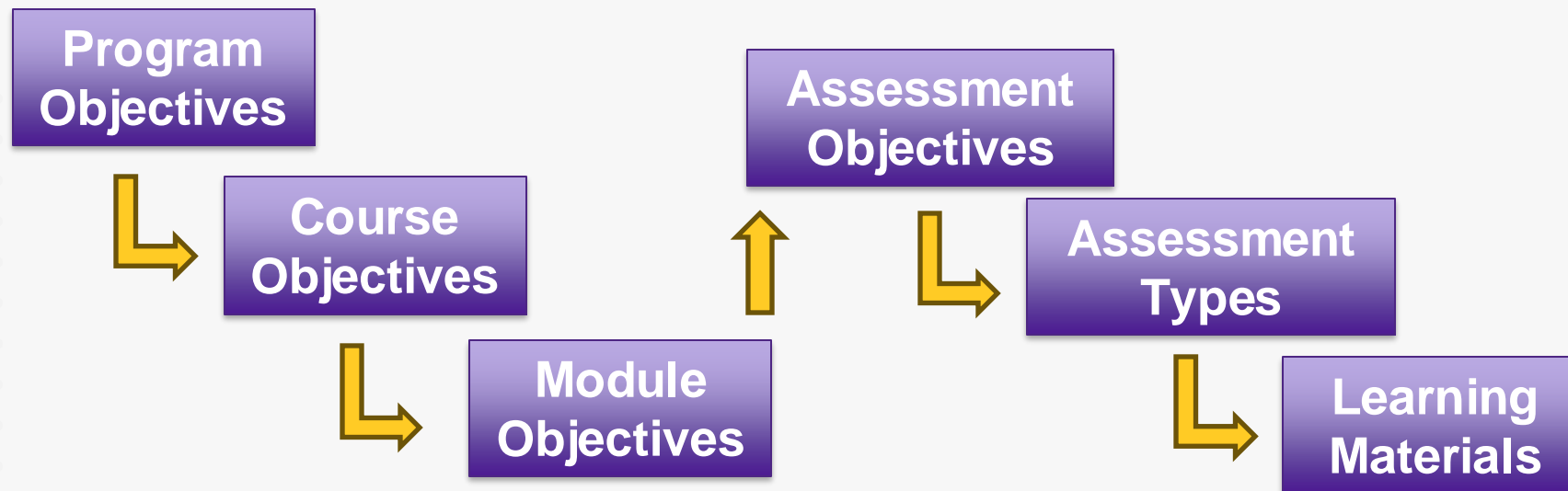
Technology Use

- Video Quizzes
- Integrating YouTube Videos into the ILearn platform
- AI for help with Rubric and Assessment creation
- Integrate Rubrics into the iLearn Platform for increased efficiency in grading
- Recorded in-person technical workshops
- Use of mobile-friendly apps for increased transferability and student access to technology for distance learners

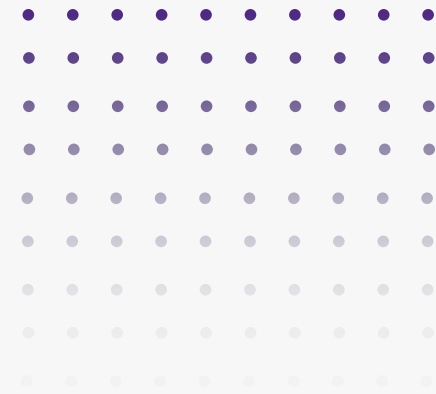


OLC Foundation Course

- Organization is Key!
- The effort to organize your course in a hierarchy is so beneficial



Key Learning Points



- Elective 1 – ***Giving Effective Feedback***
- Often times time is the constraint on giving the feedback we want
 - By having systems in place, we maximize our time and feedback for students
- Elective 2 – ***Increasing Interaction & Engagement***
- Course design, scheduled feedback and questions that encourage meaningful responses increase student engagement
- Elective 3 – ***ADA & Digital Accessibility***
- Accessibility is for all and improves the student and often faculty experience by putting in the work ahead of time.

Thank you!

Samantha Allen, PhD
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Course Facilitator: Dr. Arifa Garman

Course Mentor: Leah Chuchran-Davis

CITL Instructional Designer: Mallory Matthews



**Tennessee
TECH**



Tech Trendsetter Presentation

Dr. Abdul Momin | Assistant Professor
AGET 3520 Agricultural Spatial Technology



Presentation Overview

- Course Navigation
- Instructional Design
- Learner Support
- Learner Assessment
- Technology Use
- Key Learning Points: Foundation Course
- Key Learning Points: Elective Courses

Course Navigation

- The course design is intuitive, with easy-to-follow modules.
- The syllabus provides detailed instructions on navigating the course.
- An introduction message guides students on how to locate course materials.

The screenshot shows a course navigation interface for "AGET-3520-001 - Agricultural Spatial Technology". The top navigation bar includes links for Content, Assignments, Quizzes, Discussions, YuJa Media, Grades, Course Tools, Resources, and Course Management. Below the navigation bar, the course title is displayed. The main content area is divided into three sections: Updates, Course Overview, and Announcements. The Updates section shows "10 New Assignment Submissions". The Course Overview section features a bar chart showing course engagement for the week of Sunday to Friday, with the text "No one has visited this course today." and "No quizzes have been submitted today." The Announcements section displays a "Welcome Announcement" from Abdul Momin, Ph.D., School of Agriculture, welcoming students to the course and providing instructions on how to get started.

Content Assignments Quizzes Discussions YuJa Media Grades Course Tools Resources Course Management

AGET-3520-001 - Agricultural Spatial Technolog

Updates

10 New Assignment Submissions

Course Overview

Su Mo Tu We Th Fr Today

No one has visited this course today.

No quizzes have been submitted today.

Announcements

Welcome Announcement

Welcome Abdul, to AGET 3520: Agricultural Spatial Technology!! I'm excited to have you join this course. To get started, please navigate to [Module 0: Intro](#). This module will guide you through important course information, including the syllabus, expectations, and resources. If you have any questions along the way, don't hesitate to reach out. You can do so by adding to the [Ask a Question](#), [Answer a Question](#) discussion post, or by sending me an email. Looking forward to a great semester!

Abdul Momin, Ph.D.
School of Agriculture

Class Engagement

Instructional Design

- Use multiple activities to encourage interaction (e.g., quizzes, discussion boards, assignments).
- Activities align with learning objectives to ensure deeper understanding.
- Regular feedback is provided to keep students engaged and on track.

AGET-3520-001 - Agricultural Spatial T...

Content **Assignments** Quizzes Discussions YuJa Media Grades Course Tools Resources Course Management

Assignments

New Assignment Edit Categories More Actions

Bulk Edit

<input type="checkbox"/>	Assignment	New Submissions	Completed	Evaluated	Feedback Published
	No Category				
<input type="checkbox"/>	Homework-1 Due on Sep 10, 2024 11:59 PM		13/13	13/13	13/13
<input type="checkbox"/>	Homework 2 Due on Sep 24, 2024 11:59 PM				

Content Assignments Quizzes Discussions YuJa Media Grades Course Tools Resources Course Mana

Discussions

Discussions List Subscriptions Group and Section Restrictions Statistics

New More Actions

Filter by: Unread Unapproved

Exploring Real-World Applications of Technology

Topic	Threads	Posts	Last Post
Exploring Real-World Applications of Technology Consider a technology we've discussed in class, such as GPS systems in precision agriculture. How do you see this technology impacting real-world agricultural practices? Are there any innovative or unexpected ways it could address current challenges in agriculture or even in another industry?	0	0	

Learner Support

- Provide clear directions for accessing institutional resources.
- Course-specific support e.g., office hours, Q&A forums, and instructional videos.
- Contact details for quick support are prominently displayed.

The screenshot shows a web interface for a course syllabus. On the left is a navigation sidebar with a search bar and menu items: Course Syllabus, Bookmarks, Course Schedule, and Table of Contents. The Table of Contents lists modules with page numbers: Module 0: Intro (15), Module 1: Precision Agriculture Overview (7), Module 2: Introduction to GPS and GPS Fundamentals (17), and Module 3: Introduction to GIS Fundamentals and Exploring GIS (3). The main content area is titled 'Course Syllabus' and includes a welcome message, a file upload area, and a document viewer. The document viewer displays the following text:

Tennessee Tech University
School of Agriculture
AGET 3520-Agricultural Spatial Technology I
3 Credit Hours, Fall 2024

Instructor Information
Abdul Momin, Ph.D.
Oakley Hall, Room 136
Telephone Number: 931-372-3134
Cell: 217-904-4179
E-Mail: momin@tntech.edu
Instructor profile directory: <https://www.tntech.edu/directory/cabe/ag-faculty-staff/abdul-momin.php>

Lectures: MW 11:00 AM – 12:50 PM, OKLY 202
Office Hours: TR, 11: AM – 1:00 PM, Available by appointment; Open door policy

Course Description: This introductory course will give the student the necessary knowledge and understanding of principles and applications of geospatial technologies supporting precision agriculture/farming and planning for natural resource data management. The topics to be covered are global positioning systems (GPS), geographic information systems (GIS), remote sensing (RS), yield monitoring and mapping, internet information access, and computer software (QGIS) for management decisions.

Course Goals: The student will demonstrate how to use the information and geospatial technologies that are used for precision agriculture and its applications. They will collect spatial data, and integrate them into a GIS project using state-of-the-art technology. Students will demonstrate depth in a specialty area to support their professional goals.

Student Learning Objectives (LO): At the end of the course students should be able to

1. explain precision agriculture: Describe what precision agriculture is and articulate its importance in modern farming practices.
2. explain the basic principles and applications of GPS in precision agriculture.
3. use GIS software and demonstrate proficiency with QGIS, an open-source desktop GIS software.
4. apply the basics of project design using GIS datasets and QGIS, effectively integrating spatial data.
5. evaluate and analyze yield monitoring and mapping systems, remote sensing, variable rate technology, and their applications in precision agriculture

Course Prerequisites: Junior in good standing

Learner Assessment

- Multiple assessments (quizzes, projects, presentations) cater to different learning styles.
- Assessments are directly linked to course objectives, ensuring skill mastery.
- Opportunities for both formative (e.g., lecture reviews, in-class-exercise, group problem-solving) and summative (e.g., exams, final projects) assessment.

Back to Manage Quizzes Quiz - 1

Quiz Title *
Quiz - 1

Grade Out Of 20 points | In Grade Book | Due Date 9/24/2024 11:45 AM

Description
Point values for each question are indicated in parentheses. The entire quiz has 20 points. Circle the one best answer for multiple-choice questions unless otherwise instructed.

Questions

Add Existing Create New

Select All

1 Which is not considered as a precision agriculture tool? Multiple Choice

2 Which of the following maps allow farmers to see the landscape of their fi... Multiple Choice

In Class Exercise (ICE): 4 - GPS Signal Structures

Name:

Practice 1. a) Fill in the blanks for each section of the NAV Message.

12.5 minutes

Frame 1 ... Frame i ... Frame 25 Navigation Message

30 sec Total bits =

Sub-frame 1 ... Sub-frame j ... Sub-frame 5 Frame

6 sec Total bits =

Word 1 ... Word k ... Word 10 Sub-frame

0.6 sec Total bits =

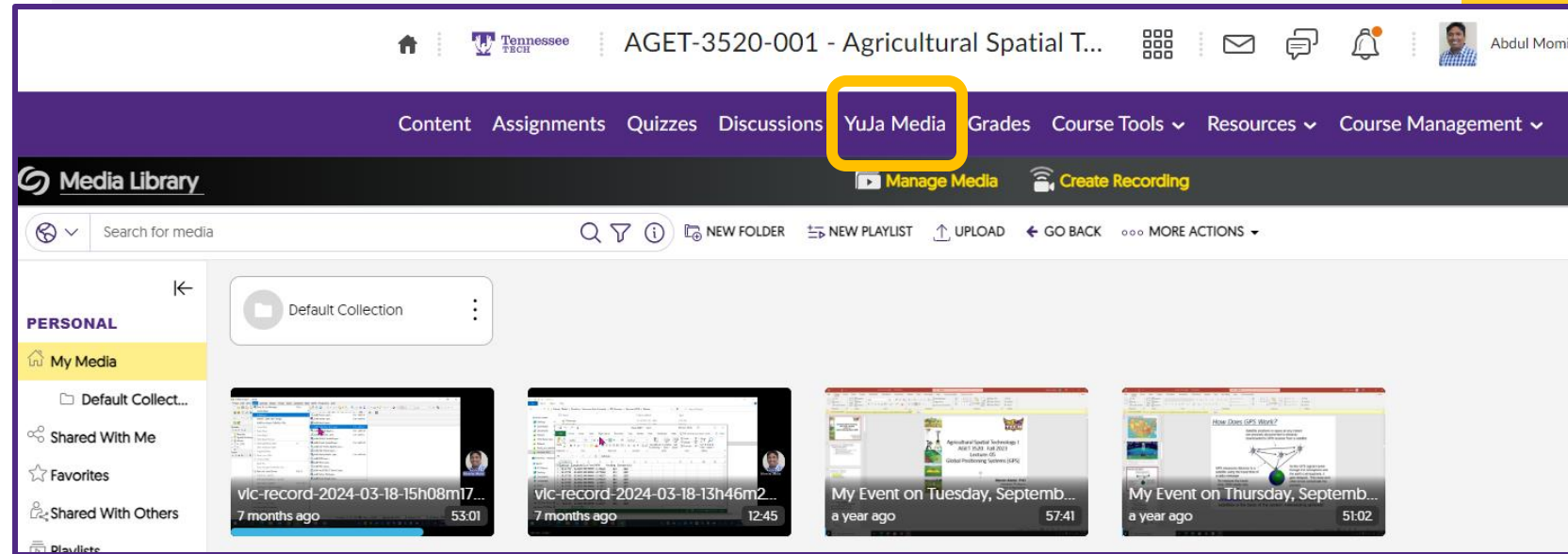
bit 1 ... bit 30 Word

Total bits =

b) Verify the entire NAV message transmitted at a rate of 50 bits per second.

Technology Use

- Use of iLearn for content management, announcements, communications, quizzes, exams, and grading.
- YuJa for lecture capture and video quizzes to increase engagement.
- GIS software and GPS tools support hands-on learning.



Key Learning Points: OLC Foundation Course

- Basic Course Materials
- Clear Course Objectives
- Organized Structure
- Interactive Activities

Key Learning Points: OLC Foundation Course



● **Basic Course Materials**

- Syllabus provided in multiple formats for easy access and clarity.
- Course Design Plan outlining objectives, lessons, assignments, and activities.

● **Clear Course Objectives**

- Course objectives are clearly stated and guide lesson planning and activities.
- Ensures alignment and helps maintain focus on learning outcomes.

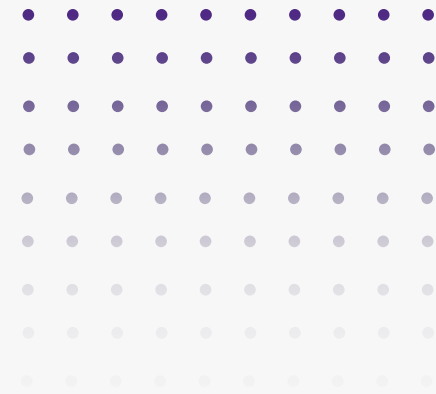
● **Organized Structure**

- Breaking down complex topics into manageable sections made it easier to stay on track.
- Modular format supports focused learning and progression.

● **Interactive Activities**

- Engaging activities, such as quizzes, discussions, and group projects, encourage active participation and enhance understanding.

Key Learning Points: Elective Courses



- **Elective 1** – Americans with Disabilities Act (ADA) and Digital Accessibility
- **Key Learning Points**
 - Understanding ADA Compliance
 - Types of accommodations needed for different visible and non-visible disabilities
 - Content must be accessible to all students, regardless of ability.

- **Elective 2** – Applying Quality Rubrics to Courses and Programs
- **Key Learning Points**
 - Understanding Quality Rubrics
 - Apply rubrics to learning modules and courses
 - Continuous improvement through feedback-based updates.

- **Elective 3** – AI-Powered Course Design
- **Key Learning Points**
 - Understanding GenAI
 - Application of GenAI tools to course building tasks and increase productivity
 - For instance, used HyperWrite to create draft syllabus

Key Learning Points: Applying Quality Rubrics



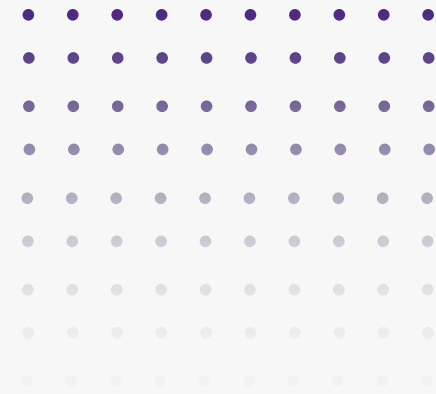
Scoring Rubric for AGET 3540 Oral Presentations

Evaluator:

Group:

Title: <i>Using Drone Tech and QGIS for Vegetation Analysis</i>		Scoring Criteria						Score	Total Points
Category		0	1	2	3	4	5		
Time (2.5 pts)								2.5	
Organization (1.5 points)	The type of presentation is appropriate for the topic and audience.							1.5	1.3
	Information is presented in a logical sequence.							1.5	
	Presentation appropriately cites required number of references (min 1).							2.3	
Organization Total								1.3	
Content (2.5 points)	Introduction is attention-getting; establishes a framework for presentation.							1.5	2.2
	Technical terms are well-defined in language appropriate for the audience.							.2	
	Material included is relevant to the overall message/purpose.							.5	
	Appropriate amount of material; points made reflect the relative importance to the chosen topic.							.5	
	There is an obvious conclusion summarizing the presentation.							.5	
Content Total								2.2	
Delivery (2.5 points)	Maintains good eye contact with audience							1.5	
	Speaker uses a clear, audible voice.							1.5	
	Delivery is poised, controlled, and smooth. You can tell they practiced.							1.5	
	Good language skills and pronunciation are used.							1.5	
	Visual aids are well prepared, informative, effective, and not distracting.							1.5	
Delivery Total								2.5	
Overall Impression (1 pts)	Comments: <i>very good.</i>							1	
Total Points								9.5	

Reflections



- Overall, **a great learning experience!**
- Initially had limited teaching experience, but now feel more confident in delivering **interactive lessons**.
- Developed a stronger understanding of **engaging classroom strategies**, both online and in-person.
- **Next steps:** Apply and integrate OLC principles into current teaching practices. For instance, use GenAI to analyze student feedback and improve future assessments.



Acknowledgement



**CITL: Instructional Designers
&
Supporting Staff**

Thank you!



Dr. Abdul Momin
Assistant Professor
momin@tntech.edu



**Tennessee
TECH**



Photo courtesy: [TN Tech News](#)



Final OLC Presentation

Nursing Research 4300

Agenda

- **Course Elements**
 - **Navigation**
 - **Design**
 - **Learner Support**
 - **Technology Use**
- **Key Learning Points**
 - **Foundations Course**
 - **Electives**
- **Reflections**



1.

Course Elements

I included several design elements related to the foundations course and the OLC rubric.

Navigation: Course Homepage

Announcements direct newer learners to where to begin; modules are along the left side for quick access.

Welcome & Getting Started ▾



Welcome **Shelia**, to NURS 4300-500, Research in Health Care! I'm thrilled to have you join this exciting learning journey. To get started, be sure to do the following. Navigate to [Module 0: Start Here](#). This module will guide you through important course information, including the syllabus, expectations, and resources.

If you have any questions along the way, don't hesitate to reach out. You can do so by adding to the [Ask a Question](#), [Answer a Question](#) discussion post, or by sending me an email. Please check the [Netiquette Guide for Online Courses](#) for online communication expectations. Let's embark on this adventure together and make the most of our time together in this engaging online learning experience!

Dr. Hurley
School of Nursing



Course Learning Objectives

The learning objectives in this course are aligned with the larger Nursing program objectives. See their relationships below.

Navigation: Module Design

With two clicks, students are at the module home page with the module's learning requirements and activities.

Program Objective	Course Objective
Provides professional nursing care which includes health teaching and health promotion to individuals, families, groups and communities throughout the lifespan, along continuum of health, illness, and/or disability within various organizational systems or multiple health care settings.	Identifies current nursing research relevant to individuals, families, groups and communities throughout the lifespan, along continuum of health, illness, and/or disability within various organizational systems or multiple health care settings.
Designs professional nursing practice based on knowledge and theories from natural and social sciences, liberal arts, and nursing.	Explores theoretical frameworks and research from the behavioral sciences that provide support to research in nursing.
Utilizes clinical judgement and the nursing process to care for individuals throughout the life-span along a continuum of health, illness and disability in various settings.	Recognizes the role of the research process within the nursing process in developing nursing care.
Demonstrates quality nursing practice based on professional values, incorporating ethical, moral and diversity and economic climate influences	Demonstrates individual responsibility by legal standards, human to group processes.
Assumes responsibility and accountability for the professional practice of nursing through critical thinking, clinical judgement, therapeutic nursing intervention and communication utilizing information and health care technologies.	Demonstrates principles of leadership in group tasks, and in initiative and development of an evidence based intervention project.

Design: Addition of Perusall to engage students

Perusall® > NURS-4300-500 - Research in Health Care > Assignments Created from Desire2learn (LTI 1.3)

NURS-4300-50... X

- ← My Courses
- 🏠 Course home
- ⚙️ Settings
- 📄 Export data
- 👁️ Student view
- 📧 Notifications
- 📝 Notes
- ⚠️ Audit 2
- 📅 Add to my calendar

Content

Library >

Assignments >

Chats ?

Groups +

- 📢 Announcements
- 🗣️ General discussion

One-on-One +

Hashtags ? +

- #connection
- #definition
- #important
- #keypoint

🏠 Get started 📖 Library **📅 Assignments** 👤 Students

+ Add assignment

Hide old assignments

Due Wed Jan 22, 2025 11:59 pm CST

☰ Introduction to Perusall (Practice Assignment)

Due Sun Feb 16, 2025 11:59 pm CST

☰ ● Quantitative Article

Due Sun Mar 9, 2025 11:59 pm CDT

☰ ● Qualitative Discussion

Due Sun Apr 20, 2025 11:59 pm CDT

☰ ● Literature Table 🔗

🗑️ Deleted assignments

Learner Support

Technical and other support information and links is included in the campus template.

The screenshot displays a course management interface. At the top left is the Tennessee Tech University logo, which includes the text "TENNESSEE TECH" and "WHITSON-HESTER SCHOOL OF NURSING" around a central emblem. To the right of the logo, the text "Module 0" is prominently displayed in white on a dark purple background, with "Start Here" written below it. Below the header, there are three main buttons: "Upload / Create" (blue), "Existing Activities" (light blue), and "Bulk Edit" (light blue). To the right of these buttons are the options "Expand All" and "Collapse All". The main content area is a white box with a light blue border. It features a section titled "Course & Instructor Information" with a dropdown arrow. Below this title, there is a paragraph of text: "Here is some information about your course and your instructor. Notice also that the link to the printable syllabus is on the top left of your screen." Underneath the text are two buttons: "Upload / Create" (blue) and "Existing Activities" (light blue). Below these buttons, there is another section titled "Course Welcome & Introduction" with a dropdown arrow and a checkmark icon to its right. Underneath this title, there is a "Web Page" entry with a globe icon.

Learner Assessment

Multiple assessment activities relevant to objectives.

Content	Percentage of Total Grade
Quizzes	25%
Literature Resource Table	15%
Article Assignments	20%
Citi Training Assignment	5%
IRB Assignment	5%
Peer Critique	5%
Final Poster Presentation	20%
*Attendance/Discussion Board	5%
TOTAL	100%

* Attendance/Discussion Board is measured by initial posting of a

Technology Use

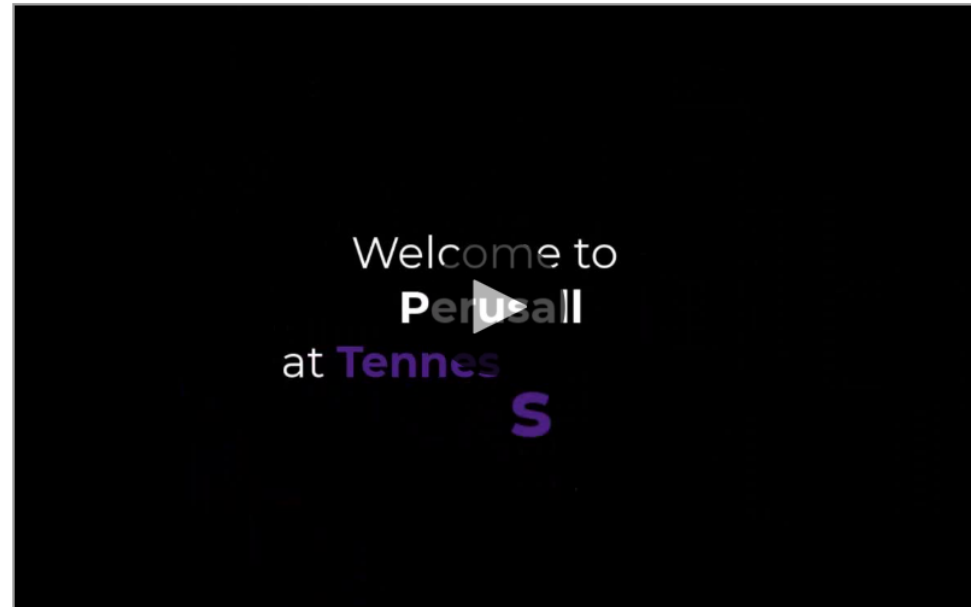
Announcements ▾

Video: Introduction to Perusall for Nursing Students



Hello, **Shelia**,

This semester we will be using a social learning tool called "Perusall." To watch an introduction to Perusall for nursing students at Tennessee Tech, click below.





2.

Key Learning Points

I took the foundations course and three electives.



Foundations Course

- Accessibility - improve by having more variety in teaching.
- Objectives- clearly link to assignment indicating how the student is achieving the objectives.
- Course Content- provide more video instruction and options for live sessions.

Electives

ADA and Digital Accessibility

- Offer multiple means of engagement (interactive content, discussion forums).
- Provide multiple means of representation (text, audio, video with captions).

Facilitating Online Group

- Importance of aligning group activities with course learning objectives.
- Strategies for structuring group work to maximize engagement and outcomes.
- Designing collaborative projects that are meaningful and achievable in an online environment.

Increasing Interaction & Engagement

- Designing activities that promote active learning (e.g., problem-based learning, case studies, interactive discussions).
- Creating opportunities for student-generated content and peer collaboration.
- Writing engaging discussion prompts that promote critical thinking.





Reflections

Is more technology better?

3.

Student Resistance

- **New Tool Learning Curve** – Students unfamiliar with Perusall may struggle with its features.
- **Preference for Traditional Discussions** – Some students may prefer discussion boards or face-to-face engagement.

Addition of Peer Review Assignment

- **Active Learning:** Engaging with peers encourages students to articulate their understanding, leading to deeper cognitive processing.
- **Diverse Perspectives:** Exposure to different viewpoints broadens students' comprehension of research methods and ethics.
- **Critical Thinking & Reflection:** Evaluating peer contributions fosters analytical skills and ethical reasoning.

Thank you!

Any questions?

You can find me at
shurley@tntech.edu

