**PSYCHOLOGY 335**

**Psychology of Creativity and Innovation**

**Fall, 2021**

**Krug Hall 5**

**Instructor**: Thalia R. Goldstein, Ph.D.

 tgoldste@gmu.edu

703-993-6460

 Department of Psychology

David King Hall 3055

**Office Hours**: Tuesdays/ Thursdays, 1:30-3pm. Appointments highly recommended. It is unlikely that I’ll be able to see you for very long via walk in. Zoom appointments also available outside of these times.

**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: 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 we 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. Class participation online and synchronously is crucial for the success of the course, and for your learning experience. Reading is expected to be completed before the date for that topic.

I expect you to complete the readings for each class and watch any assigned videos **prior to coming to class** and to come prepared to comment on the readings. I will call on students randomly, so be prepared. Why do I do this? Because it is important to learn the skill of being informed and being able to speak up. And it is also OK to say “I don’t know.” Your participation grade will not be deducted for answering that you’re not sure or don’t know.

**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.

**Class Cancellation Policy**: This class will entail frequent use of email, blackboard, PowerPoint, etc. Please check blackboard and your email regularly. If class is cancelled, I will notify you by email/blackboard and how we will make the time up.

**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*. 2nd Edition ISBN-13: 978-0826106254 ($29.75 new on amazon)
* Various articles/ videos posted on Blackboard

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

* Participation (10%)
* Two Quizzes (5% each)
* Article Reading Response (15%)
* Midterm case study presentation/podcast (25%)
* Final UnEssay Proposal (5%)
* Final UnEssay Project (35%)

**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 will be granted, but you need to talk to me. We are in the middle of multiple, systemic crises, and I understand that we are all doing the best that we can. However, if you don’t communicate with me, I can’t help you! I want you to produce for me the best work that you can.**

**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:**

Everything except Thursday synchronous sessions will happen on Blackboard. I will post notes, resources, grades, lectures, 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.
* Please turn cell phones OFF during class. Not vibrate, off. I know it’s really easy to look at cell phones when cameras are off or videos are on the face only, but you simply won’t get as much out of this class if you are checking your phone.
* Courtesy is expected. Come to class on time and stay for the entire session. If you have an emergency and must come in late or early, please do so quietly.
* 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. It would be wise to check email the morning of class. 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: Aug 30

Last day to drop: Sept 7

Unrestricted Withdrawal Ends: Sept 27

Monday is Tuesday: Oct 12

**SUMMARY COURSE SCHEDULE**

**Guests**: \*Order/ timing of guests lectures to change (and therefore shift other topic weeks)\*

|  |  |  |  |
| --- | --- | --- | --- |
| **Week** | **Day/Date** | **Topic** | **Notes** |
| **Creativity: The Basics** |
| 1 | Aug 24 & 26 | What do **you** think creativity is? Attitudes you bring to the study of creativity and the arts.  |  |
| 2 | Aug 31 & Sept 2 | Defining and Theorizing Creativity |  |
| 3 | Sept 7 & 9 | Measuring Creativity  |  |
| 4 | Sept 14 & 16  | Creativity, Biology, and the Brain | Quiz #1: September 16 |
| **Creative People** |
| 5 | Sept 21 & 23 | Personality, Genius, and Madness |  |
| 6 | Sept 28 & 30 | Childhood: Imagination, Play, Prodigies, Practice | Midterm Topic Approval Due October 1, 9am |
| **Creative Groups** |
| 7 | Oct 5 & 7 | Culture and Cultural Appropriation  |  |
| 8 | Oct 14  | **Midterm case study presentations** |  |
| 9 | Oct 19 & 21 | *Guest Lectures\*\** |  |
| 10 | Oct 26 & 28 | Business, Organizations and Leadership | Quiz #2– October 26 |
| **Creativity Within Domains** |
| 11 | Nov 2 & 4  | The Dark Side of Creativity |  |
| 12 | Nov 9 & 11 | Science |  |
| 13 | Nov 16 & 18 | Music and Visual Art  | Topic approval for Final UnEssay due Nov 19, 9am.  |
| 14 | Nov 23 | Theatre and Dance | Final Date for Article Reading Response- Nov 23 |
| 15 | Nov 30 & Dec 2 | Wrap up & Show and Tell  |  |
| **FINAL** | **THURS DEC 9** | ***FINAL EXAM DUE/ TIME*** | **1:30pm** |

**Assigned Readings for Each Day**

Aug 24: No readings

Aug 26: ***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?

Aug 31: ***Defining Creativity: ProC, BigC, little-c, mini-c***

* Read through the syllabus, bring in any questions
* Creativity 101, Introduction and Chapter 1

Sept 2: ***Theories of Creativity***

* Creativity 101, Chapter 2

Sept 7: ***Measuring Cognitive Creativity***

* Creativity 101, Chapter 4

Sept 9: ***Measuring Non-Cognitive Creativity***

* Explaining Creativity, Chapter 3

Sept 14: ***Creativity, Biology, and the Brain***

* Explaining Creativity, Ch 9

Sept 16: ***Creativity, Biology, and the Brain***

* Explaining Creativity, Ch 10

Sept 21: ***Personality***

* Creativity 101, Chapter 5 and 6

Sept 23: ***Genius and Madness***

* Creativity 101, Chapter 7 and 8

Sept 28: ***Creativity, Imagination, and Play***

* Explaining Creativity “The creative LifeSpan” pgs 68-77

Sept 30: ***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>)

Oct 5: ***Culture, Creativity, and Art***

* Explaining Creativity, Chapter 14
* Blackboard:Ted Talk and Performance:
* https://www.ted.com/talks/kafari\_jake\_hoffman\_bones\_and\_banjo\_confronting\_cultural\_appropriation

Oct 7: ***Culture, Creativity, and Art***

* Blackboard: How did Rock Music get so white?
* <https://www.rnz.co.nz/national/programmes/afternoons/audio/201819388/how-did-rock-music-get-so-white>
	+ Blackboard:Look at the Creative Equity Tool Kit resources

**Oct 14: MIDTERM CASE STUDY PRESENTATIONS**

**Oct 19 & 21: GUEST LECTURES**

* + **Readings TBD on Blackboard**

**Oct 26: Groups and Organizations**

* + Creativity 101, Chapter 9

**October 28: Groups Organizations**

* + Creativity 101, Chapter 10

**Nov 2: The Dark Side of Creativity**

* + Creativity 101, Chapter 12

**Nov 4 –The Dark Side of Creativity**

* + Benign Masochism Reading TBD

**Nov 9 & 11 – Science**

* + Explaining Creativity Chapter 20

**Nov 16 Music**

* + Explaining Creativity Ch 18

**November 18- Visual Art**

* Explaining Creativity Ch 16

**Nov 23- Theatre and Dance**

* Explaining Creativity, Chapter 19

**Nov 30 & Dec 2: Wrap up/ show and tell**

**ASSIGNMENTS**

* Participation (10%)
* Two Quizzes (5% each)
* Article Reading Response (15%)
* Midterm case study presentation (25%)
* Final UnEssay Proposal (5%)
* Final UnEssay Project (35%)

**Participation (10%)**

Class discussions on the readings play a critical role in your success in the course. Effective class comments 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. 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 on discussion board 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 on discussion board 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 on discussion board 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 or on discussion board. 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/ on discussion board 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.

**Article Reading Response (15%)**

*APA Formatting, 2 pages, double spaced, 12 pt font, 1in margins*

For every single of topic on the syllabus, beyond the required readings from the textbooks, there are a number of empirical and scientific articles that you **could** read. All of the work we read about in class has scientific investigation behind it. I’ve listed some of the articles below. Pick one of these articles, and write a two-page response. The response should include 1 paragraph about the study itself which gives the main question of the article, and the main finding of the article (no need to summarize the paper more than 1 paragraph, I’ve read it). Instead, the rest of 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.

The articles refer to various weeks throughout the semester. Feel free to submit your response in the week of your choosing, since you’ll already be thinking about the topic. However, no papers will be accepted after November 23rd at 5pm. Note that you have to find the original article yourself. Part of the assignment is locating the resource.

Article choices (choose ***one***!)

* 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>
* Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. (1996). Assessing the work environment for creativity. *Academy of management journal*, *39*(5), 1154-1184.
* Christensen, J. F., Gomila, A., Gaigg, S. B., Sivarajah, N., & Calvo-Merino, B. (2016). Dance expertise modulates behavioral and psychophysiological responses to affective body movement. *Journal of Experimental Psychology: Human Perception and Performance*, *42*(8), 1139.
* Djikic, M., & Oatley, K. (2014). The art in fiction: From indirect communication to changes of the self. *Psychology of Aesthetics, Creativity, and the Arts*, *8*(4), 498.
* Drake, J. E., & Winner, E. (2018). Extreme drawing realism in childhood. *Roeper Review*, *40*(4), 222-233.
* Hass, R. W., Katz-Buonincontro, J., & Reiter-Palmon, R. (2016). Disentangling creative mindsets from creative self-efficacy and creative identity: Do people hold fixed and growth theories of creativity?. *Psychology of Aesthetics, Creativity, and the Arts*, *10*(4), 436.
* Kirschner, S., & Tomasello, M. (2010). Joint music making promotes prosocial behavior in 4-year-old children. *Evolution and Human Behavior*, *31*(5), 354-364.
* Kyaga, S. et al. (2013). Mental illness, suicide and creativity: 40-year prospective total population study. *Journal of Psychiatric Research*, *47 (1):* 83-90.
* 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.
* Orkibi, H. (2012). A field training model for creative arts therapies: Report from a 3-year program evaluation. *Art Therapy*, *29*(4), 174-179.
* Pring, L., Ryder, N., Crane, L., & Hermelin, B. (2012). Creativity in savant artists with autism. *Autism*, *16*(1), 45-57.
* Russ, S. W., Robins, A. L., & Christiano, B. A. (1999). Pretend play: Longitudinal prediction of creativity and affect in fantasy in children. *Creativity Research Journal*, *12*(2), 129-139.
* 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.
* Schellenberg, G. (2004). Music lessons enhance IQ. *Psychological Science,* 15, 8, 511-514.
* Simonton, D. K. (2019). Creativity and psychopathology: The tenacious mad-genius controversy updated. *Current Opinion in Behavioral Sciences*, *27*, 17-21.
* Smith, L. F., Smith, J. K., & Tinio, P. P. (2017). Time spent viewing art and reading labels. *Psychology of Aesthetics, Creativity, and the Arts*, *11*(1), 77.
* Snyder, H. T., Hammond, J. A., Grohman, M. G., & Katz-Buonincontro, J. (2019). Creativity measurement in undergraduate students from 1984–2013: A systematic review. *Psychology of Aesthetics, Creativity, and the Arts*, *13*(2), 133.
* Tinio, P. P. (2013). From artistic creation to aesthetic reception: The mirror model of art. *Psychology of Aesthetics, Creativity, and the Arts*, *7*(3), 265.
* Tolkamp, G., Vriend, T., Verwaeren, B., & Reiter-Palmon, R. (2020). Disentangling the Creative Process: Differential Predictions of Radical and Incremental Creativity. In *Academy of Management Proceedings* (Vol. 2020, No. 1, p. 19325). Briarcliff Manor, NY 10510: Academy of Management.
* Vartanian, O., & Goel, V. (2004). Neuroanatomical correlates of aesthetic preference for paintings. *Neuroreport*, *15*(5), 893-897.
* Vartanian, O., Navarrete, G., Chatterjee, A., Fich, L. B., Leder, H., Modroño, C., ... & Skov, M. (2013). Impact of contour on aesthetic judgments and approach-avoidance decisions in architecture. *Proceedings of the National Academy of Sciences*, *110*(Supplement 2), 10446-10453.
* Winner, E. (2000). Giftedness: Current theory and research. *Current directions in psychological science*, *9*(5), 153-156.
* Winner, E., & Drake, J. E. (2013). The rage to master: The decisive role of talent in the visual arts. *The complexity of greatness: Beyond talent or practice*, 333-366.

Essays will be scored on:

* 2% - APA formatting, spelling, grammar, general readability, 2 pages long, give or take a few lines
* 3% - 1 paragraph on the paper itself, summarizing the main points, methods, and findings
* 5% - Thoughtfulness of explained critique, alternative, or new study
* 5% - Thoroughness of explained critique, alternative, or new study

/2 - APA formatting, spelling, grammar, general readability, 2 pages long, give or take a few lines

/3 - 1 paragraph on the paper itself, summarizing the main points, methods, and findings

/5 - Thoughtfulness of explained critique, alternative, or new study

/5 - Thoroughness of explained critique, alternative, or new study

**Midterm Group Presentation: Case Studies (25%)**

*October 14, in class*

*Topic Approval Due October 1 at 9am*

In small groups (assigned on Blackboard), 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). Give a 10 minute presentation on the work of art/ artist/ business/ person, using the framing and discussions we’ve had so far.

**Remember that you can probably only spend 1-2 minutes describing the case itself before going into the questions regarding its creativity**. The presentation itself can be all by 1 person, or distributed, or something in between.

Think about the following questions: (Not every presentation can answer every question, but you should consider these questions when developing your presentation).

*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?*

*What are the cultural norms/ implications/levels of blending at work here?*

*Is it interpretive? Generative? Something in between?*

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. Groups will be given a chance to evaluate their own work, and workload distribution, which I will take into account when grading. I will also ask you to submit a group work form, to ensure equal contribution. You must get topic approval by me ahead of time, by October 1. ALL MEMBERS OF THE GROUP MUST SUBMIT A TOPIC APPROVAL (can be the same exact sentence).

**Final UnEssay – 35%, Due Thursday December 9th at 1:30pm**

**Topic approval for Final UnEssay due Nov 19, 9am (5%)**

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 November 19th) you will create an “UnEssay”. What’s an “UnEssay? glad you asked!

An UnEssay is meant to provide the student with a capstone or final project feel, and will take as much work as a traditional, 10 page, empirically based literature review (which, you’re welcome to turn in instead of the unessay), but the format of showing me what you’ve learned thought about, or engaged in over the course of the semester is much more free. Consider your strengths, talents, and skills and think about how to apply them.

**Before November 19th, at 9am, you have to write a 1 page proposal for the final, that includes**

* + The form your project will take (a script? A podcast? A painting?)
	+ A short description of what you will do, and how it will relate to content of the class
	+ A short description of how you will research/ expand beyond the material of the class.

This way we can make sure that you meet the assignment requirements.

Select a topic that interests you, related to course content, conduct research and then demonstrate your understanding of the topic in any manner that is meaningful to you.

If you’ve read this far in the syllabus before August 31 at 12pm, please email me (tgoldste @ gmu.edu) a picture of a chocolate cake, and receive 1 extra credit point.

Some examples include:

A board game

A magazine syle story

A watercolor painting, sculpture, photography series, dance, with artist explanation

A song

A play

A lesson plan for middle school students

An actual essay

A graphic novel prospectus

**Rubric**

|  |  |  |
| --- | --- | --- |
|  |  | Points (5 points each) |
| 1. **Polished and Complete Project**
 | Project contains no errors, grammatical or otherwise, is complete expression of ideas. |  |
| 1. **Effort Put Into Project**
 | Project shows effort equivalent to a 10 page traditional essay, with depth and breadth of thinking and application |  |
| 1. **Creativity, and Innovation of the Project**
 | Project is creative or innovative in some way, coming to a new conclusion or expression of ideas that is new and useful to the question at hand |  |
| 1. **Relevance to Psychology of Creativity**
 | Project is clearly related to ideas and elements of the coursework, literature from textbook or articles, lectures, and the psychology of creativity  |  |
| 1. **Connection to Empirical Literature and Elements of the Class**
 | Project is clearly influenced and connected to empirical literature from the Psychology of Creativity, and scientific findings from the field.  |  |
| 1. **Depth of Thinking about Material from the Class**
 | Project shows depth of thinking about the material beyond preliminary findings and elements discussed in class- additional research and ideas clear |  |
| 1. **Application of Elements of the Class to the Project**
 | Project shows how material from Psychology of Creativity are applied to the project, expressed and explored through the project  |  |