UNI Environment, Technology and Society Capstone May 2020 Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Week 1 Homework ***60 points***, please complete this then upload it to the individual google drive course folder I made for you. Also please remember to keep this as a word/google doc rather than converting to a pdf.

**Primer Questions** – Please answer these before interacting with any of the week 1 content

1. What are the major problems facing our civilization? (Top five, in your opinion). (5 pts)

2. Select ONE of these problems that you believe will affect you the most directly. Then list the top five ‘players’ who are directly related to both creating and addressing this problem.

3. What factors do you believe will hinder a solution to this problem?

**Content found on this webpage** <https://www.exploreiowageology.org/ETS_CapstoneMay4Week.php>

A. Introduction from Dr. Heinzel

B. Reading - Wicked Problems

C. Learning from the Past - Jared Diamond Collapse video

D. Happiness - It's importance to our course and civilization

**Content Questions** – The answers to these questions are in the content

A. Dr. Heinzel Intro

\_\_\_\_\_ 1. Where does Chad conduct geoarchaeological research? (1pt)

 A. Ireland B. Iowa C. Sicily D. Iowa and Sicily

2. How does geoarchaeology relate to our capstone class? (3 pts)

*Expand to place answer here…*

3. If you were to select one of the recommended books, which one would it be and why? (2)

*Expand to place answer here…*

B. Wicked Problems reading

The chapter begins with definitions then goes onto characterizing Wicked Problems, Social and Technical Complexity through ‘discussion’ and examples from the business world. If you are not a business major, some of the terms may be confusing, so I would like everyone to use the problem you identified (above in Primer Questions #2) to address the following questions.

1. Is the problem that you chose (Primer Question #2) a tame/simple OR wicked problem, explain using the six factors of wicked problems (p. 7 & 8) (2)

2. One of the biggest roadblocks to addressing problems is ‘analysis paralysis’ (last paragraph p. 10), does this affect your chosen problem? If yes, what are your thoughts regarding (p. 11) the steps needed to ‘tame’ a wicked problem? How do you get around ‘analysis paralysis? (5)

3. With respect to problem solving within large groups, how do you regard the statement “We all pretty much think and act the same”? (Page 12, top of second column). Did you include diversity or globalization within your answer to question 3 BEFORE you read the paper (Yes/No), why is this important? (4)

4. P. 15 (top left), what are your thoughts towards the chapter’s Holy Grail of effective collaboration? Why is this important? (4)

C. Jared Diamond Collapse TED Talk

\_\_\_\_\_1. In analyzing societal collapses, Dr. Diamond has come up with a 5 point framework, what civilization did he use to share this framework? (2)

 A. Maya B. Norse C. Romans D. Greeks

2. List the components to this five point frame work. (4)

*Expand to place answer here…*

\_\_\_\_\_3. What U.S.A. State did he use to serve as a modern example? (2)

 A. Wyoming B. Iowa C. Montana D. New York

4. Use this five point framework to reflect on Iowa, how are we doing? (4)

*Expand to place answer here…*

\_\_\_\_\_\_5. Mathematically, what derivatives should you look closes at with respect to potential societal collapse? (2)

 A. 1st and 2nd B. 3rd and 4th C. 5th and 6th D. 7th and 8th

6. Using his analogy of a petri dish, in your own words what is important in this statement? (4)

*Expand to place answer here…*

7. At 11:53 in the Ted talk he states “*where there is a conflict of interest, between the short term interests of the decision making elites and the long term interests of the society of the whole*’. How does this statement fit our current COVID-19 Pandemic? (4)

*Expand to place answer here…*

8. What is the biggest threat and biggest solution to our environmental problems? (4)

*Expand to place answer here…*

D. The Happiness Lab, Podcasts - You Can Change (42 min) and Making the Grade (37 min)

1. Take notes on these presentations and turn them in… (Either type them up as you listen OR hand write them, take a picture then upload your text or picture/s…) (6)

2. Do you think you and your friends agree with the content of these podcasts? How does happiness relate to the SDGs? To our class Environment, Technology and Society? (2)