# DIG2005 Introduction to Digital Technologies

<b>Instructor</b> James Oliverio Michael Clark	Course Description An introduction to fundamental concepts, terms, and applications of digital and computing technologies. The topics covered provide the basis for a solid understanding of the components of common technological constructs including software, hardware, databases, networks, and contemporary entertainment and communications systems
<b>Phone</b> (352) 294-3937	<b>Pre-Requisites</b> BA in Digital Arts & Sciences major
<b>Email</b> Canvas Mail	Objectives: By the end of this course, students will be able to: By the end of this course, students will be able to:
Office Location Canvas	<ul> <li>Compare and contrast analog and digital systems</li> <li>Describe components and functions of digital hardware and software</li> <li>Demonstrate fluency in digital technology concepts and terms</li> </ul>
<b>Office Hours</b> Canvas	<ul> <li>Demonstrate indency in digital technology concepts and terms</li> <li>Analyze the components and functions of consumer electronics</li> <li>Demonstrate understanding of current technology trends including AI, Blockchain, AR/VR/MR, and IOT</li> </ul>
<b>Course Number</b> DIG4940	
Semester/Year Fall 2021	
<b>Course Credits</b> 3 credits	
<b>Course Location</b> Online	
<b>Course Meeting Times</b> Online	

## **Course Schedule**

The final exam time scheduled for this course will be announced in advance of each semester by the University of <u>Florida</u> <u>Registrar's Office</u> (https://registrar.ufl.edu/soc/)

Module	торіс	Quizzes • Assignments		
0	Introduction and Overview			
1	Analog and Digital Systems	Quiz 1: Syllabus • 5 analog and 5 digital systems		
2	Numbers and Technology	Quiz 2 • Write Like a Boole		
3	Electricity, Hardware, and Programming	Quiz 3		
4	Imagery, Sound, and Consumer Electronics	Quiz 4		
5	Databases	Quiz 5		
6	Network Connections, Languages & 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		
10	The Internet of Things (IOT)	Quiz 10		
11	Blockchain - Principles & Applications	Quiz 11		
12	Quantum computing	Quiz 12		
13	Ethics and Computing Futures	Quiz 13		
14	Careers in Digital Sectors	Quiz 14		
15	Review and preparation for Final Exam	Quiz 15 - FINAL		
Weekly Schedule				

#### **Required Textbook and Software**

None - Instructor will provide any needed reading materials

#### **COURSE STRUCTURE**

The course consists of an Orientation Module and 15 Content Modules. You have one week to work on each module. Each week, you will watch lectures, take quizzes and complete assignments.

## **COURSE FEES**

Course fees are assessed for certain courses to offset the cost of materials or supply items consumed in the course of instruction. A list of <u>approved courses and fees</u> is published in the Schedule of Courses each semester. (UF-3.0374 Regulations of the University of Florida).

Material and supply and equipment use fee information is 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/).

# **Evaluation of Grades**

#### **Evaluation of Grades**

Graded Course Components		Total Points	Percentage of Grade
12 Weekly Quizzes	250		25%
Project 1	100		10%
Midterm exam	200		20%
Project 2	100		10%
Participation	50		5%
Final exam	300		30%

#### **Grading Scale**

Letter Grade	% Equivale	ency GPA Equivalency
А	94-100%	4.0
A-	90 - 93%	3.67
B+	87 – 89%	3.33
В	84 - 86%	3.00
B-	80 - 83%	2.67
C+	77 – 79%	2.33
С	74 – 76%	2.00
C-	70 – 73%	1.67
D+	67 – 69%	1.33
D	64 - 66%	1.00

Letter Grade	% Equivalency	GPA Equivalency
D-	60 - 63%	.67
E, I, NG, S-U, WF	0 – 59%	0.00

More information on UF grading policy may be found at: https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

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# **Course Polices**

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

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: <u>https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/</u>

#### **Course Communications**

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

#### **Class Mental Wellness**

The student will be asked to seek <u>U matter, We care</u> advisement during the term if the student GPA drops below 2.0 in the class or if the student is in some other jeopardy of continuance due to excessive absence or lateness.

#### **Sensitive Topics and Materials**

Potentially offensive subject material should at minimum be accompanied with a warning to the viewer or avoided altogether. While the Instructor approves of critical thinking and controversial topics there will be no tolerance of any comment of content containing harassment; violent, threatening, defrauding or obscene material; accessing or publishing pornographic, sexual comments or images, racial slurs, genderspecific comments; any comments that could reasonably offend someone on the basis of their age, sexual orientation, religious or political beliefs, marital or parental status, physical features, national origin, or disability.

# **Course Technology Support**

The <u>Technology Support Center</u> provides computer support for Digital Worlds students who access Zoom, lecture recordings, student equipment, facilities and other technology-based resources. <u>http://digitalworlds.ufl.edu/support</u>

For computer assistance related to Zoon, lecture recordings, student equipment, and facilities request please <u>Submit a Help Ticket</u> or email <u>support@digitalworlds.ufl.edu</u>.

For support related to account services, technical consulting, mobile device services, software services, administrative support, application support center, and learning support services, please contact the <u>UF</u> <u>Computing Help Desk</u> available 24 hours a day, 7 days a week at 352-392-4357 or <u>helpdesk@ufl.edu</u>.

# **UF** Policies

## **University Honesty Policy**

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

## **Class Demeanor**

Students are expected to arrive to class on time and behave in a manner that is respectful to the instructor and to fellow students. Please avoid the use of cell phones and restrict eating to outside of the classroom. Opinions held by other students should be respected in discussion, and conversations that do not contribute to the discussion should be held at minimum, if at all.

## **Students Requiring Accommodations**

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. <u>Click here to get started with the</u> <u>Disability Resource Center</u>. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

## **Netiquette Communication Courtesy**

All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats, more information can be found at: <u>http://teach.ufl.edu/wp-</u>content/uploads/2012/08/NetiquetteGuideforOnlineCourses.pdf

#### Software Use

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary

action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

#### **Student Privacy**

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see: <a href="http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html">http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html</a>

#### **Course Evaluation**

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. <u>Click here for guidance on how to give feedback</u> <u>in a professional and respectful manner</u>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <u>ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students here</u>.

# **Campus and Academic Resources**

*U Matter, We Care*: If you or someone you know is in distress, please contact <u>umatter@ufl.edu</u>, 352-392-1575, or visit <u>U Matter, We Care website</u> to refer or report a concern and a team member will reach out to the student in distress.

*Counseling and Wellness Center*: <u>Visit the Counseling and Wellness Center website</u> or call 352-392-1575 for information on crisis services as well as non-crisis services.

**Student Health Care Center:** Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the Student Health Care Center website.

*University Police Department*: <u>Visit UF Police Department website</u> or call 352-392-1111 (or 9-1-1 for emergencies).

**UF Health Shands Emergency Room / Trauma Center**: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; <u>Visit the UF Health Emergency</u> Room and Trauma Center website.

*E-learning technical support*: Contact the <u>UF Computing Help Desk</u> at 352-392-4357 or via e-mail at <u>helpdesk@ufl.edu</u>.

*Career Connections Center*: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

Library Support: Various ways to receive assistance with respect to using the libraries or finding resources.

*Teaching Center*: Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.

Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.

*Student Complaints On-Campus*: Visit the Student Honor Code and Student Conduct Code webpage for more information.

**Online Students Complaints:** <u>View the Distance Learning Student Complaint Process</u>.

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.