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DIG 2005 Introduction to Digital Technology
Spring 2026

Course Meetings Tuesdays 11:45 AM – 1:40 PM, Thursdays 12:50 PM – 1:40 PM NRG 0205
Course Modality: Face-to-Face (F2F) Live

Course Description

Comprehensive introduction to fundamental digital technologies and computing concepts; covers history of computing, binary arithmetic, Boolean logic, file formats, computer architecture, databases, networking, security/privacy, and ethics.

Course Prerequisites

N/A

Course Objectives and/or Goals:

By the end of this course, students will be able to:

- Compare and contrast analog and digital systems
- Describe components and functions of digital hardware and software
- Demonstrate fluency in digital technology concepts and terms
- Analyze the components and functions of consumer electronics
- Demonstrate understanding of current technology trends including AI, Blockchain, AR/VR/MR, and IOT

Materials & Books

The course does not require you to purchase any textbook. The Office 365 ProPlus Software needed for this course is available to UF students through UFIT or other licensed commercial services. The exact version depends on which computer platform you use: (1) For MAC: Microsoft 365 Subscription for macOS (including WORD and PowerPoint 2019 version 16.19 and later) OR their equivalent Apple tools (Pages and Keynote). (2) For WINDOWS: Microsoft 365 Subscription (including WORD and PowerPoint 2019). Students will also need the capability to make documents in the .PDF file format. This can be done with Adobe Acrobat (information on student licenses also at UFIT on https://info.apps.ufl.edu/adobeatufapps/) or other readily-available software.

Course Schedule

This schedule is only a guide and is subject to change. Unless otherwise indicated, assignments and readings are due the day they are listed on the syllabus, not the following day.

Week	Subject	Assignment Quizzes	Assignments Due
0	**Introduction and Overview**	Quiz 0: Syllabus	
1	**Analog and Digital Systems**	Quiz 1 • Assignment 01 Given: **Earliest Technologies**	
2	**By the Numbers**	**Quiz 2**	**3 •** **Assignment 01 DUE**
3	**Hardware, Software, and Firmware**	**Quiz 3**	
4	**Sound, Images, & Consumer Electronics**	Quiz 4 • Assignment 02 Given: **Design your Own**	
5	**Databases**	Quiz 5	**6 •** **Assignment 02 DUE**
6	**Network Matters: Connections & Protocols**	Quiz 6	
7	**BIG DATA: Concepts and Applications**	Quiz 7: Midterm **(all topics covered in modules 1-7)**	
8	**Virtual, Augmented, and Mixed Realities**	Quiz 8	
9	**Introduction to Artificial Intelligence**	Quiz 9 • Assignment 03 Given: **The Singularity**	
10	**The Internet of Things (IOT)**	Quiz 10	**11 •** **Assignment 03 DUE**
11	**Intro to Blockchain - Principles & Applications**	Quiz 11	
12	**Quantum Computing**	Quiz 12	

		• Assignment 04 Given: The Next **Big Thing**	
13	**Ethics and Computing Futures**	Quiz 13	**14 • Assignment 04 DUE**

Grading Criteria

Assignment / Assessment	Total Points	% of Grade
Weekly Quizzes	250	25%
Four Assignments	200	20%
Midterm exam	200	20%
Participation	150	15%

Grading Scale

Letter Grade	% Equivalency
A	94 – 100%
A-	90 – 93%
B+	87 – 89%
B	84 – 86%
B-	80 – 83%
C+	77 – 79%
C	74 – 76%
C-	70 – 73%
D+	67 – 69%
D	64 – 66%
D-	60 – 63%
E, I, NG, S-U, WF	0 – 59%

More information on grades and grading policies is here: https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/

Materials, Supply, and Equipment Fees
Material and supply and equipment use fee information are available from the academic departments or from the schedule of courses (Florida Statutes 1009.24). The total course fee for this class is $0.00. The total course fee for each course is listed on the UF Schedule of Courses. (https://registrar.ufl.edu/soc/)

Academic Policies and Resources:
Information about grading and attendance policies, support for students with disabilities, course evaluations, the Honor

Code, and other campus resources can be found at https://syllabus.ufl.edu/syllabus-policy/uf-syllabus-policy-links/

Attendance Policy, Class communicating Expectations, and Make-Up Policy

The UF Digital Worlds Institute is committed to the idea that regular student engagement is essential to successful scholastic achievement. No matter if the class is held in a traditional classroom, an online classroom, or a combination of the two, interaction with your peers and the instructor will empower you to greater achievement. *The instructor is responsible for the specific details of what percentage of your grade (if any) will be assigned to participation, and how class participation will be measured and graded. If the course includes participation grades, the syllabus must include a rubric to show how participation will be evaluated.*

In our course, attendance is taken at the beginning of each class period, and is calculated as the Participation element which makes up 10% of your overall grade. Any unexcused absences are factored into the Participation grade total. Exempt from this policy are only those absences involving university-sponsored events, such as athletics and band, and religious holidays, family emergencies, and health issues for which you must provide appropriate documentation in advance of the absence.

All assignments are due by the stated date and time. Late submissions will incur a 10-point deduction. Assignments will close the day after the due date and will receive a failing grade. Students are expected to proactively communicate with the instructor if they are unable to submit an assignment by the deadline for an excused reason. Students are also expected to communicate about assignment submissions to develop strategies that best help them succeed.

Additionally, tardiness will not be tolerated. If you are tardy for three class periods, you will receive an unexcused absence.

Course Technology

The students will be required to have access to and use a personal computer with access to the Internet. Word editing software will be required for written assignments. The University of Florida and Digital Worlds require that students have access to and ongoing use of a laptop/mobile computer for DIG courses in order to be able to function in the current learning environment. Digital Worlds requires each DAS major's laptop computer to meet certain minimum specs for heavy graphics use, the requirements documented below must be met.
https://digitalworlds.ufl.edu/programs/ba-in-digital-arts-sciences/technology-requirements/.

Course Communications

Students can communicate directly with the instructor regarding the course material through the course management system (CANVAS) using "Canvas E-Mail".

Creation of Original Content Ethics

For original projects and all assignment deliverables, students should remember that representations of acts of violence, coarse and offensive language, sexual behavior, bodily function and ability, neurodiversity, and personal identity are likely to cause extreme audience response, regardless of the creator's intentions. In addition, the recreation of such actions and subjects for fictional purposes may unintentionally traumatize or negatively impact those who collaborate in the creation of the images. While the university encourages students to explore themes and tell stories that may include this difficult subject matter, they should be cautioned against modes or styles of representation that might be considered unnecessarily offensive or potentially triggering. Instructors, faculty, and university administrators reserve the right not to show or share any student work they feel is inappropriate for their classroom or for public exhibition, as there may be concerns about the impact of such work on the community. Please consult with the faculty when producing work that might be considered controversial, and err on the side of being cautious when it comes to making decisions about a project's content - in other words, make the PG-13 version of your story, not the R version, and certainly not the "unrated" version. This is also to help students understand that most professional creative situations have strict guidelines and limitations on such content and how it is produced: your ability to tell stories effectively with "less" is a strong professional skill that will aid in the dissemination of your work to a broader audience.

University Policies

Information about university-wide policies and resources can be found here: https://syllabus.ufl.edu/syllabus-policy/uf-syllabus-policy-links/

Disclaimer: This syllabus represents the instructor's current plans and objectives. As we go through the semester, those plans may need to change to enhance the class learning opportunity. Such changes, communicated clearly, are not unusual and should be expected.