DIG3691 Blockchain Innovation in DAS

Instructor

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Email

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Office Location

FAA 102

Office Hours

Wednesdays 1 – 3 PM

Course Number

DIG3691

Semester/Year

Spring 2020

Course Credits

3 credits

Course Location

NRG 205 (PICT)

Course Meeting Times

TUE Period 7
THURS Periods 7/8

Course Description

This course is a comprehensive survey of relevant topics in blockchain space, and its impact on digital arts and sciences. It will provide an overview of the technology behind blockchain and explore current and potential real-world applications in technology, entrepreneurship, and the arts.

Pre-Requisites

DAS major, or instructor's approval

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

- Master the theoretical foundations of blockchain technology
- Identify applications of blockchain technology in digital arts and sciences
- Understand the concept of decentralization, its impact, and its relationship with blockchain technology
- Grasp the inner workings of blockchain and the mechanisms behind bitcoin and alternative cryptocurrencies
- Understand the principles of smart contracts

Required Materials

- "The Basics of Bitcoins and Blockchains", Anthony Lewis (2019) Author
- "Artists Re:Thinking the Blockchain", Ruth Catlow, Marc Garrett (2017)

Recommended Materials

- The Rise and Rise of Bitcoin (1h:36m): https://www.amazon.com/Rise-Bitcoin-Daniel-
 Mross/dp/B000GM2ZY2/ref=sr 1 1?keywords=The+Rise+and+Rise+of+Bitcoin&qid=1573782976&s=instant-video&sr=1-1
- Finance: The History of money (10:58): https://www.youtube.com/watch?v=YCN2aTlocOw
- A brief history of money From gold to bitcoin and cryptocurrencies: https://www.youtube.com/watch?v=kU6NaDs-7ww
- Decentralizing Everything with Ethereum's Vitalik Buterin | Disrupt SF 2017 (https://www.youtube.com/watch?v=WSN5BaCzsbo&t=1169s
- How the blockchain is changing money and business | Don Tapscott (20 min):https://www.youtube.com/watch?v=Pl8OlkkwRpc

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 |
|---------|--|--------------------|-----------------|
| Week 1 | Introduction to class | | |
| | Money, Physical and digital (Part 1, pg. 20-24, 63-79) | | |
| Week 2 | Money, Physical and digital (Part2, pg. 82-115) | Weekly Quiz | |
| | Blockchain: What is it, and its uses (Pg. 324-349) | | |
| Week 3 | Bitcoin Protocol and Mechanics - A technical overview (Pg. 148-194) | Weekly Quiz | |
| Week 4 | Technical primer on Bitcoin, its recent history, and ways of ownership (Pg. 194-249) | Weekly Quiz | |
| Week 5 | Ethereum and other Cryptocurrencies (Pg. 254-290) | Weekly Quiz | |
| Week 6 | Initial Coin Offerings (ICO) (Pg. 352-369) | Weekly Quiz | |
| Week 7 | Forking (Pg. 291-298) | Weekly Quiz | |
| Week 8 | Removing Middleman and Reaching Trust - Reach consensus | Mid Term | |
| Week 9 | Spring Break | | |
| Week 10 | Blockchain as an Art medium | | |
| Week 11 | Blockchain and Art Market | Weekly Quiz | |
| Week 12 | Digital Tokens (Pg. 300-320) | Weekly Quiz | |
| Week 13 | Review of art projects on blockchain | Weekly Quiz | |
| Week 14 | Blockchain: Real-world Applications in 2040 | Weekly Quiz | |
| Week 15 | Student project presentations | | |
| Week 16 | Student project presentations | | |

Evaluation of Grades

| Assignment | Total Points | % of Grade |
|---|---------------------|------------|
| Weekly quizzes - There will be assigned readings each week, which should be completed before each class. Quizzes on weekly reading assignments | 300 | 30% |
| Mid-term project - All students will be required to create an art project of their own choice that is blockchain related. | 100 | 10% |
| Group project - Students will form project groups and complete a high-impact class project. The final deliverable will be a group presentation on a new application of blockchain in digital arts and sciences. | 300 | 30% |
| Final Exam | 200 | 20% |
| Attendance/Participation - All students are expected to attend the class, and actively participate in class discussions. | 100 | 10% |

Grading Scale

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

More information on grades and grading policies is here:

https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/

Materials and Supply Fees

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/).

Course Polices

Attendance Policy, Class Expectations, and Make-Up Policy

We value participation more than mere attendance. The instructor is responsible for communicating 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. Interaction with your peers and the instructor will empower you to greater achievement.

Students are allowed three unexcused absences. If you miss more than three classes during the semester, each additional absence will lower your overall grade by 1%. If you miss more than six classes, you will fail the course. Exempt from this policy are only those absences involving university sponsored events, such as athletics and band, and religious holidays, family emergencies, and health.

Any assignment turned in past the due date will lose 10% of the total point value of the assignment, and be available to be submitted up to one week late. Excluded from this policy are any assignments missed due to medical emergencies.

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: https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/

Course Technology

The students will be required to have access to and use a personal computer with the access to the Internet. Word editing software will be required for written assignments.

The University of Florida and Digital Worlds requires that students have access to and on-going 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 student's laptop computer to meet certain minimum specs for heavy graphics use, the requirements documented below must be met.

DW Technology Requirements: 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 Mail".

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. http://digitalworlds.ufl.edu/support

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 requesting accommodations should first register with the Disability Resource Center (352-392-8565, https://www.dso.ufl.edu/drc) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure 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: http://teach.ufl.edu/wp-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:

http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html

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. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. 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 https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

Campus Resources

U Matter, We Care:

If you or a friend is in distress, please contact <u>umatter@ufl.edu</u> or 352 392-1575 so that a team member can reach out to the student.

Counseling and Wellness Center: http://www.counseling.ufl.edu/cwc, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Assault Recovery Services (SARS)

Student Health Care Center, 392-1161.

University Police Department at 392-1111 (or 9-1-1 for emergencies), or http://www.police.ufl.edu/.

E-learning Technical Support

352-392-4357 (select option 2) or e-mail to Learning- learning-support@ufl.edu

Career Connections Center

Reitz Union, 392-1601. Career assistance and counseling. https://career.ufl.edu

Library Support

Various ways to receive assistance with respect to using the libraries or finding resources. http://cms.uflib.ufl.edu/ask

Teaching Center

Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. http://teachingcenter.ufl.edu/

Writing Studio

2215 Turlington Hall, 846-1138. Help brainstorming, formatting, and writing papers. http://writing.ufl.edu/writing-studio/

Student Complaints Campus

http://regulations.ufl.edu/wp-content/uploads/2012/09/1.0063.pdf

Online Students Complaints

http://www.distance.ufl.edu/student-complaint-process

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.