# Howard Lichtman TICS / Blockchain to Bitcoin



## **Class Meetings:**

Lectures: Monday, Tuesday, Thursday, Friday 9:00 - 11:30

# Instructor Information:

Prof. Howard Lichtman Johnstone 323 Extension 4856 Office Hours: by appointment

# Textbook:

There is no book purchase required for this course. A complimentary textbook has been added to D2L under the "Textbook" section. There will also be assigned readings and assignments from various online resources, these will be discussed in class.

## **Description:**

The sudden rise in the value of Bitcoin and other cryptocurrencies, and its subsequent decline, focused the world's attention on cryptocurrencies as a means of payment. Blockchain technology powers Bitcoin and has been hyped as the next new, transformative technology. What is blockchain and what are its potential impacts and uses? It has been called everything from "groundbreaking" to "useless." The reality is somewhere in the middle and this class will examine what the blockchain is, as well as how it works at a technical level. Once the basics of blockchain are understood, the conversation can move into the most popular use case for blockchain, Bitcoin. Bitcoin is the original cryptocurrency, and we will spend time examining how Bitcoin utilizes the blockchain and what all the hype is about. The conversation will also include several other crypto projects and the potential future use of the technology.

**NOTE** – This class is not providing any kind of financial advice; all discussions are for educational purposes only.

## Learning Outcomes:

- Possess the skills to communicate ideas and arguments in a well-organized, clear, efficient, and precise manner.
- Understand the concepts fundamental to the discipline
- Become proficient in new or emerging areas of the field.
- Demonstrate professionalism and a commitment to ethical behavior

## **Objectives:**

- Students should acquire specific knowledge about blockchain technologies and major uses, including cryptocurrencies and token projects.
- To understand the potential impact of blockchain implementations
- Students should develop skills in clarifying and ethically analyzing realistic cases that involve information technology.
- To provide a foundation for further studies in Computer Science.

## Grading:

Grades will be assigned according to the following schedule.

Class Discussions	30%
Research Reports	25%
Case Studies	10%
Exams	30%
Projects	5%

Hartwick College is committed to upholding and maintaining all aspects of the Federal Americans with Disabilities Act of 1990 (ADA) and Section 504 of the Rehabilitation Act of 1973. If a student with a disability wishes to request academic accommodations, they should contact Lara Sanford, Director of AccessAbility Services, at sanfordl@hartwick.edu, or AccessAbilityServices@hartwick.edu.

AccessAbility Services is located on the 5th floor of Yager Library in the Center for Student Success. Any information regarding a student's disability will remain confidential. Requests for academic adjustments should be made as early as possible.

### **Class Discussions:**

An important part of this course will be the in-class discussions. Students are expected to be part of and maintain a discussion on the current in-class topic. Since this is meant to be more of a discussion-based class, your input into the daily material is very important. Students that do not participate will not pass this class. Please do not mistake the online nature of this course as one that will not require your attention.

### **Research Reports:**

There will be several research reports during the semester. These will be based on the class discussions and assigned readings. The topics will differ and will cover a wide aspect of the field.

### **Case Studies:**

Case studies will be completed in class as group assignments. More information will be discussed as the case studies are presented.

### Exams:

There will be two exams during the semester that are based on the assigned readings and class discussions.

### Attendance:

Attendance is essential for you to master the material in this course. Every day is important, and attendance will be considered when final letter grades are assigned. Any student that misses more than three class periods will be penalized one letter grade, with an additional drop in letter grade for each additional absence. As a January course, this class only meets for 15 sessions. Missing one day would be the equivalent of missing a week of class during a standard semester.

If you feel you need to miss a day of class, please contact the professor as soon as possible to

# Email:

It is the students' responsibility to check their email regularly. Hints, corrections, and suggestions will be distributed in this way, and you will be responsible for all information disseminated this way. Please also feel free to send questions and comments to me by email. I'll do my best to respond promptly. Since class email is sent through the Hartwick D2L system, students must use their Hartwick assigned email addresses for class.

## Academic Honesty:

Integrity of scholarship is essential for an academic community. The college expects that students will honor this principle and in so doing protect the validity of intellectual work. This means that all academic work will be done by the individual to whom it is assigned, without unauthorized aid of any kind. The college's policy on academic honesty can be found at:

https://www.hartwick.edu/academics/student-services/academic-affairs/academic-policies/

# **Other College Policies:**

- Title IX/Sexual Misconduct: <u>https://www.hartwick.edu/about-us/employment/human-resources/title-ix/</u>
- Covid-19: <u>https://www.hartwick.edu/about-us/covid-19-updates/</u>
- **Counseling:** <u>https://www.hartwick.edu/campus-life/health-wellness/counseling-center/</u> Counseling Center Phone: (607) 431-4420; Heart Peer Counselors Phone: (607) 431-5050.