

Fall 2017-Sprin 2018

Human Perception and Knowledge Creation

IDH 3034-3035

Section: U11

## GENERAL INFORMATION

|   |                                 |
|---|---------------------------------|
| <b>Instructor:</b> Dr. John Tsalikis  | <b>Phone:</b> 305-348-2571      |
| <b>Office:</b> RB 306A  | <b>Fax:</b> 305-348-3792        |
| <b>Office Hours:</b> 5:15 pm – 6:20 pm Monday   |                                 |
| <b>Link to professor's site:</b><br><a href="https://emst.fiu.edu/faculty/expert-guides.cfm?FlagDirectory=Display&amp;User=tsalikisj">https://emst.fiu.edu/faculty/expert-guides.cfm?FlagDirectory=Display&amp;User=tsalikisj</a> | <b>E-mail:</b> tsalikis@fiu.edu |

## COURSE DESCRIPTION

This course will use an interdisciplinary approach to explore the limitations of human perception and how it affects knowledge creation and ultimately our understanding of the world. The course will explore both the scientific and the intuitive modes of knowledge creation.

## COURSE OBJECTIVES

Develop:

- the skills for critical thinking,
- a “healthy” skepticism without this skepticism leading to the stifling of creative and innovative thought
- the tools for information analysis and creation
- a historical perspective of our current state of knowledge

## MAJOR & CURRICULUM OBJECTIVES TARGETED

Understanding of human knowledge creation

Ethics

Critical thinking

## TEXTBOOK, VIDEOS, POWER POINTS & PROJECT

Professor notes:

With the exception of the Kida book, the class subjects are covered in the professor's notes and related power points. You will be provided with a free electronic copy of both.

Book:

"Don't Believe Everything you See," by Thomas Kida, Prometheus Books, ISBN:-13:978-159102408-8

Videos:

The Century of the Self

The Currents of Fear

Power points:

Gestalt, Sociological, Senses, Psychological

Project: A synopsis of the main ideas covered in the class. Expand these ideas to your personal life experience and how they interact with other concepts in science.

## TEACHING METHODOLOGY

A. Classroom lecture. The students should attend every classroom lecture.

B. Class project presentations and panel discussion will be planned for this class.

## COURSE PREREQUISITES

None

## COMMUNICATING WITH THE INSTRUCTOR

Instructor monitors email on a daily basis. Please identify the class you are referring to.

## GRADING

| Course Requirements | Weights     |
|---------------------|-------------|
| First exam          | 35%         |
| Second exam         | 35%         |
|                     |             |
| Participation       | 10%         |
|                     |             |
| Project             | 20%         |
|                     |             |
| <b>Total</b>        | <b>100%</b> |

| Letter Grade | Range    | Letter Grade | Range    | Letter Grade | Range |
|--------------|----------|--------------|----------|--------------|-------|
| A            | 94-100%  | B-           | 80-83.99 |              |       |
| A-           | 90-93.99 | C+           | 77-79.99 |              |       |
| B+           | 87-89.99 | C            | 70-76.99 |              |       |
| B            | 84-86.99 | F            | <70      |              |       |

## DISABILITY NOTICE

If you have a disability and need assistance, please contact the [Disability Resource Center](#) (University Park: GC190; 305-348-3532) (North Campus: WUC139, 305-919-5345). Upon contact, the Disability Resource Center will review your request and contact your professors or other personnel to make arrangements for appropriate modification and/or assistance.

## RELIGIOUS HOLIDAYS

The University's policy on religious holy days as stated in the University Catalog and Student Handbook will be followed in this class. Any student may request to be excused from class to

observe a religious holy day of his or her faith.

## **RULES, POLICIES, and ACADEMIC MISCONDUCT**

### **Honors Citizenship Requirements**

All members of the Honors College are expected to be active citizens of the College, the university, and the community at large. To be a committed Honors College student is to take advantage of enhanced learning opportunities and to assume a leadership role in the world. All College members are expected to participate in the community-building activities listed below:

1. Attend one Honors Excellence Lecture per academic year and one Honors Colloquium per semester (fall and spring). (Attendance will be taken).
2. Participate in the Honors College Convocation each fall. (Attendance will be taken).
3. Attend at least three Honors Hour sessions per semester or enrichment events specified by the Honors College as satisfying this requirement. (Attendance will be taken).
4. Perform at least ten hours of Community Service per semester either through the Honors College service partnerships (Sweetwater, Overtown Youth Center, etc.) or through other community service projects and/or events. If you want to apply this service to your graduation portfolio, be sure to document your hours.

### **Academic Misconduct Policy**

All syllabuses must include an academic misconduct statement. In addition, we ask that you include references to the Honors College handbook and links listed below:

“Registration in this course implies an acceptance of and compliance with the Honors College policies for students and the FIU Code of Academic Integrity. Please refer to the following documents for additional information:

FIU Code of Academic Integrity - <http://integrity.fiu.edu/>

FIU Honors College Student Handbook –<http://honors.fiu.edu/students/policies/>

## **STUDENT PORTFOLIOS AND IMPORTANT HONORS COLLEGE EVENTS**

### **Student Portfolios**

The Honors College will be using a portfolio method to assess students’ learning outcomes. The portfolio method allows for maximum flexibility in gauging student learning. Students decide (with instructor consultation) what “artifacts” or assignments to include for consideration in their portfolios to demonstrate successful achievement of each of the student learning outcomes. Portfolios provide a rich context for students to show what they have learned and to explain their learning process. Because the Honors curriculum is meant to be thought-provoking and reflective, student self-assessment through portfolios will facilitate learning and provide in-depth assessment. Each course should include at least one assignment that could potentially fit portfolio requirements.

### **Honors Education in the ARTS (HEARTS)**

The HEARTS program is designed to give Honors College students opportunities to “explore and

appreciate different artistic and cultural traditions and modes of artistic expression. HEARTS will also serve as a clearinghouse (and curatorial framework) for our students to experience the arts on campus and in the community by providing them with information about cultural activities and access to performances with free or discounted tickets. See <http://honors.fiu.edu/programs/hearts/>.

### **Procedures and Penalties**

An Honors faculty member may bring charges of academic misconduct against an Honors student if the faculty member suspects plagiarism or other forms of academic misconduct. The faculty member will decide whether to pursue informal resolution, file formal resolution charges, or take no further action, and will follow the procedures outlined in the Honors College website (<http://honors.fiu.edu/academics/policies/>), and the Academic Misconduct Procedures, available at <http://integrity.fiu.edu/misconducts.html>.

### **Policy for Assigning an “I” Incomplete Grade**

An incomplete grade is a temporary symbol given for work not completed because of serious interruption not caused by the student’s own negligence. Please see FIU’s Policy for Assigning an Incomplete Grade.

### **GL Learning Outcomes for IDH 3034-5**

- Global Awareness: Students will be able to demonstrate knowledge of the interrelatedness of local, global, international, and intercultural issues, trends, and systems. .
- Global Perspectives: Students will be able to develop a multi-perspective analysis of local, global, international, and intercultural problems.
- Global Engagement: Students will be able to demonstrate a willingness to engage in local, global, international, and intercultural problem solving.

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## **COURSE CALENDAR**

### **CALENDAR FOR HONORS CLASS**

DOC 1

*UNIT 1: August 21-September 5*  
**Science**

- \_\_\_ Video: The Matrix movie 2
- \_\_\_ What is science
  - \_\_\_ Video: Science compilation
- \_\_\_ Theoretical vs. experimental science-- **READ: Tsalikis Chapter 8**
  - \_\_\_ Aristotle rocks
  - \_\_\_ Gun buying to feel protected
  - \_\_\_ Loose weight diet
  - \_\_\_ All new ideas sound stupid
  - \_\_\_ Dolls with breasts
  - \_\_\_ Who wants to be a millionaire/ survivor
  - \_\_\_ Saturday night fever (end of disco, release music first).
  - \_\_\_ Location 1 or 2 on intersection
  - \_\_\_ AIDS in Africa (slim peoples' disease)
  - \_\_\_ Cold, getting a cold shiver
  - \_\_\_ Baby sleeping face down
  - \_\_\_ Butter/margarine
  - \_\_\_ Gilligan's island, robot with a laser
  - \_\_\_ Clean (food from floor/Japan/bathroom vs. office)
  - \_\_\_ Prices at ghettos vs. suburbs
  - \_\_\_ Want your child to stop doing something nasty, instead of yelling, love them.
  - \_\_\_ Crocodiles eat their young, Australia experiment.
  - \_\_\_ Warm water freezes first
  - \_\_\_ Paradigm change Romans then cannon
  - \_\_\_ Headache take Tylenol (too much creates them) LINEAR
  - \_\_\_ Reaction to art Picasso, Monet,
  - \_\_\_ Movies last temptation
  - \_\_\_ How TV was viewed (killer apps) and cell phones
  - \_\_\_ Prohibition in USA, drugs now.
- \_\_\_ Ex post facto fallacy (argument by retrospective improbability)
- \_\_\_ Systems approach-- **READ: Tsalikis Chapter 1**
  - \_\_\_ Medicine
  - \_\_\_ Marketing
  - \_\_\_ Evolution
- \_\_\_ Skepticism: Video: Obama skate

## ***UNIT 2: September 12***

### **Measurement**

- \_\_\_ Operationalization-- **READ: Tsalikis Chapter 10**
  - \_\_\_ Continuous, dichotomous
- \_\_\_ Types of measurement--**READ: Tsalikis Chapter 15**

- \_\_ Speed of light (hard soft measurements)
- \_\_ Measurement of time (statistical average)
- \_\_ Chaos (stick, dimensionality)
- \_\_ Subjective, objective
- \_\_ Reliability
- \_\_ Validity (predictive, content, construct)
  - \_\_ GPA
  - \_\_ Face criminality
  - \_\_ Marriage for money
  - \_\_ Accented people are dumb
  - \_\_ Spasms of Hawkins
  - \_\_ IQ in Vietnam
  - \_\_ Witches red hair
  - \_\_ Nixon vs. Kennedy (who won the debate)
  - \_\_ Sneeze Bless you, soul in liquids, Chinese and liquids)
  - \_\_ Khmer rouge in Cambodia
  - \_\_ Greece income pools

**UNIT 3: September 19**

**Sampling-- READ: Tsalikis Chapter 13**

- \_\_ What is a representative sample
  - \_\_ Sampling in the bible
  - \_\_ Cubans in Miami
  - \_\_ Mother with airplanes falling
  - \_\_ News with crime and shark attacks
  - \_\_ Madonna effect
  - \_\_ Subways Jared
  - \_\_ Winners of lotto
  - \_\_ People on a diet
  - \_\_ People on exercise
  - \_\_ Are there planets? Big gaseous ones rotating in 4 days (measurement)

**UNIT 4: September 25**

**Causation-- READ: Tsalikis Chapter 5**

Two ways of developing knowledge

- \_\_ Experiments
- \_\_ Correlations
  - \_\_ Superstitions
- \_\_ Correlation and causation
  - \_\_ Spurious correlations
- \_\_ The Vikings tried to scare the eclipsing sun (it worked)

Smoking causes cancer

- \_\_\_ Anecdotal
- \_\_\_ Correlation
- \_\_\_ Experiments with animals
- \_\_\_ Quasi experiments
- \_\_\_ Longitudinal studies
- \_\_\_ Interaction
- \_\_\_ The nature of statistics combining individuals
- \_\_\_ Mediating variables (red bird)
- \_\_\_ Moderating variables (race)
- \_\_\_ Video: Currents of fear

### **UNIT 5: October 3**

#### **Chaos**

- \_\_\_ Video Chaos
- \_\_\_ Simple formula creating the Mandelbrot set. Evolution
- \_\_\_ Reversal of gas movement
- \_\_\_ Predictability
- \_\_\_ Butterfly effect
- \_\_\_ Law of unintended consequences
- \_\_\_ Forecasting and human inability to project-- **READ: Tsalikis Chapter 7**
- \_\_\_ Dimensionality (Circumference of Cuba, a quarter). Measuring humans
- \_\_\_ Heisenberg's uncertainty principle

#### **Problems of perceiving other people-- READ: Tsalikis Chapter 2**

- \_\_\_ Card on forehead experiment
- \_\_\_ Self concept: we get it from other peoples reactions
- \_\_\_ Positive answers
- \_\_\_ Role playing
- \_\_\_ Hawthorne effect
- \_\_\_ Freud

#### **Rational vs. emotional humans**

- \_\_\_ Think-feel-do
- \_\_\_ Feel-do-think

#### **Attitude formation-- READ: Tsalikis Chapter 10**

- \_\_\_ Volvo is beautiful car
- \_\_\_ Volvo is a safe car
- \_\_\_ Beauty is important
- \_\_\_ Safety is important

### **UNIT 6: October 10**

#### **Bounded rationality-- READ: Tsalikis Chapter 2**



- \_\_\_ Example with a circle and an idea out of the circle (National Inquirer)
- \_\_\_ Time--isolation
- \_\_\_ Matrix
- \_\_\_ Space--isolation
- \_\_\_ Brother with toilet paper
- \_\_\_ Muslim clothing
- \_\_\_ Toy manufacturers
- \_\_\_ Snowflakes are irregular
- \_\_\_ Rudolf the Rain deer (Sears)
- \_\_\_ Soap (how often do you wash), napoleons letter, ads from soap companies.
- \_\_\_ Spinach, Popay
- \_\_\_ Margarine vs. butter
- \_\_\_ Maria Antoinette--let them eat cake

- \_\_\_ Plato's allegory of the cave
- \_\_\_ Zeitgeist
- \_\_\_ Garbage can theory

### **Logic**

- \_\_\_ Inductive deductive reasoning
- \_\_\_ Alexander paradox
- \_\_\_ Zero
- \_\_\_ Monty Hall three doors
- \_\_\_ Logical fallacies
- \_\_\_ Liars paradox

### ***UNIT 7: October 17***

#### **Quantitative data analysis-- READ: Tsalikis Chapter 4**

- Chi square
- T-test
- Correlation
- Regression
- Cluster

### ***UNIT 8: October 24***

Power point presentations on: Gestalt, Limitations of Human Perception, and Psycho Linguistic

### **FIRST EXAM: October 31**

***The first exam will comprise of the following:***

1. The chapters from the Tsalikis book.
2. All the concepts in Units 1-8 that are not included in the Tsalikis book

**UNIT 9: November 7-December 5**

All the chapters from the KIDA book

**FINAL EXAM:**

Based on:

1. The KIDA book,
2. The Century of the Self Videos:
  - a. Watch the videos,

**VIDEO 5-1 through 5-16 THE CENTURY OF THE SELF (1=16 min, 2=1 min, 3=5 min, 4=19 min, 5=8 min, 6=10 min, 7=6 min, 8=27 min, 9=13 min, 10=12 min, 11=6 min, 12=18min, 13=19 min, 14=7 min, 15=7 min, 16=8 min).**

b. Read the word file "Century of the Self,"

c. Take the quizzes online

**QUIZ: VIDEO 5-1 through 5-16 THE CENTURY OF THE SELF (1=5 questions, 2 and 3=4 que, 4=5 que, 5=4 que, 6=2 que, 7=5 que, 8=5 que, 9=3 que, 10=6 que, 11=2 que, 12=5 que, 13 to 16=5 questions). Notice that the quizzes for some segments are combined).**

3. Any other concepts that will be covered in class.

**Synopsis paper is due on December 10**

