

## Science and Society – Psychology of Creativity

Honors 204 Section 01

Spring 2012

Dumbach Room 4

Thurs 4:15 – 6:45p

Professor

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*...believing that the dots will connect down the road will give you the confidence to follow your heart even when it leads you off the well-worn path, and that will make all the difference.*

*Steve Jobs, CEO Apple Computer*

*The analysis of creativity in all its forms is beyond the competence of any one accepted discipline. It requires a consortium of talents: Psychologists, biologists, philosophers, computer scientists, artists, and poets would all expect to have their say. That “creativity is beyond analysis” is a romantic illusion we must now outgrow.*

Peter Medawar, Nobel Prize winning Immunologist

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## Description

During the last sixty years scientists have explored the personality traits, mental processes, and brain functions that allow people to exhibit creative behavior. In this course we will survey a variety of different theories of creativity drawing on cognitive, developmental, personality and social psychology and neuroscience. We will consider artistic, scientific and cultural creativity, making extensive use of reading and film to encounter creators and their products directly and through the minds of their students and scholars. Together we will reflect on our own creative processes via discussion and writing and engage in a group study of a living eminent creative individual here in Chicago.

## Goals

As a result of being a part of this learning community I hope that you will:

1. Develop a personal working definition of creativity and use it to evaluate creative production within a given domain and field.
2. Be able to describe several different ways that psychologists study the topic of creativity
3. Become more familiar with the creative personality
4. Describe sociocognitive mechanisms important for the success of the creative individual
5. Work better in groups to foster new ideas and approaches to problems
6. Be better able to take creativity communicate new information to groups of people

## Materials

The following books are required for the course and are available at the Loyola University Bookstore:

1. GARDNER: Gardner, H. (1993). *Creating minds: An anatomy of creativity seen through the lives of Freud, Einstein, Picasso, Stravinsky, Eliot, Graham, and Gandhi*. New York: Basic Books. – head of project zero at Harvard University, Gardner was the originator of a well known theory of multiple intelligences. Herein he takes us for a tour of personality and cognitive perspectives on several of the most creative individuals from human history.
2. ANDREASEN: Andreasen, N.C. (2005). *The creative brain: The science of genius*. London, UK: Penguin Books LTD. – Andreasen is a MD, PhD (English Literature) cognitive neuroscientist who has studied

creativity for nearly 40 years and was one of the first people to use modern methods to study the relation between mental illness and creativity. She provides an overview of (neuro)cognitive approaches to creativity, as well as one of the best introduction chapters to the brain that I've ever read.

3. Readings underlined on the course schedule will be available as PDF files on Blackboard. To logon go to: <https://blackboard.luc.edu/webapps/login/> or simply go to the luc.edu homepage, click on Resources>Technology and then Access 24/7>Blackboard and login in with your UNIVERSAL ID and PASSWORD.

### Assignments & Assessment

1. **Participation and Attendance (10pts).** I expect you to be in class (there will be a sign-up sheet and it is your responsibility to initial it whenever you are in class) and to actively participant while in class during class discussions, and in your group both in and out of class.
2. **What's Creative Blog (25pts).** A goal of the course is encourage you to open your eyes to creative discoveries and people all around you. A day almost never goes by when I am not struck by an amazing idea, invention, or discovery in the news. Find them and share them...what's creative? Why is it creative? Do other's in the field agree? What lead's the person to the discovery, invention, or idea? What principles from the course may have been in play in the discovery, or even it's reception in the public. This is your individual chance to share some or all of this with the world.

During the semester you will be responsible for making three posts and three comments on other's posts. Your posts may feature three different creative products or instead you may go in depth into one. Remember this is the psychology of creativity so you should focus not just on the product, but also the creators and their creative process. To help you stay on track I've put deadlines for the posts and comments on the course schedule.

To facilitate the sharing I have set up a real world (not Blackboard) blog: [whatscreativeluc.blogspot.com](http://whatscreativeluc.blogspot.com) You will receive an email at your luc.edu email account in the next week asking you to submit a non-luc.edu email (e.g., gmail, yahoo, hotmail). You will then receive a message at that email with an invitation to the blog. Please follow that link and set up your account. Always use this account to post to the blog.

Remember this is an open blog so invite your friends and family to visit the blog (you can invite using Facebook or Twitter if you like or just email them the URL). You can also use your browser or an RSS reader to subscribe.

To receive credit for your blog entries you must paste the URL of your post or comment to the assignment sheets under the blog heading in Blackboard. This must be done before midnight on the day indicated on the schedule. You will loose one grade for each day your post is late, so please make sure to post by the deadline.

3. **Great Mind Presentation (25pts).** We will be considering the lives of seven "great minds" discussed in the GARDNER book. These individuals (i.e., Freud (psychology), Einstein (physics), Picasso (visual art), Stravinsky (music), Elliot (literature), Graham (modern dance), and Gandhi (politics)) demonstrated "Big C" creativity in their various domains of work. As a part of the class you will work in groups of 4-5 students to consider one of these individuals in depth and help the class answer the question, *Why are we talking about this person in this class?* To answer this question your group would likely consider what this person did and why we consider it creative. You will also want to consider if there where particular things about this person's environment or thought processes that helped them to be creative. Your presentation should incorporate other course material and you should also look for additional material in the literature relevant to helping us understand what the person did and how. Given the multifaceted approach of Gardner to these individuals you will also want to consider the reaction of the field to this individual's life and work.

Your group will have 30-45 minutes on the day indicated on the course schedule to facilitate the classes' consideration of these issues. What should your group do to lead the class? That is entirely up to you! This is a course concerning creativity...so BE CREATIVE. DON'T BORE US! When planning, try to think of ways to make the learning experience interactive for the entire class. You may create a film, write a play or opera, make a music video, do a demonstration, lecture, lead a discussion, run an experiment, etc. Most

likely you will want to use a combination of these approaches to use your time effectively and keep it interesting.

Everyone in the group should be involved in creating the project, but you may have different roles to build on your individual strengths. I will ask that you hand in a brief description describing who did what on the day of your presentation. This should be signed by all of the group members.

4. **Real World Creativity Presentation (40pts)**. During the last two class sessions (including the final exam time) you will work in your same small group of students to make a class presentation on a notable creative person based here in Chicago. It is your group's responsibility to identify this individual, and have them agree to share their time and work with you (start looking for this person IMMEDIATELY and feel free to ask for suggestions). This person SHOULD NOT be a member of the Loyola community...reach outside into the great city of Chicago, home to many, many creative individuals. The person should have made some type of creative product (a new method of growing giant goose livers?) you can share with the class. Your study should be in on an individual. They can work in a group or some type of collaboration, but ultimately your story is about them and what they did (this is psychology after all). This person's creative product needs to be public as you will look for evidence of how it has been accepted in the field.

The intent of the project is to allow you as a group to try your hands at the methods of studying creativity we have been reading about, particularly in Gardner. As in the your Gardner presentation you will want to address what this person has done and why we should consider it creative as well as consider what factors contributed to this persons development as a creative individual. You have an advantage over Gardner, in that you are going to choose a living person who you can talk to. This is closer to the method used by Csikszentmihayli in his book, *Creativity: Flow and the psychology of discovery and invention* (I've put his interview questions on the course website). Your presentation should incorporate the foundational course material whenever applicable and also reach outside of the assigned course material where appropriate. Make sure to address the field's reaction to the work (and person) and try to help us understand that. What you do for your presentation is wide open, but it should be accessible and encourage engagement with the class just like your Gardner presentation...don't go out with a fizzle...give us a BANG!

## Expectations

1. Academic conduct: All students are expected to abide by the academic integrity policies outlined in the [Loyola University Undergraduate Studies Catalog](#) (e.g., online information at). Each individual student is expected to complete his/her work in the course in an honest and ethical manner. Furthermore, you may not submit a paper or assignment for this class that has already been submitted by you in another class. All forms of academic misconduct (including but not limited to cheating; plagiarism; tampering with materials, grades, or records; aiding in academic misconduct) will not be tolerated, and acts of cheating and plagiarism will be punishable by failure in the respective assignment/quiz. In addition, university policy states that instructors must report all forms of academic misconduct to their departmental chairperson. The chairperson is required to report all forms of academic misconduct to the dean's office, and all forms of academic misconduct are recorded. The administration may impose additional sanctions against the student including expulsion from the university. The consequences of academic misconduct go beyond the imposed sanctions. For example, consider the following process for application to medical or law school and how these schools would use records of academic misconduct in their decision to accept or reject applicants. As part of a general policy in the selection process, medical and law schools contact the administration at the applicant's undergraduate institution to inquire about instances of academic misconduct. Any record of academic misconduct on the part of the applicant is reported to the medical or law school, which would then likely translate into a rejection.
2. You are expected to attend every class and be prepared to discuss the assigned readings. Many of our class goals are dependent on your participation in in-class activities. Your success, as well as the success of your classmates is thus dependent on your presence and active participation. To enforce this expectation we will take attendance every day and this will be a part of your grade (see below). If you come to class more than 15 minutes late or leave more than 15 minutes early this will count as a half absence for that day.

Students who wish to observe their religious holidays need to notify me within the first two weeks of the semester of the date(s) when they will be absent so that course accommodations can be made. If you do not do this these absences will be recorded and counted towards your grade.

Student athletes are responsible for providing their travel schedule to me within the first two weeks of class or these absences will be recorded and counted towards your grade. You will be responsible for all work missed during your absence.

Extended absences from class because of severe illnesses or family or personal emergencies may keep students away from class for extended periods. Such situations will be resolved on a case-by-case basis. Students who are absent from a significant number of classes due to one of these causes may want to consider taking the course at another time.

3. A significant way you will be exposed to new information in this course is through regular reading assignments. Assigned readings must be read BEFORE the class for which they are assigned. As you read try to outline or concept map the information you are reading. Also write down questions you have about the material and questions based on the material you can ask each other.
4. Class participation and discussion are mandatory for all students. I expect you to participate verbally in class by asking and answering questions and contributing to discussion. I also expect you to participate in in-class activities including various group activities.
5. I also expect you to maintain respectful behavior towards all course members as consistent with the [Loyola Student Promise](http://www.luc.edu/judicial/thepromise.shtml) (<http://www.luc.edu/judicial/thepromise.shtml>). Please do not talk when others are speaking, or interrupt during discussion. Please consider other's perspectives and try to be constructive when providing feedback and critiques. **We will all (including the professor and TA) turn off our cell phones at the beginning of class. If your phone rings during class please gather your belongings and leave for the day. This will count as an absence.** Reading email or instant messaging on your phone or on a computer is also not appropriate during class. Please focus your attention on what is happening in class and not on things outside of class.
8. Late assignments and/or papers will be graded down according to the number of days that the paper is late, with the exception of unforeseen emergencies and extenuating circumstances with documentation and only at the discretion of the instructor. **There will be a deduction of 10% of the total possible points for each day that the paper or assignment is late (e.g., 10% point deduction if the paper is one day late, 20% point deduction if the paper is two days late, and so on).** Assignments are due at the beginning of class. Thus if you submit the assignment to Blackboard after class or later that day it will be considered 1 day late. Thus, please attempt to submit the assignment the night before class. PLEASE observe the deadlines for assignments and papers.
9. General e-mail policy: I reply to e- mails within 1 to 2 business days, with the exception of when I am away on university business. Typically I will check class email first thing in the morning and around 6p. Please make sure you spell my e-mail address correctly ([rmorrison@luc.edu](mailto:rmorrison@luc.edu)).
10. Students with disabilities who require accommodations for access and participation in this course must be registered with the Services for Students with Disabilities (SSWD) office. Please contact SSWD at 773-508-7714 (<http://www.luc.edu/sswd/index.shtml>), and see me immediately. All students with special needs are expected to fulfill all course requirements.

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**Grading.** Final Grades will be assigned as follows:

A:	93-100%
A-:	90-92.9%
B+:	87-89.9%
B:	83-86.9%
B-:	80-82.9%
C+:	77-79.9%
C:	73-76.9%
C-:	70-72.9%
D+:	67-69.9%
D:	60-66.9%
F:	less than 60%

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Week	Date	In Class	Readings*	Due
1	1/19	Course Introduction & Syllabus Introduction to methods in psychology <i>Latin Liver</i>	GARDNER Ch. 1 ANDREASEN Ch. 1	
2	1/26	What is Creativity and how can we measure it? Meet your group <i>Sketches of Frank Gehry</i>	GARDNER Ch. 2 ANDREASEN Ch. 2 <u>Kaufman &amp; Beghetto</u> <u>Sternberg et al</u> <u>Simonton</u>	
3	2/2	How are people creative? Group Time <i>Sketches of Frank Gehry</i>	<u>Smith &amp; Ward</u> <u>Ward</u> <u>Ward, Finke, &amp; Smith</u> <u>Gentner et al</u> <u>Weisberg</u>	Read Gardner Chapter for your group
4	2/9	The Brain and Creativity Group Time	ANDREASEN, Ch. 3 & 6, <u>vanSteenburgh et al.</u> <u>Sacks</u>	Blog: First Post
5	2/16	Creative Personality <i>Dog Town and Z-Boys</i>	<u>Csikszentmihalyi</u> <u>Barron &amp; Harrington</u> <u>Lubart &amp; Sternberg</u>	Blog: First Comment
6	2/23	Play <i>Tim Brown</i>	GARDNER Ch. 4 <u>Russ_etal</u> <u>Sawyer</u> <u>Melcher</u>	Great Mind: Einstein Final Project Topic Identified
7	3/1	Unconscious <i>Danielson Familie</i>	GARDNER Ch. 3 <u>Kris</u> <u>Cai et al.</u> <u>Zhong et al.</u>	Great Mind: Freud Blog: Second Post
8	3/8	SPRING BREAK NO CLASS		
9	3/15	Motivation	GARDNER Ch. 9 ANDREASEN Ch. 5 <u>Collins &amp; Amabile</u>	Great Mind: Gandhi Blog: Second Comment

\* Underlined readings to be available on Blackboard

Week	Date	In Class	Readings	Due
10	3/22	Collaboration <i>The Secret of Life</i>	GARDNER Ch. 8 <u>Uzzi &amp; Shapiro</u> Bennis Hagendoorn	Great Mind: Graham
11	3/29	Prodigies Group Time	GARDNER Ch. 5 Feldman Gladwell	Great Mind: Picasso Final Project Proposal Due
12	4/5	Mental Illness <i>A Beautiful Mind</i>	GARDNER Ch. 7 ANDREASEN, Ch. 4 Russ <u>Kaufman &amp; Baer</u> Keri	Great Mind: Eliot Blog: Third Post
13	4/12	Culture Group Check-In on Final Projects	GARDNER Ch. 6 <u>Lubart</u> Raina Krumhansl and Lerdahl	Great Mind: Stravinsky Blog: Third Comment
14	4/19	Group Time & Wrap Up	GARDNER Ch. 10 & Epilogue	
15	4/26	Four Group Presentations		
16	5/3	FINAL: Remaining Three Group Presentations		

DATES ARE TENTATIVE. ASSIGNMENT DUE DATES MAY CHANGE DURING THE SEMESTER! I will communicate changes both in class and also on Blackboard.

19 January 2012

\* Underlined readings to be available on Blackboard