**PSYCHOLOGY 335**

**Psychology of Creativity and Innovation**

**Fall 2020**

Blackboard Course

**Instructor**: Kristi Liverette, Ph.D.

Kherndon@gmu.edu

202-246-6433

**Office Hours**: By appointment: meeting will be held on Zoom

**Course Description:**

Creativity enables us to see common elements in a new light, make new combinations from often-familiar information, create something new and appropriate, and to perceive analogies and other linkages in seemingly unlike elements. Creativity and innovation take place in many domains including: an entrepreneur starting a new venture, a research scientist making scientific breakthroughs, and an artist generating new visions and techniques. By the end of this course, students will be familiar with the scientific literature on the antecedents of creativity and innovation including emotions, cognitions, individual differences, and social contexts. They will be familiar with what psychologists know (and what they don’t) about the cognitive and social skills involved in the arts. Students will have had the opportunity to reflect on and experiment with ways to enhance their own creativity and innovation. And, students will explore creativity and innovation in various domains such as business, science, and the arts from the view of creativity and innovation as a psychological phenomenon.

**Prerequisite:** PSYC100 or permission of instructor

**Course Objectives and Questions:**

1. What is creativity?
2. What are the cognitive, social, developmental, contextual, cultural predictors of creativity?
3. How do we define and assess creativity in different fields?
4. What is known about the psychology of creativity in various domains including art, science, and business?
5. How can we implement strategies and findings about creativity into our lives?

**What to Expect in Class**

This class is not about memorizing information. It is about thinking, asking questions, and reading psychological papers that provide evidence that help us answer these questions. It is also about discussion. This is an interactive, discussion-based course. This will look very different this semester with everything being online so we will work together as we go along. Participation in the discussion boards are crucial for the success of the course, and for your learning experience. Reading is expected to be completed before the date for that topic. **Participation in discussion boards is mandatory**.

I expect you to complete the readings for each lecture (posted every Tuesday) and watch any assigned videos **prior to participating in discussion boards (posted Wednesday)**. I will post a new lecture every Tuesday and will post a discussion board for that lecture on Wednesday. I expect everyone to particpate in the discussion board and create new threads within that discussion board.

**Official Communications via GMU E-mail**: Mason uses electronic mail to provide official information to students. Examples include communications from course instructors, notices from the library, notices about academic standing, financial aid information, class materials, assignments, questions, and instructor feedback. Students are responsible for the content of university communication sent to their Mason e-mail account and are required to activate that account and check it regularly.

**Accommodations:** Disability Statement: If you are a student with a disability and you need academic accommodations, please see me and contact the Disability Resource Services (DRS) at 703-993-2474.

**Required Course Materials:**

* Sawyer, R. K. (2012) *Explaining Creativity: The Science of Human Innovation* (second edition). New York: Oxford University Press.
* Kaufman, J. *Creativity 101*. ISBN-13: 978-0826106254
* Various articles/ videos posted on Blackboard

**Assignments/ Requirements: (Please see end of syllabus for full assignment descriptions)**

* Discussion Boards (20%)
* Looking Assignment (10%)
* Two Reading Responses (7.5% each)
* Guest Lecture Responses (10% each)
* Case Study (15%)
* Final Presentation and Journal Paper (30%)

**Grading:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Grade** | **Percentage** | **Quality Points** | **Graduate Courses** |
| A+ | 97-100 | 4.00 | Satisfactory/Passing |
| A | 93-96.99 | 4.00 | Satisfactory/Passing |
| A- | 90-92.99 | 3.67 | Satisfactory/Passing |
| B+ | 87-89.99 | 3.33 | Satisfactory/Passing |
| B | 83-86.99 | 3.00 | Satisfactory/Passing |
| B- | 80-82.99 | 2.67 | Satisfactory\*/Passing |
| C | 70-79.99 | 2.00 | Unsatisfactory/Passing |
| F | Under 70 | 0.00 | Unsatisfactory/Failing |

*Make up/ Extension Policy*: Extensions on assignments will not be granted lightly, and will be reserved for serious, documented problems and must be requested BEFORE the due date. Grades will be lowered if no extension has been previously granted. There is no extension without previous approval, by me, in writing. When you request an extension, I will ask to see everything you have prepared for the assignment up to that point, to ensure that you are not simply requesting an extension because you had not yet begun the assignment!

**Academic Integrity:**

**Honor Code:** George Mason University has an Honor Code, which requires all members of this community to maintain the highest standards of academic honesty and integrity. Cheating, plagiarism, lying, and stealing are all prohibited. It is every student’s responsibility to familiarize himself or herself with the Honor Code.

* All violations of the Honor Code will be reported to the Honor Committee.
* See [honorcode.gmu.edu](http://honorcode.gmu.edu/) for more detailed information.

*What is Plagiarism*? ***Plagiarism*** (*v.*) is the act of taking undeserved or unwarranted credit for something. ***Plagiarism*** (*n.*) is something represented in a plagiaristic fashion.

*Severe plagiarism* (a.k.a. “copying”) is the most overt and deceptive form of plagiarism. This involves deliberately misrepresenting all or part of another person’s work as one’s own. For example, a student might turn in a paper written by another student in a previous term. Another common example is writing containing chunks of “copy-and-paste” from published articles or internet sources such as Wikipedia. Papers copied from the internet are typically obviously copied, and can be located on the internet with a simple Google search.

*Irresponsible plagiarism* (a.k.a. “omission”) is the act of paraphrasing or quoting from a source, without giving credit to the source. The author does not necessarily explicitly take credit for the idea or materials (but this is nevertheless implied). Please be aware that not only do ideas need to be cited, but they should also be stated *in your own words*.

*Self-plagiarism* (a.k.a. “recycling”) is the act of representing one’s own previous ideas or materials as new and original. For example, a student might turn in all or part of the same paper for more than one course. This may not seem as bad as stealing another person’s work, but it is *deceptive*, and therefore unacceptable.

*Should I Plagiarize*? You should absolutely not plagiarize. You will be caught and there will be severe consequences.

Sometimes students tell me that they do not know what constitutes plagiarism. All students should go to http://www.indiana.edu/~wts/pamphlets/plagiarism.shtml and read this site carefully. Clear examples are provided about the difference between using a secondary source correctly and plagiarizing from it.

**It is very easy to discover Internet plagiarism by typing in a few words of the plagiarized paper into Google.** **If a student is suspected of academic dishonesty, the matter will be turned over to the Committee on Academic Integrity. Students who violate academic integrity will receive an F in the course, and the Committee on Academic Integrity may determine other more serious consequences.** **I have an extremely strict policy on plagiarism. So please remember, it is never worth it!**

**Blackboard:**

I will post notes, resources, grades, and announcements on Blackboard. You should frequently check Blackboard because you will be responsible for the material posted. Additionally, all assignments will be turned in through Blackboard.

**General classroom management:**

* It goes without saying that we are all adults and behavior that shows respect for yourselves, your classmates, and the educational process is expected.
* We will be using our discussion boards as our classroom so please be respectful to everyone and do not post inappropriate material.
* The instructor reserves the right to change the syllabus if necessary.
* In the event that the instructor wishes to disseminate information to the entire class outside of the classroom, an email will be sent to all students’ GMU email addresses. It is the students’ responsibility to regularly check email at this address. There may be announcements regarding assignments or lecture that would be a good idea for you to see.

**Important dates for GMU:**

* Last day to Add classes/ drop with no tuition penalty: Tuesday, September 8, 2020
* Last Day to Drop (50% tuition penalty): Tuesday, September 15, 2020
* Selective Withdrawal period: Wednesday, September 29, 2020

**COURSE SCHEDULE (Subject to change)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Week** | **Day/Date** | **Topic** | **Notes** |
| **Creativity: The Basics** | | | |
| 1 | Tues 8/25 | Introduction/Syllabus |  |
| 2 | Tues 9/1 | What do **you** think creativity is?  Attitudes you bring to the study of creativity and the arts |  |
| 3 | Tues 9/8 | Defining Creativity: ProC, BigC, little-c, mini-c  Theories of Creativity |  |
| 4 | Tues 9/15 | Measuring Cognitive Creativity  Measuring Non-Cognitive Creativity |  |
| 5 | Tues 9/22 | Creativity, Biology, and the Brain |  |
| 6 | Tues 9/29 | *Guest Lecture: TBD* |  |
| **Creative People** | | | |
| 7 | Tues 10/6 | Personality  Genius and Madness |  |
| 8 | Tues 10/13 | Creativity, Imagination, and Play  Prodigies, Giftedness, and Practice |  |
| **Creative Groups** | | | |
| 9 | Tues 10/20 | Culture, Creativity, and Art  Group Improvisation: Jazz and Theatre as Case Studies |  |
| 10 | Tues 10/27 | Business, Organization and Leadership Creativity | **Case Study Topics Due** |
| 11 | Tues 11/3 | *Guest Lecture: Creativity in Starting a Business* |  |
| 12 | Tues 11/10 | The Dark Side of Creativity: Terrorism, Horror, etc |  |
| **Creativity Within Domains** | | | |
| 13 | Tues 11/17 | Science  Visual Art | **Final Topic Approval Due**  **Looking/Listening Assignment Due** |
| 14 | Tues 11/24 | Music  Theatre |  |
| 15 | Tues 12/1 | Creative Show and Tell! | **Final Journal Source Articles Due** |
| 16 | Dec 9 | Final Presentations Due | **Final Journal Due** |

**Assigned Readings for Each Day, Articles for Responses**

***Tues 8/25: Introduction/ Syllabus***

* Syllabus

***Tues 9/1: What do*** you ***think Creativity is?***

* No Readings

***Attitudes you bring to the study of creativity and the arts***

* TED Talks: (Links on Blackboard)

1. Elizabeth Gilbert- Your Elusive Creative Genius
2. Amy Tan- Where does Creativity Hide?
3. Daniel Pink – The Trouble with Motivation
4. Ken Robinson- Do Schools Kill Creativity?

***Tues 9/8: Defining Creativity: ProC, BigC, little-c, mini-c***

* Creativity 101, Introduction and Chapter 1

***Theories of Creativity***

* Creativity 101, Chapter 2 and 3

***Tues 9/15: Measuring Cognitive Creativity***

* Creativity 101, Chapter 4

***Measuring Non-Cognitive Creativity***

* Explaining Creativity, Chapter 3

***Tues 9/22: Creativity, Biology, and the Brain***

* Explaining Creativity, Ch 9 and 10

***Tues 9/29: Guest Lecture:***

* Posted on Blackboard: *TBD*

***Tues 10/6: Personality***

* Creativity 101, Chapter 5 and 6

***Genius and Madness***

* Creativity 101, Chapter 7 and 8

*Readings for a Possible Response Paper:*

* 1. Treffert, D., & Wallace, G. (2002). Islands of genius. *Scientific American, 286*, 6, 69.
  2. Miller, L.K. The “Savant Syndrome:” Exceptional skill and mental retardation. In N. Colangelo, S.G.Assouline, & D.L. Ambroson (Eds.), *Talent Development, Vol II: Proceedings from the 1993 Henry b. and Jocelyn Wallace National Research Symposium on Talent Development* (pp. 214-237). Dayton, Ohio: Ohio Psychology Press.
  3. Ludwig, A. (1992). Creative achievement and psychopathology: Comparison among professions. *American Journal of Psychotherapy, 46*, 3, 330-356.
  4. Kyaga, S. et al. (2013). Mental illness, suicide and creativity: 40-year prospective total population study. *Journal of Psychiatric Research*, *47 (1):* 83-90.

***Tues 10/13: Creativity, Imagination, and Play***

* Explaining Creativity pgs 68-77

*Readings for a Possible Response Paper:*

1. Russ, S. W. (2016). Pretend play: Antecedent of adult creativity. *New directions for child and adolescent development*, *2016*(151), 21-32.
2. Taylor, M., Carlson, S. M., Maring, B. L., Gerow, L., & Charley, C. M. (2004). The characteristics and correlates of fantasy in school-age children: imaginary companions, impersonation, and social understanding. *Developmental Psychology*, *40*(6), 1173.
3. Mullineaux, P. Y., & Dilalla, L. F. (2009). Preschool pretend play behaviors and early adolescent creativity. *The Journal of Creative Behavior*, *43*(1), 41-57.

***Prodigies, Giftedness, and Practice***

* BLACKBOARD: *Why few child prodigies grow up to be geniuses (http://www.straitstimes.com/opinion/why-few-child-prodigies-grow-up-to-be-geniuses)*
* BLACKBOARD: Can you learn to be a genius? (<https://www.theguardian.com/books/2000/apr/22/books.guardianreview1>)

*Readings for a Possible Response Paper:*

* 1. Sloane, K., & Sosniak, L. (1985). The development of accomplished sculptors. In B. Bloom Ed.), *Developing talent in young people* (pp. 90-138). New York: Ballantine Books.
  2. Goldsmith, L.T. (1992). Stylistic development of a Chinese painting prodigy. *Creativity Research Journal, 5,* 3, 281-293.
  3. Ericsson, K.A., Krampe, R., Tesch-Romer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review, 100*, 363-406.
  4. Ackerman, P.L., Nonsense, common sense, and science of expert performance: Talent and individual differences. I*ntelligence* (2013), <http://dx.doi.org/10.1016/j.intell.2013.04.009>

***Tues 10/20: Culture, Creativity, and Art***

* Explaining Creativity, Chapter 14

*Readings for a Possible Response Paper:*

* 1. Masuda, T., Gonzalez, R., Kwan, L., & Nisbett, R. (2008). Culture and aesthetic preference: Comparing the attention to context of East Asians and Americans. *Personality and Social Psychology Bulletin, 34*, 9, 1260-1275.
  2. Silver, H. (1983). Foreign art and Asante aesthetics. *African Arts, 16*, 3 64-67, 79-80.

***Group Improvisation: Jazz and Theatre as Case Studies***

* BLACKBOARD: *Jamming in Jazz and Improv Theatre, Keith Sawyer*

***Tues 10/27: Business, Organization and Leadership Creativity***

* ***Case Study Topics Due on Blackboard***
* Creativity 101, Chapters 9-10

*Readings for a Possible Response Paper:*

1. Woodman, R. W., Sawyer, J. E., & Griffin, R. W. (1993). Toward a theory of organizational creativity. *Academy of management review*, *18*(2), 293-321.
2. Sawyer, R. K., & DeZutter, S. (2009). Distributed creativity: How collective creations emerge from collaboration. *Psychology of Aesthetics, Creativity, and the Arts*, *3*(2), 81.

***Tues 11/3: Guest Lecture:*** Creativity in Starting a Business

***Tues 11/10: The Dark Side of Creativity: Terrorism, Horror, etc***

* Creativity 101, Chapter 12

***Tues 11/17: Science***

* Explaining Creativity, Chapter 20

***Visual Art***

* Explaining Creativity, Chapter 16
* ***Looking/Listening Assignment due***

***Tues 11/24: Music***

* Explaining Creativity, Chapter 18

*Readings for a Possible Response Paper:*

1. Schellenberg, G. (2004). Music lessons enhance IQ. *Psychological Science,* 15, 8, 511-514.
2. Kirschner, S., & Tomasello, M. (2010). Joint music making promotes prosocial behavior in 4-year-old children. *Evolution and Human Behavior*, *31*(5), 354-364.
3. Cross, I. (2001). Music, cognition, culture, and evolution. *Annals of the New York Academy of sciences*, *930*(1), 28-42.

***Theatre***

* Explaining Creativity, Chapter 19

***Thurs 12/1:*** ***Creative Show and Tell!***

* No Readings

***Dec 9: Final Presentations Due***

* No Readings

**ASSIGNMENTS**

**Discussion Boards (10%)**

Class discussions on the readings play a critical role in your success in the course. Since we are unable to meet in person, we will be using discussion boards as our classroom for this semester. Effective comments in our discussion board may integrate material from this and other courses, draw on real-world experiences and observations, address questions raised by others, or pose new questions to the class. High quality participation involves knowing when to start a new thread for a topic and providing high quality content. Take the time to think about how your comments will be received; comments that are vague, repetitive, unrelated to the current topic, or without sufficient foundation are distracting and do not move forward the discussion. *Those that are insensitive to other students in the class or are framed as personal attacks are unacceptable under any circumstances.* Below are the criteria for assessment.

Strong Contributor: Contributions in discussion boards reflect thorough preparation. Ideas offered are substantive and provide good insights as well as direction for the class. Challenges are well substantiated and are persuasively presented in a respectful manner. If the strong contributor person were not a member of the class, the quality of discussion would be diminished considerably.

Adequate Contributor: Contributions in class reflect satisfactory preparation. Ideas offered are sometimes substantive, provide generally useful insights but seldom offer a new direction for the discussion. Challenges are sometimes presented, fairly well substantiated and are sometimes persuasive. If the adequate contributor were not a member of the class, the quality of discussion would be somewhat diminished.

Minimal Contributor: Contributions in class reflect minimal preparation. Ideas offered are occasionally but rarely substantive, and offer repetitive or obvious insights. Challenges are rarely presented, or are not persuasive if presented. If the minimal contributor were not a member of the class, the quality of discussion would diminish only slightly.

Non-Participant: The non-participant says little or nothing in class. Hence, there is not an adequate basis for evaluation. If this person were not a member of the class, the quality of discussion would not be changed.

Unsatisfactory Contributor: Contributions in class reflect inadequate preparation. Ideas offered are seldom substantive, provide few if any insights and are often tangential and off track. Comments are insensitive to other students in the class. If this person were not a member of the class, valuable time would be saved and the comfort level of the class would be elevated.

**Looking Assignment (10%)**

**Timeline notes pages plus 2 page summary (double spaced, 12 pt font, 1 inch margins), DUE: Nov 17**

*Readings that may help with this assignment*

* Cutting, J. (2003). Gustave Caillebotte, French Impressionism, and mere exposure. *Psychonomic Bulletin & Review*, *10,* 2, 319-343.
* Meskin, A., Phelen, M., Moore, M., & Kieran, M. (2013). Mere exposure to bad art. *British Journal of Aesthetics, 53,* 2, 139–164.

Find a work of visual art (preferred), or an object that is purposefully *designed*, and look at it for one full hour. You must look at an actual painting or object, physically in the world, not at an image of a painting online or a poster print. If you have questions as to whether your work of art or object is acceptable, please email me. Put away your phone, and go alone (or with someone you will not discuss this process with). Take notes as you look, documenting what you see (and when you see it), how your experience changes over time, whether you come to like it more or less. Document your time as you write. Include a picture of the work of art at the end of your paper (you can find it online, or photograph it if allowed). You are handing in both a timeline of your thought process as you went through the one hour, and a two page summary of the whole experience- how did it make you think about creativity, about art, about the artist, or the process?

**Two** **Article Reading Responses (7.5% EACH)**

**2 page each, double spaced, 12 pt font, 1in margins, due on your schedule throughout the semester (you must hand in two total, due the day of the topic, at 3pm on blackboard)**

For many of the topics on the syllabus, beyond the required readings from the textbooks, there are a number of empirical and scientific articles that you **could** read. Pick one of these articles, and write a two-page response. The response should include no more than 1 paragraph about the study itself (no need to summarize the paper, I’ve read it). Instead, your 2 pages should:

* Point out a criticism of one or more of the studies AND/OR
* Suggest an alternative explanation for the results of one of the studies AND/OR
* Suggest a new study that might follow from one of the studies.

**Guest Lecture Responses (10%)**

**2 pages each, double spaced, 12 pt font, 1in margins, due, due within 48 hours after the lecture, at 3pm on blackboard.**

* Write a two page response to the guest lecture
* Include a short discussion of the reading for the lecture, your response to the lecture itself, and how the lecture relates back to at least one of the readings we’ve read for class

**Midterm Presentation: Case Studies (15%)**

**10 minutes, DUE: October 20**

**Topic approval DUE: October 6**

Pick a work of art, theatre, dance, or music, a business, or a person. Create a 10 minute presentation on this work of art, person, business, product, etc. Think about and answer some or all of these questions in your presentation (depending on your “case”, some of these questions and outcomes may be more or less appropriate).

Why is this creative? Is it social or individual in its creation? What kind of creativity (Big, Pro, Mini, etc) does it involve? Does it involve elements of improvisation? In what way? Does it involve talent, or practice, or both?

Give a 10 minute presentation on the work of art/ artist/ business/ person, using the framing and discussions we’ve had so far. You do not have to focus on something big (e.g. Apple, Uber, Picasso, Mozart). Feel free to pick smaller or less known groups and work. Remember that you can probably only spend 1-2 minutes describing the case itself before going into the questions regarding its creativity. This is supposed to be fun so get creative with your presentation.

**Final Journal and Presentation- 30% (15% paper, 15% presentation)**

Pick a topic that you would like to explore further from all of the weeks of the syllabus. Once approved (due date for approval is 11/17) you will write a 7 page journal, and create a 5 minute presentation. The format of both of these is relatively flexible and open, there are only a few requirements.

For the “journal” paper, you must include

1. the literature behind this phenomenon (2-3 pages)
2. your personal relationship with it (1-2 pages)
3. open questions, and how it might be studied in the future (2-3 pages)

Remember that this is a class on the psychology of creativity, so relate your final journal back to the issues and ideas we’ve discussed throughout the semester.

For the presentation, this can be:

1. Submitted on blackboard via link at the beginning of the finals hour.
2. It can be a film of you presenting, TEDTalk style, classroom presentation style, or something more creative. However, the point of the presentation is to present your paper
   1. 1-2 minutes on literature review
   2. 1-2 minutes on your personal relationship with it
   3. 1-2 minutes on open questions and how it might be studied in the future

Both the talk and the paper will be graded. Congratulations! You’ve read this far in the syllabus. Please send me (kherndon@gmu.edu) a favorite picture of a slow loris for a point of extra credit. This must be done by the beginning of class, Aug 25, to count for 1 extra credit point. To build the literature review, find 3 journal articles addressing the topic (not newspaper or magazine, psychology empirical journal, peer reviewed). Your three additional articles can include the supplemental reading(s) assigned for that topic, if there are any assigned (due date for article approval is two weeks before the final is due).