

# HU 494: Creative Thinking

Spring 2021

Class format: Online with both synchronous and asynchronous components

Live online meetings: TBD on MS Teams

## Instructor

Dr. Katie Panciera

## Contact

[panciera@msoe.edu](mailto:panciera@msoe.edu)

612-804-6543 (cell)

## Office Location & Hours

MS Teams by appointment

[calendly.com/panciera](https://calendly.com/panciera)



## Course Description

The subject seeks a deeper understanding of the creative process by examining the nature of creativity and various competing and complementary theories which seek to explain the nature of creativity and its origins. The course provides instruction beyond the scientific method and traditional problem solving, aiming for greater fluency in generating ideas, increased sensitivity to problems, greater intellectual flexibility, and the gaining of a broader range of new insights through an enhanced “openness to experience.” (prereq: none)



## Student Learning Outcomes

- Identify and discuss at least three competing theories which outline the origins of creative thought
- Demonstrate flexibility in defining problems
- Approach the solution to any problem with several different methodologies
- Perform a patent search to confirm the originality of their idea
- Compare and contrast problem solving, critical thinking, and creative thinking
- Apply theoretical and pragmatic approaches toward the completion of a final, genuinely original and unique, project



## Required Materials

### Course supplies:

- [inGenius: A Crash Course on Creativity](#) by Tina Seelig
- Paper, pen/pencils, something with color (crayons, colored pencils, markers, etc)
- All other materials will be available from the course Canvas site

### Free online materials including:

- Mural
- Podcasts, TED Talks, YouTube videos



## Course Assignments Outline

- **Weekly Reflections:** On a weekly basis, you will be asked to reflect on activities, readings, and discussions to deepen your understanding and contemplate additional problems.
- **Creative Challenges:** Most weeks you will have a creative challenge to turn in. I will give some prompts and tips to guide you. These are designed to be smaller activities (e.g. not a project) that can be completed in a few hours or less but will allow you to flex your creative muscles.
- **Group Work:** Throughout the quarter you will regularly meet and work in groups. This will allow you to have a space with a small number of people with which you will hopefully be able to be

more vulnerable around. These groups will be assigned in week 1. You will have to meet with this group and report back from this group so this portion of your grade will be about both attendance and contribution.

- **Projects:** Over the course of the term you will have several multi-week projects. These are designed to require more thought, time, and/or research to complete satisfactorily and so they are worth a larger percentage of your grade. There will be two visualizations for which you will need some time to collect data and one statement project about an issue of your choice. More details will be provided as you begin to work on them.
- **Final Exam:** There will be one exam in this class. It will be a take home exam designed to take 1-2 hours. It will be given to you during week 10 and due in week 11.



## Week by Week Outline (This is in flux)

Readings and Materials are TBD and may fluctuate based on the needs of the class.

WEEK	TOPIC	DUE
1	<p><b>Introduction to Creative Thinking and Quieting the Inner Critic</b>            Live class: Introductions            Live class: Quieting the Inner Critic            Group meetings: Introductions</p> <p>Read inGenius: Introduction and Chapter 1            Read <a href="#">Excerpt of Let's Pretend This Never Happened by Jenny Lawson</a>            Watch Elizabeth Gilbert's <a href="#">Your elusive Creative Genius TED talk</a>            Watch James Vietch's <a href="#">Elaborate Wrong Number Prank</a>            Watch Brene Brown's <a href="#">The power of vulnerability TED talk</a> or Brene Brown's <a href="#">Netflix Special</a>            Listen to <a href="#">The Creative Power of Misfits</a> by Adam Grant</p> <p>EXTRA CREDIT: Thursday Evening 6pm  <a href="#">UX: A Startup's Secret Weapon by Joe Poeschl</a> (The Commons)</p>	<p>First Day Survey</p> <p>Reflection 1</p> <p>Group Report 1</p>
2	<p><b>Vulnerability and Reframing</b>            Live class: Vulnerability            Live class: Framing &amp; Reframing            Group meetings: Pictionary or Skribbl.io</p> <p>Read inGenius: Chapters 8 &amp; 9            Read <a href="#">There are 4 Types of Creativity</a>            Read <a href="#">The Failure Tour of New York</a>            Listen to <a href="#">Bouncing back from rejection</a> by Adam Grant            Watch Jia Jiang's <a href="#">What I learned about 100 days of rejections TED talk</a></p>	<p>Reflection 2</p> <p>Group Report 2</p> <p>Creative Challenge 1: Doodling</p>

<p><b>3</b></p>	<p><b>Failure and other Challenges</b>  Live Class: Failure  Live Class: Ambiguity and other Challenges  Group meetings: Short collective biography</p> <p>Read inGenius Chapters 3 &amp; 4  Watch Doug Dietz's <a href="#">Transforming healthcare for children and their families TED talk</a>  Watch Tim Brown's <a href="#">Tales of Creativity and Play TED talk</a></p> <p>Other sources TBD</p>	<p>Reflection 3</p> <p>Group Report 3 (Short Collective Biography)</p> <p>Creative Challenge 2: Close your eyes</p>
<p><b>4</b></p>	<p><b>Brainstorming &amp; Observation</b>  Live Class: Sketching &amp; Observation Activities  Group: Spoon Museum</p> <p>Read inGenius Chapter 2  Listen to one episode of <a href="#">99% Invisible</a>  Watch <a href="#">Dar William's Buzzer</a>  Watch <a href="#">Hamilton Polka by Weird Al Yankovic</a></p> <p>Other sources TBD</p>	<p>Reflection 4</p> <p>Group Report 4</p> <p>Creative Challenge 3: Blow Up or Quietest Place</p>
<p><b>5</b></p>	<p><b>Cross Pollination</b>  Live class: TBD  Group: Disruptus and Sketching</p> <p>Read inGenius Chapter 5  Read Making Playgrounds a Little More Dangerous  Read Running Free in Germany's Outdoor Preschools  Watch Takaharu Texuka's <a href="#">The best kindergarten you've ever seen</a> TED talk  Skim <a href="#">20 super-cool design offices to stir the senses</a>  Skim <a href="#">These 7 Innovative Offices Were Designed to Spark Creativity</a></p>	<p>Reflection 5</p> <p>Group Report 5</p> <p>Imperfection Visualization Due</p>
<p><b>6</b></p>	<p><b>Environment</b>  Live class: TBD  Group meetings: Image collage and discussion</p> <p>Read inGenius Chapter 6  Listen to <a href="#">Reply All Podcast Episode 140: Roman Mars Mazda Virus</a>  Read <a href="#">Luck, foresight, and science: How an unheralded team developed a COVID-19 vaccine in record time</a></p> <p>Other readings TBD</p>	<p>Reflection 6</p> <p>Group Report 6</p> <p>Creative Challenge 4: Ideal Workspace or Emotional Furniture</p>

7	<p><b>Experimentation</b>  Live class:TBD  Group meetings: TBD</p> <p>Read inGenius Chapter 7  Read <a href="#">18 Things Highly Creative People Do Differently</a>  Listen to one of the episodes of the <a href="#">Death, Sex &amp; Money Podcast</a></p> <ul style="list-style-type: none"> <li>• <a href="#">No Slumping with Twyla Tharp</a></li> <li>• <a href="#">John Green Thinks Adulthood is Underrated</a> (TW: mental health)</li> <li>• <a href="#">Lena Waithe Says Have a Dream... and a Sponsor</a></li> </ul> <p>Watch Kio Stark's <a href="#">Why you should talk to strangers TED talk</a></p>	<p>Reflection 7</p> <p>Group Report 7</p> <p>Creative Challenge 5: Fort or Tower</p>
8	<p><b>Constraints and Rewards</b>  Live class: TBD  Group meetings: Sketching (constraints vs. no constraints)</p> <p>Read inGenius Chapter 10  Watch Jill Bolte Taylor's <a href="#">Stroke of insight TED talk</a>  Watch Aimee Mullins' <a href="#">My twelve pairs of legs</a> TED talk  Watch Chimamanda Ngozi Adichie's <a href="#">Danger of a single story</a> TED talk  Other materials TBD</p>	<p>Reflection 8</p> <p>Group Report 8</p> <p>Beauty Visualization Due</p>
9	<p><b>Attitude</b>  Live class: TBD  Group meetings: TBD</p> <p>Read inGenius Chapter 11  Watch <a href="#">Alton's Favorite Kitchen Gadgets</a>  Watch <a href="#">Art Assignment: Creativity is Overrated</a>  Watch <a href="#">Zoe Keating: Possible</a></p>	<p>Reflection 9</p> <p>Group Report 9</p> <p>Creative Challenge 6: Comfort and Discomfort</p>
10	<p><b>Review</b>  Live class: TBD  Group meetings: Group endorsed course summary/reflection</p>	<p>Group Report 10:  Reflection</p> <p>Statement Project</p> <p>Final Exam (take home)</p>
11	<p><b>Exam Week</b></p>	



## Grading Policies

### Participation and Attendance

This course is all about people and your engagement is critical. During the live class we'll be doing exercises and learning about new methods. Due to this, 10% of your grade is for attendance and participation.

Participation can look like:

- **Showing up to live classes**
- Actively engaging in live classes
- Actively engaging in online discussion
- Demonstrating awareness of the course materials (e.g. Canvas readings) in class
- **Turning your camera on during synchronous classes**

If you cannot attend class (or will be significantly late), please let me know BEFORE class starts. I know that sometimes life gets in the way with sickness, interviews, and can take that into account when grading if you have given me advance notice. Communication is KEY to ensuring that I know that you are engaged and learning.

### Attendance

As mentioned above, you are expected to attend class. I calculate a tardy as missing  $\frac{1}{3}$  of a class. If you miss more than 40% of classes (via tardies and/or absences), **you will receive a 0 for the 10% of your grade that is participation and attendance.**

### Assignment Due Dates

Late assignments will automatically be docked one half grade (5% off the total points possible) per day late and are only accepted up to one week beyond the original due date. After that, a grade of zero (0) will be given. Finishing an assignment is not an excuse to miss class.

The majority of assignments will be due on a specific day and time each week, TBA in the first week of the class. If there is a different deadline, you will be informed.

### Grading

Follows standard MSOE grading scale: A, AB, B, BC, C, CD, D, F

For this course, your grade will be determined as follows:

- Weekly reflections: 10%
- Participation and attendance: 10%
- Creative challenges: 20%
- Group work: 20%
- Individual responsibilities for group work: 5%
- Projects: 25%
- Final Exam: 10%

## **Grading Philosophy**

This class may be quite different from what you're used to at MSOE. While you will have a list of requirements, the emphasis here is on the process, not necessarily the end product. Some assignments will be graded based on detailed rubrics, some will be graded on whether or not they were completed. You will not receive detailed feedback on every assignment.

## **Extra Credit**

Extra credit may be offered by the professor periodically during the quarter. It will be offered to the entire class and no later than Friday of Week 9.

## **Communication Policies**

### **Respect**

All class communications should be professional and respectful. Unprofessional communications (verbal or written), will not receive a response. This includes, but is not limited to: racism, sexism, transphobia, homophobia, aggressive language (with or without profanity), slander, inappropriate topics, etc. This applies not only to communications with myself but with your fellow students as well. If you feel that a classmate is not being respectful, please let them know or talk to me.

I will try to call issues out when I see them, but may miss some. My goal is for this class to be a safe, inclusive environment for all. Please let me know if you do not feel that this is the case.

### **Electronic Communication**

In general, email or MS Teams are the best ways to contact me as I am working from home. I will try to return email within 24 hours on weekdays. I will check email once between 5pm and 8:30pm every weeknight and once a day on weekends. Expect a slower response during evenings and weekends than during the workday.

I expect you to check Canvas regularly for readings, assignments, grades, and announcements. Their app is supposedly useful.

### **Phone Communication**

I have listed my cell phone number above. Please respect that this is my personal phone number and use it only if you need to reach me immediately. My phone is off from 10pm to 7am, so you will not get through at that time. Texts usually get quicker responses than phone calls.

### **When In Doubt**

If you think maybe you have a question or find yourself guessing at my intended meaning, please reach out and ask the question or for clarification. Chances are you aren't the only one. In addition, communication is critical for online work. If you are sick and have to miss class, please let me know. If you're starting to spiral into anxiety, let me know (in addition to talking to the Wellness Center). If I don't know, I can't help.

## **BE VOCAL**

While I taught this course last spring, this is still somewhat new and I guarantee I will make mistakes. Please be vocal. Tell me if things aren't working for you. Let me know when assignments are confusing. I also appreciate suggestions for how to improve things, but it's up to you to share those with me. I want this to be a good class, but I need your help!

## **Current Circumstances**

### **Personal Wellbeing**

I am your professor, but first and foremost, I am a human. If you do not have a home, food, or childcare or are caring for someone who is sick or are sick yourself, please let me know. I may not be able to help directly, but I can try to connect you to others who can. This will also allow me to understand why you may have additional difficulties turning in work, participating in your group, etc.

### **Internet Access**

I will post all assignments on Canvas and use Canvas and Teams for the majority of the coursework. If for some reason you lose internet access during the quarter please let me know so that I can be flexible. There is a Canvas App, but if your computer has to go to IT or you have other problems, please let me know. I don't want you completing all this work from your phone.

### **Empathy**

This is a weird period for all of us and requires empathy and compassion. While I am willing to be flexible on occasion, I will be more understanding if you have a good track record in the class. If you've turned nothing in all quarter, have not responded to my emails or early alerts, and at the end of the quarter want to turn everything in all at once, that is not ok. However, if you have been communicative and have been a good teammate, I will be more understanding with delays that were not caused by you. Procrastination is never a valid excuse to turn things in late.

Similarly, I may have times in the quarter where things on my end start falling apart and I get your assignments back late or have to reschedule meetings. (I also have a 4 year old in "virtual school" who may disrupt things on occasion.) Please be understanding of this as I am understanding of your situations.

Communication is key.

## **Resources**

### **Mental and Physical Health**

If you find yourself struggling with your mental or physical health this quarter, please feel free to approach me. I try to be flexible and accommodating. You can also receive assistance from The Wellness Center for Advising, Counseling, Health, & Accessibility Needs in Kern 250, 414-277-7590, or [wellness@msoe.edu](mailto:wellness@msoe.edu) **Counseling can be done online.**

## **Virtual Drop In Hours**

Drop in hours (office hours) are designed for you to ask questions (related to class or not) and get help as well as to have another sounding board or faculty connection. By talking to me, you're helping me get to know you which may allow you to get industry connections, find scholarships, or discover jobs you didn't know existed.

If you have a specific question/concern, please email me or send me a message on Teams and we can find a time to have a quick video call. I am online most days from 10:00ish to 4:30ish. You can also use [calendly.com/panciera](https://calendly.com/panciera) to schedule a 15 minute appointment with me.

## **Student Accessibility Services**

For students with documented disabilities, chronic medical conditions or mental health concerns; MSOE provides services to make reasonable accommodations available. If you are a student who requires or anticipates the need for accommodations, please contact Student Accessibility Services Office at 414-277-7281, by email at [moureau@msoe.edu](mailto:moureau@msoe.edu), or in person at Kern 250 to discuss appropriate accommodations and eligibility requirements.

## **Raider Success Coaches**

To help all students be successful in this course, struggling students will be required to meet with a Raider Success Coach throughout the quarter. These meetings will focus on strategies for academic success. Students will be notified if they need to meet with a Raider Success Coach via email by either myself or Dr. Nadya Shalamova.

## **Academic Assistance**

The Raider Center for Academic Success (RCAS) is available virtually and in person. In addition to 1:1 tutoring for some classes, they also offer writing assistance. Please take advantage of this if you are not a strong writer as communication skills are important to succeed in this class.

## **University Policies**

### **Nondiscrimination Statement**

Milwaukee School of Engineering admits students of any race, color, national and ethnic origin to all the rights, privileges, programs and activities generally accorded, or made available, to students at the university. It does not discriminate on the basis of race, color, national and ethnic origin, religion, age, gender, sexual orientation, marital status or disability in administration of its educational policies, admission policies, scholarship and loan programs, and athletic and other institutionally administered programs. MSOE also maintains its long-standing policy as an Equal Opportunity/Affirmative Action Employer of male and female personnel for its faculty and administrative staff.

### **Academic Integrity**

Academic integrity means that any work you hand in as your own is truly your own and that it represents work developed by you. The consequences for handing in the work of someone else as your own will result in a failing grade for the semester for both you and the person who gave you the file or worksheet. Don't share your electronic files with your friends.

As a course requiring teamwork, collaboration will be necessary to complete assignments, but individuals will be responsible for handling in their own work.

See more detail: <https://msoe.app.box.com/s/4c8k9jx8zso5ezybxmszr6zmc73zgoox>

## **Sexual Misconduct**

Sexual misconduct will not be tolerated at MSOE.

See more detail: <https://msoe.app.box.com/s/o7c2rz2jdweq47rbhrzukeyecwxxb3x>

## **COVID-19**

MSOE is committed to the health, safety, and well-being of all members of our community. In an effort to maintain such an environment, as well as to prevent further spread of COVID-19, students, faculty, staff and guests of the university must wear a facial covering when they are inside university buildings and when they are outdoors on campus and social distancing of at least six feet is not possible.

- Failure to wear a facial covering in class or laboratory will result in your faculty member requiring you to leave class and not return until you have secured a facial covering for yourself.
- Failure to comply with your faculty member's instructions will result in immediate action from the Office of the Dean of Students.
- Failure to comply with this policy will be handled according to the Student Code of Conduct and may result in sanctions, up to and including expulsion.
- The university strongly encourages all students to keep an extra and clean facial covering on their person at all times and strongly discourages students from borrowing and lending others their facial coverings.

If you suspect you are ill, have symptoms of COVID-19, or have possibly been exposed to COVID-19, please contact the Dean of Students Office at [deanofstudents@msoe.edu](mailto:deanofstudents@msoe.edu) for guidance on testing and self-isolation procedures. Please do not physically come to campus if you are ill or suspect you may be ill. MSOE is committed to your education and will work with you to provide a virtual educational experience until you are cleared to return to campus.