COURSE SYLLABUS

Computer Information Systems

Course code: CIS 161/1
Semester and year: Spring 2026
Day and time: Wednesday, 11:15am-2:00pm
Instructor: Jeff Medeiros, MBA
Instructor contact: jeff.medeiros@aauni.edu
Consultation hours: Before class by appointment

Credits US/ECTS	3/6	**Level**	Bachelor
Length	15 weeks	**Pre-requisite**	None
Contact hours	42 hours	**Grading**	Letter grade

1. Course Description

The course introduces students to the practical use of computer information systems in everyday academic, professional, and personal contexts. Emphasis is placed on how digital tools and basic information systems support organization, research, communication, and decision-making across disciplines. The course explores topics such as digital productivity, data interpretation, responsible internet behavior, online safety, and AI-assisted learning. Students engage in hands-on activities, discussions, and group work using real tools and case-based examples. No prior technical knowledge is required, making the course accessible to students from all study backgrounds.

2. Student Learning Outcomes

Upon completion of this course, students should be able to:

- Describe the core components of contemporary information systems – including basic hardware, software, cloud services, and networks – and explain how they support everyday academic tasks.
- Select and apply appropriate digital productivity and collaboration tools to organize work, manage study projects, and work effectively in teams.
- Collect, format, and analyze small datasets in spreadsheet software, and interpret resulting tables, charts, or dashboards to inform simple decisions.
- Formulate clear prompts and ethically employ generative AI tools to enhance learning, research, and writing, while documenting AI contributions and limitations.
- Identify common cybersecurity threats, implement basic protective measures, and manage personal digital identity and online footprint responsibly.
- Plan, create, and deliver a concise, visually supported presentation – individually or in a small group – using online slide or white-board platforms to communicate structured ideas to an academic audience.

General Education Learning Outcomes

This is a general education course. Your general education core curriculum enables you to learn and practice the basics about the use of information systems that will become the foundation for learning and achieving success in your academic major.

3. Reading Material

Required Materials

- All materials can be accessed via NEO:
    - Overview of Information Systems (Rainer & Prince, 2023)
    - *Cybersecurity Essentials*, 2nd Edition by Charles J. Brooks, Christopher Grow, Philip Craig, & Donald Short (Wiley, 2022)
    - Articles or additional materials provided in class and/or on NEO

Recommended Materials

- Recommendations will be provided during the semester via NEO as the aim is to cover the latest innovations in the Information Technology world.

4. Teaching methodology

Each class includes a short lecture, open discussions, and hands-on exercises using real tools or examples. Students work individually and in groups to apply what they learn in a clear and useful way. Active participation is expected throughout. The course includes individual tasks and a group presentation to support learning and practical understanding.

5. Course Schedule

Date	Online Coursework/ Assignment Due
Lesson 1 Feb 4	**Topic: Course introduction and academic expectations; Introduction to Information Systems; Introductory discussion with topic "using technology to succeed"** **Description:** We will walk through the syllabus and introduce the topics of this course along with the academic expectations for both students and professor. We will have a presentation about information systems concepts and an open discussion about the use of information systems **Assignments/deadlines:** Verification of the login credentials and ability to upload assignments on NEO **Due before class meeting:** Syllabus review
Lesson 2 Feb 11	**Topic: Computer and information systems concepts and evolution** **Description:** We will explore how selected digital tools—such as Notion, Google Workspace, Trello, and Evernote - can help with managing notes, assignments, group tasks, and deadlines. The focus will be on showing practical examples and guided use cases relevant to university life and personal productivity **Reading:** Overview of Information Systems (Rainer & Prince, 2023) **Assignments/Deadlines:** Provide two everyday examples of systems you use and describe what they help you
Lesson 3 Feb 18	**Topic: Tools That Help You Study and Stay Organized** **Description:** We will talk about different types of information systems we use in daily life - from those that manage information and support learning to tools that help with communication and collaboration. Then we will explain how cloud-based systems work and try out tools like Notion, Google Docs, and Trello to see how they help you stay organized. This session will also include introduction to AI and AI tools.

	Reading: Information Systems in Organizations (Rainer & Prince, 2023); and shared demos of practical tools **Assignments/Deadlines:** Try at least one of the tools introduced in class and write a short reflection (due before next session)
Week 4 Feb 25	**Topic: Basics of Data and Visual Information, Introduction to Spreadsheet Software** **Description:** We will explain what we mean by data, how we use it in different situations, and why it matters. Then we will look at how data is shown in different formats like charts, dashboards, maps, or lists. As part of this, we'll also introduce basic spreadsheet tools like Excel to see how they help us organize, format, and work with information in a clear and structured way. We will focus on what makes visual information useful and where it can be unclear or misleading. **Assignments/Deadlines:** Group work: compare and discuss real-life examples of visual data (infographics, app dashboards, graphs, or similar)
Lesson 5 March 4	**Topic: Introducing AI: Using Smart Tools to Get Help with Tasks** **Description:** We will introduce the basics of AI tools and show how they can be used to support different types of tasks. Focus will be on how to ask clear and useful questions or prompts. We'll test some examples directly in class and compare how the answers change based on how the prompt is written. **Reading:** Selected short reading on prompt design (PDF on NEO) **Assignments/deadlines:** Try at least two AI tools (e.g., ChatGPT, Copilot, or similar) and bring one example of a good and bad prompt for discussion next class
Lesson 6 March 11	**Topic: Getting Help from AI for Research and Writing** **Description:** We will explore how AI tools can help with everyday academic tasks like summarizing long texts, finding structure in an idea, or getting explanations. Focus will be on examples that show how to use these tools without over-relying on them. We will have an introduction to semester project requirements **Assignments/deadlines:** We will have an introduction to semester project requirements. Write a short paragraph using AI to help rephrase or organize your ideas. Bring both the AI version and your original version to discuss in class next week
Lesson 7 March 18	**Topic: AI and Digital Content: From Chatbots to Deepfakes** **Description:** We will talk about how AI-generated content is created—from smart assistants and writing tools to deepfakes and manipulated visuals. We will look at how this content is generated, how to identify it, and how it affects our perception and trust online. The lesson will also briefly touch on the evolution of AI content and how it's changing the digital space. **Reading:** https://www.cyberark.com/resources/blog/deepfake-news-the-impact-of-ai-and-synthetic-media-on-trust-identity-and-democracy **Assignments/deadlines:** Try out one AI-generated tool (text, image, or voice). Bring a sample to class and reflect briefly on how you knew it was AI-generated (or not).
Session 8 March 25	**Topic:** Mid-term exam **Description:** Mid-Term test covering the lectures from previous weeks **Reading:** **Assignments/deadlines:**

April 1	**Mid-term break**
Lesson 9 April 8	**Topic: Staying Safe Online and Managing Your Digital Identity** **Description:** We will talk about what it means to stay safe online—from avoiding scams, phishing, and weak passwords to understanding what happens to the data we leave behind. The session will cover concepts like digital footprints, personalization, cookies, and data trails—what they are, how they work, and how they shape our online identity. We will also discuss practical ways to manage your digital behavior and protect your privacy. **Reading:** Chapters 1 & 2 from *Cybersecurity Essentials* (Brooks, Grow, Craig & Short, 2nd Edition, Wiley, 2022) – "What is Cybersecurity?" and "Cyber Threat Landscape" and Selected excerpts from Digital Literacy Unpacked (Reedy & Parker, 2018), Ch. 5: "Managing digital identity" (PDF will be provided) **Assignments/deadlines:** Come prepared with one example of a scam, fraud, or security breach you've heard of or experienced
Lesson 10 April 15	**Topic: Spreadsheet applications - Working with Formulas and Useful Functions** **Description:** We will work with spreadsheet software to explore how formulas and functions can help us organize and make sense of data. The session will cover how to format cells, clean up simple datasets, and apply functions like basic math, logic (like IF), and lookups. Focus will be on how these tools help you organize data and find useful answers. **Reading:** Spreadsheet practice task (details in class) **Assignments/deadlines:** None
Lesson 11 April 22	**Topic: Spreadsheet applications - Practical Exercises and Real-World Scenarios** **Description:** This session will be focused on practice. You'll work through real-life examples using spreadsheets - cleaning data, using logical and lookup functions, sorting, filtering, and creating basic summaries. The goal is to build fluency and apply what we covered last week. You'll get direct feedback and tips during the class. **Reading:** Complete the in-class Excel tasks and submit your file by the end of the week **Assignments/deadlines:** None
Week 12 April 29	**Topic: Using Online Tools to Develop and Present Ideas** **Description:** We will look at how different platforms - like whiteboards, slides, and visual organizers - can be used to brainstorm, structure, and communicate an idea. The focus will be on how we go from the first thought to something that can be presented to others. We'll test out a few tools, compare their strengths, and work on outlining one idea from scratch. **Reading:** Presentation Zen" excerpts by Garr Reynolds — professional, simple, visual (https://www.presentationzen.com/) **Assignments/deadlines:** Come to class with one idea (product, campaign, problem) and be ready to brainstorm how to present it using slides or diagrams.
Lesson 13 May 6	**Topic: Semester project completion and presentation** **Description:** We will have a presentation of the semester project where each group will present their work **Assignments/deadlines:** Semester project presentation and submission of Individual research project **Due before class meeting:** Upload of the semester project document (Word document) and presentation on NEO

Lesson 14 May 13	**Topic: Final Exam** **Description:** The final exam will be multiple choice questions covering the whole semester (Peer review of Team Presentations). **Reading:** Review course materials **Assignments/deadlines:** Final Exam

6. Course Requirements and Assessment (with estimated workload)

Assignment	Workload (average)	Weight in Final Grade	Evaluated Course Specific Learning Outcomes	Evaluated Institutional Learning Outcomes*
Attendance and participation	25	10%	Students are expected to be in class, participate and submit in class work.	3
In class activities and homework	25	10%	Working in teams or individually on the topics assigned in class.	2
AI-reflection workbook assignment	25	10%	Working individually to document AI work and prompts used during the semester	
Test covering class lessons before midterm (Test 1)	25	20%	Written test based on a topic from week 1 to week 7	1,2
Semester project delivery and presentation	25	20%	The student is able to write a paper presenting a given topic in a consistent way and to deliver a presentation based on the written paper and topic, in a concise and precise way.	1,2,3
Final Test	25	30%	Written test based on topics covered during lessons	1,3
TOTAL	**150**	**100%**		

*1 = Critical Thinking; 2 = Effective Communication; 3 = Effective and Responsible Action

7. General Requirements and School Policies

General requirements

All coursework is governed by AAU's academic rules. Students are expected to be familiar with the academic rules in the Academic Codex and Student Handbook and to maintain the highest standards of honesty and academic integrity in their work. Please see the AAU intranet for a summary of key policies regarding coursework.

Course specific requirements

There are no special requirements or deviations from AAU policies for this course.