Spring 2025 - ITE 501 and ITE 505 Capstone Presentations Monday April 28, 2025

Room: Meier Hall 210

Time Schedule for Today: 10:00 am - 1:20 pm

<u>ITE 501</u>

1.	10:00 AM - 10:15 AM	Drew Anderson		
2.	10:15 AM - 10:30 AM	Elny Cruz		
3.	10:30 AM - 10:45 AM	Keith Healy		
4.	10:45 AM - 11:00 AM	MaryJane Quinn		
<u>ITE 505</u>				
5.	11:00 AM - 11:20 AM	Marlene Leon		
6.	11:20 AM - 11:40 AM	Michael OLeary		
7.	11:40 AM - 12:00 PM	Nicholas Hahn		

Lunch Break 12:00 to 1:00pm

- 8. 1:00 PM 1:20 PM
- Andrew Wojtas

ITE 501 – Capstone Proposal

Time/Presenter/	Project Title and Description
Advisor	
10:00 am – 10:15 am	Automated Windows Image Creation, Deployment, and Testing with Optional Cloud Integration
Drew Anderson (Dr. Lakshmi Sree)	This project focuses on automating the creation, deployment, and validation of standardized Windows images for enterprise environments. It includes building a reference image, capturing it using tools like Sysprep, DISM, or MDT, and deploying it via PXE boot or Windows Deployment Services (WDS). The solution supports optional cloud-based deployment using platforms like Microsoft Azure or AWS EC2 to simulate scalable enterprise environments. Automated testing verifies domain join, network connectivity, and software readiness across both local and cloud-based scenarios.
10:15 am – 10:30 am	ParkSync: Revolutionizing Parking with Smart Technology
Elny Cruz (Dr. Ihab Agha)	Introducing ParkSync—a cutting-edge parking management solution that transforms the parking experiences. By assigning unique QR codes to each parking spot, ParkSync enables users to effortlessly check availability via mobile or web applications. Simultaneously, staff can utilize license plate recognition technology to monitor vehicle entry and exit, ensuring secure and streamlined operations. This system supports real-time parking space management, role-based user access, and data-driven insights, aiming to reduce congestion and improve the overall parking experience. Embrace the future of parking with ParkSync—where convenience meets efficiency
10:30 am – 10:45am	Waste Management Website with Optional Mobile Application
Keith Healy (Dr. Lakshmi Sree)	This project involves developing a web-based waste management system for efficient scheduling, tracking, and reporting of waste collection services. The platform enables administrators to manage bins, vehicles, routes, and service requests. An optional mobile application allows residents to view pickup schedules, receive notifications, report issues, and access recycling tips, promoting better waste disposal practices and community involvement.

10:45 am – 11:00 am	Smart Justice: Leveraging Relational Databases to Curb Recidivism in Drug Treatment Courts
MaryJane Quinn	Smart Justice: Leveraging Relational Databases to Curb Recidivism in Drug Treatment Courts explores how the implementation of relational database systems can improve decision-making, resource
(Dr. Ihab Agha)	allocation, and case tracking within drug treatment court programs. This research study focuses on designing a database framework that supports the collection, management, and analysis of participant data to identify patterns, monitor progress, and enhance treatment outcomes. By integrating technology into the justice system, the capstone aims to demonstrate how smart data solutions can reduce repeat offenses, support rehabilitation, and promote long-term public safety.

ITE 505 – Capstone Project

Time/Presenter/ Advisor	Project Title and Description	
11:00 am – 11: 20 am	TaskMaster: Personal Task and Project Management Web App	
Marlene Leon	TaskMaster is a web-based application designed to help users efficiently organize, prioritize, and track their daily tasks and projects. The platform	
(Dr. Lakshmi Sree)	enables users to create, edit, and delete tasks, set deadlines, assign priority levels, and mark tasks as completed. Users can categorize tasks into different projects, receive timely notifications for upcoming deadlines, and stay on top of their responsibilities with ease. TaskMaster aims to enhance productivity by providing a seamless, intuitive experience for managing personal and professional tasks.	
	Salem Events Hub: Discover Local Happenings	
11:20 am – 11: 40 am	The Salem Events Hub is an intuitive website designed to streamline the	
Michael OLeary	discovery of events hosted at Salem State University and throughout the Salem area. With a user-friendly interface, the platform allows students,	
(Dr. Lakshmi Sree)	faculty, staff, and the public to easily explore upcoming activities such as concerts, sports events, cultural festivals, club meetings, and more, all in one convenient location.	

11:40 am – 12:00 pm Nicholas Hahn (Dr. Lakshmi Sree)	Developing a Video Game with GODOT Engine This project involves the creation of a fully functional video game prototype using the GODOT game engine and its built-in GDScript programming language. It highlights the challenges of designing intricate file structures, integrating assets and code, and implementing complex algorithms that work seamlessly to immerse players in the game world. The goal is to showcase a feature-complete demo of my original game, which I plan to fully develop after college. This project reflects my experience in solo game development, offering a glimpse into the process of building a compelling and interactive game environment.				
Awards: 12:00 PM - 12:15 PM, Room MH 210 Lunch Break 12:15 PM - 1:00 PM, Room MH 207					
1:00 pm – 1: 20 pm Andrew Wojtas (Dr. Ihab Agha)	Power to the User: Hosting and Building OpenFinder.xyz with no- cost tools. This project involved creating an entire website from scratch using HTML, CSS, and JavaScript. In a world full of subscriptions and anti- consumer business models, the need for high-quality, easy-to- understand information about alternatives is more important than ever. The website, called OpenFinder, was created to help the average person—especially those who may not be very technical—learn about free and open-source software, or make better use of inexpensive hardware they may already own. True to the mission of the website, a major component of this project was building a server to host it using entirely no-cost software.				