PSYC 354Z:
Seminar on Intelligence and Creativity

Professor
Dr. Steven Stemler

Location and Time
9am-12:30pm
January 4, 2022 – January 14, 2022
Judd Hall, Room 116

Office Hours:
By appointment in Judd 214 and/or
via Zoom: https://wesleyan.zoom.us/j/4931579508
via email: steven.stemler@wesleyan.edu

Course Description
What does it mean to be smart? Who decides whether something, or someone, is creative? The answers to these questions are of great consequence as they often determine who gets access to scarce resources. This course will introduce students to some of the most vibrant and lively debates in the fields of intelligence and creativity. Our goal will be to discuss relevant theories and evaluate empirical data associated with various perspectives and approaches to understanding these important constructs. In addition, students will gain familiarity with and critically evaluate how intelligence and creativity are measured and the usefulness of different measures for predicting the success of individuals and organizations.

Course Objectives
• Understand various theories of creativity and intelligence that have been proposed and studied in the literature.
• Evaluate evidence that supports and contradicts different proposed theories of intelligence and creativity
• Gain experience and familiarity with different tests of intelligence and creativity.
• Understand which intelligence tests are most widely used for research and practice.
• Develop sufficient historical and theoretical background to participate intelligently in current debates related to the study of creativity and the study of intelligence.

Required Readings
• Research articles posted to Moodle
Course Requirements and Grading
25% Attendance and class participation
25% Intelligence Presentations
25% Creativity Presentation/Assignments
25% Final Project

Attendance and class participation. Because this is an advanced seminar, the nature of this class will require frequent discussion of your ideas about intelligence and creativity. As such, attendance and participation in discussions and activities will count for 25% of your grade.

Intelligence Presentations. Each participant will be responsible for presenting on and leading discussion about two different topics in Intelligence. The purpose is to give you a chance to demonstrate your mastery of the material and to provide a different modality for discussing the course content covered in the book.

Creativity Assignments. Each participant will be responsible for presenting on and leading discussion about one different topic in Creativity. The purpose is to give you a chance to demonstrate your mastery of the material and to provide a different modality for discussing the course content covered in the book. In addition, there will be different assignments for each creativity class session. These may take different forms and will be formally graded only on the basis of whether you engaged with the task or not (a check if you did and a minus if you did not). Taken together the homework will be worth a total of 25% of your final grade.

Final Project. The final project will involve an integration of material you have learned throughout the semester and is worth 25% of your total course grade. You will be given further details about this exam at a later time.

Pre-course readings:
Available on Moodle:
Thorndike, E.L. (1921). The uses of intelligence tests. Harpers Magazine

Pre-course Assignment:
Implicit theories of intelligence
Implicit theories of creativity
Course Outline
(Each topic will be covered in depth in one class session)

Part I: Intelligence

Day 1 (Tues, 1/4/22): What is Intelligence? What is on an Intelligence Test?
- History of Intelligence
- Achievement, Ability, and Aptitude
- The General Theory of Intelligence (‘g’ theory)
- Raven’s Progressive Matrices (gf)
- The Mill-Hill Vocabulary Scale (gc)
- The Wechsler Intelligence Test
- The Stanford Binet Intelligence Test Subtests and their purposes
  - Reliability and Validity

Presentations:
History of Intelligence (Stemler)
Tests of Intelligence (Stemler)
Selection of Group Projects

Day 2 (Wed, 1/5/22): What Are Intelligence Tests Good For?
- Diagnosing Learning Disabilities
- Predicting Student Success
- Predicting Job Performance
- Group Differences in Intelligence (Gender Differences; Racial/Ethnic Differences)
- The Problem of Bias

Presentations:
Intelligence in Admissions Testing and Personnel Selection
Intelligence and Working Memory
The Identification of Intellectual Disabilities
Investigations of Gender Differences in Intelligence
Investigations of Ethnic Differences Intelligence
Global Perspectives on Intelligence
Day 3 (Thurs, 1/6/22): The Development of Intelligence

- Development of Intelligence in Early Childhood
- Development of Intelligence Across the Lifespan

Presentations:
Prodigies and Savants
Intelligence in Childhood
Intelligence in Adulthood
Intelligence and the Identification of Giftedness
Artificial Intelligence
Biological Basis of Intelligence

Day 4 (Fri, 1/7/22): Broader Conceptions of Intelligence

- Cultural Intelligence
- Rational Intelligence
- Multiple Intelligences
- Successful Intelligence
- Social and Emotional Intelligence
- The MSCEIT and the Bar-On Tests of Emotional Intelligence
- The George Washington Social Intelligence Test

Presentations:
Social Intelligence
Cultural Intelligence
Successful Intelligence
Multiple Intelligences
Emotional Intelligence
Society and Intelligence

Day 5 (Sat, 1/8/22): The Relation of Intelligence to Other Constructs

- The Flynn Effect and other curiosities

Presentations:
Intelligence and Personality
Intelligence and Motivation
Intelligence and Creativity
Intelligence and Rationality
Intelligence and Wisdom
Intelligence and Expertise
Part II: Creativity

Day 6 (Mon, 1/10/22): What is Creativity?
- Historical roots of the concept
- Origins of the scientific study of creativity
- The Four C’s and the Five A’s
- Adaptability
- Mental Flexibility
- Convergent and Divergent Thinking

Presentations:
A Review of Creative Theories
Assessing Creativity
Enhancing People’s Creativity

Day 7 (Tue, 1/11/22): How is Creativity Measured?
- Measuring the Creative Process
- The Torrance Test Insight Tests
- Examples of creative process assessments
- Measuring Creative Products
- How do we know if a product is creative?
- The Consensual Assessment Technique
- Examples of creative products

Presentations:
The Genetic Basis of Creativity
The Neuroscience of Creativity
Creative Cognition
Creativity and Cognitive Control

Day 8 (Wed, 1/12/22): The Creative Person
- The study of eminently creative individuals
- Everyday creativity
- The Historiometric approach to identifying creativity
- Trait-based theories of creativity

Presentations:
In the Mood for Creativity
Emotions and Creativity
Creativity and Mental Illness
Creativity and Healing
Day 9 (Thurs, 1/13/22): The Creative Environment

- Factors associated with organizations that foster creativity
- The context of creativity
- Creativity in the Classroom

Presentations:
Cultural Perspectives on Creativity
Eastern-Western Views of Creativity
The Creative City
Creativity’s Role in Schools
Improving Creativity in Organizational Settings

Day 10 (Fri, 1/14/22): Group Differences and Genetic Correlates of Creativity

- Genius, Madness, and Creativity
- Gender differences in creativity
- Ethnic/racial/cross-cultural differences in Creativity
  Genetic studies of creativity
- Neurological correlates of creativity

Presentations:
Individual and Group Creativity
Play and Creativity
Creativity and Malevolence
Creative Genius
Personality and Creativity

Final Project:
Take home project due via Moodle by Monday, January 17th, 2022