

Course: ENGR 5390/7390 Special Topics: Building Creative Confidence
(note: this course is proposed to soon become a permanent course in the Design and Innovation Program as DSIN 5304/7304)

Texts: *Creative Confidence* by Tom Kelley and David Kelley
Creativity: The Psychology of Discovery and Invention by Mihaly Csikszentmihalyi

Additional: Course Reader and various videos as assigned

Instructors: Kate Canales
Office: Caruth Hall Bldg., Room 267
Office Hours: by appointment
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Class Schedule: daily 9am – 1pm during May Term

Class Location: TBD

Enrollment: Sophomore standing and above (graduate students enroll in 7000 level)
No pre-requisites, enrollment encouraged from outside Lyle

University Curriculum: Creativity and Aesthetics, Level 2
Oral Communication

Grading: Your grade will be dependent on attendance, participation, completion of assignments, punctuality, and attitude.

I will subdivide grading as follows:

Class (participation, attendance and punctuality):	25%
Daily assignments:	20%
Self-evaluation	10%
Mid-term Project	20%
Final Project	20%
Final Project Presentation	10%

This is a hard class to grade. Much of it comes down to something like “perceived wholeheartedness.” When grading, I will ask, “Has this student demonstrated effort, risk, growth, and vulnerability?” You will hear me say this more than once: **this class is not about creating great work; it is about getting past the fear of creating bad work.** So remember: “bad” work delivered with a whole heart is not “bad” at all in this class!

Course Description

In a poll of all Fortune 500 executives the number one quality that they are looking for in employees is creativity. We know that creativity means more than ‘glitter and glue sticks,’ and most of us believe in our own capacity for creativity. But when the rubber meets the road, what do you DO when the time comes to be creative. Many of us freeze up. Do you have the confidence to overcome the vulnerability and risk that creativity often requires? Do you know how to share your ideas so that others can build on them and help make them real? Can you draw? (You can.)

This course is a shot in the arm for students seeking strategies, tools and mind-shifts required to make creativity real, and not necessarily in the traditional ways.

We will investigate the essential components of successful innovation, and what it takes to get around the blocks that we have (as a culture and as individuals) against creativity. These are primarily mindsets that need to be learned, practiced and implemented. We'll look at the current research supporting these factors including research on learned optimism, comfort with risk taking, and even happiness as they relate to innovation. Then we'll look at strategies that successful "creatives" have used to generate, express and develop their ideas. More than mindsets, these are actions. We'll work on very tactical skills that should help you figure out what to do with your own creative energy: the skills of building, drawing, storytelling, and public speaking, among others.

One mid-term project will ask students to synthesize class content (to date) and to use it as inspiration for an experiential piece. A final project will build through the second half of the course and will express an idea in action. Presentations about these projects will serve as the final exam.

Course Details

Class Experience

A daily theme guides each class period. This theme will be explored through reading and videos, group discussion and hand-on exercises. The success of a given class period depends heavily on the energy and participation of all students. Students are expected to come to class informed, curious, respectful and opinionated with an awareness of their own learning goals. This class is a lot of fun, but it also has its own brand of rigor.

From last semester's course evaluations:

"This class was about learning how to build up the guts to make something and put it out into the world. It's soft skills – but not soft in a weak sense. It's things that they never taught us in school: learning how to deal with rejection, breaking misconceptions about perfectionism, cultivating our inner creative."

"This class got me to think in new ways and generate ideas I normally wouldn't have. It gave me the opportunity to learn in a multidisciplinary environment studying with students from many different majors."

"I gained the ability to just go for something and see it on to completion."

Course work is personal, individually produced and project-oriented. One midterm project will be delivered on the 5- or 6- day of class. There is no final exam for this class, instead there is a rather substantial, extremely personal, and largely unprescribed final project. Constraints and expectations for this project will be clearly articulated, but the task is likely to still feel very open-ended. You will be expected to take significant pro-action and initiative to complete this project. I will rarely tell you what needs to be done, but at the same time will insist that you show progress. This is by design. The final project will have two graded components: the project itself and your presentation of the project.

Students enrolled in the graduate section of the course must complete an additional assignment that will be designed and determined collaboratively.

Morning Pages

To inspire and reflect, we will be using one of the key tools of Julia Cameron's book: morning pages. The morning pages will be described in more detail in the first day's reading, but essentially it entails three pages of stream-of-consciousness writing first thing every morning. I will *never* read your morning pages (and actually Cameron recommends that *you* never read your morning pages either), but I will require that you show me your morning pages each day. There will be a certain honor code to this system, and karma will likely be the ultimate evaluator.

Materials

I do not allow the use of laptops or tablets in class (see Class Policies), so I recommend you purchase a notebook to capture notes, ideas, thoughts, and doodles. This might also be where you want to write your morning pages. Get a beautiful notebook . Get some good pens that you love. Enjoy the analog experience of

making notes with your hands. In the course we will discuss *why* analog documentation is so vital to creative practice.

If you do not do your Morning Pages in your notebook (I don't) then please buy a big, durable envelope or folder in which to keep the loose pages.

Beyond that, materials will vary depending on your projects. If projects require a financial investment that you aren't able to make, please see me. There are funds for this type of thing if you know where to look. I will help.

Dress Code

This class requires a daily dress code. It is different each class period. Although the dress code theme might sometimes be funny or frivolous, I consider your participation in the dress code a very serious aspect of class. We will not have a dress code for the very first class.

Course Objectives:

At the end of the course students should have:

- A framework and vocabulary to describe creativity in a very broad, applicable way. A way of considering creativity as a skill for all types of work.
- Strategies for overcoming individual blocks on creativity
- go-to techniques for generating ideas
- go-to techniques for expressing ideas
- go-to techniques for developing ideas and taking action
- Creative Confidence

ABET Learning Outcomes:

- G. An ability to communicate effectively
- I: A recognition for the need for, and an ability to engage in life-long learning

UC Learning Outcomes, Creativity and Aesthetics 2:

1. Students will be able to analyze and construct clear and well-supported interpretations of creative works.
2. C) Students will be able to articulate and discuss the ways in which creative works provide opportunities to transform cultures and individuals, including themselves.

UC Learning Outcomes, Oral Communication:

3. Students will be able to select and use appropriate forms of evidence in a public presentation.
1. Students will be able to design verbal messages to suit particular audiences and purposes.
2. Students will be able to use visual cues to enhance a public presentation

Course Schedule by Theme:

5/14	Culture
5/15	Creativity Frameworks
5/18	Resilience and Luck
5/19	Authenticity
5/20	Midterm project
5/21	Action
5/22	Empathy
5/26	Story
5/27	Presence
5/28	Gratitude
5/29	Final project

Instructor Bio

Kate Canales is a Research Professor and the Director of Design and Innovation Programs at the Lyle School of Engineering at Southern Methodist University. She oversees the popular Innovation Gymnasium program and runs SMU's new master's degree in Design and Innovation (MADI). She has a background in mechanical engineering, product design and design research, and much of her recent work has focused on building creative capacity inside organizations. She studies and teaches the ways we innovate on the basis of human needs and behavior, and is responsible for integrating empathy and creativity into the technical engineering curriculum. Kate teaches several design courses including *Human Centered Design* and *Building Creative Confidence*.

Kate has worked as a designer and design researcher at IDEO and as a Creative Director at frog design, both internationally recognized leaders in the field of design and innovation. She holds a BS in Mechanical Engineering from Stanford University. Her writing on human centered design has appeared in GOOD magazine, The Atlantic, and The Journal of Applied Behavioral Science.

Class Policies

1) Unless otherwise specified, assignments are due at the beginning of the period on the assigned due date; late assignments will not be accepted for a grade without prior approval by the instructor and at her discretion, and may be subject to a penalty.

2) Students are expected to attend every class. If you cannot attend, please communicate your absence to the instructor at the beginning of May Term. Additionally, you must still submit a report of your preparation prior to the class you are missing in order to receive partial credit for class participation.

3) A key component of creative work is in the engagement of different ways of thinking and documenting. We will be "thinking with our hands" as much as possible in this course. Therefore, laptops may not be used during lectures or discussion, but may be used if needed for exercises or project work in class. During class, cell phones must be turned off.

University Policies

* Disability Accommodations: Students needing academic accommodations for a disability must first be registered with Disability Accommodations & Success Strategies (DASS) to verify the disability and to establish eligibility for accommodations. Students may call 214-768-1470 or visit <http://www.smu.edu/alec/dass.asp> to begin the process. They should then schedule an appointment with the professor to make appropriate arrangements.

* Religious Observance: Religiously observant students wishing to be absent on holidays that require missing class should notify their professors in writing at the beginning of the semester, and should discuss with them, in advance, acceptable ways of making up any work missed because of the absence. (See University Policy No. 1.9.)

* Excused Absences for University Extracurricular Activities: Students participating in an officially sanctioned, scheduled University extracurricular activity will be given the opportunity to make up class assignments or other graded assignments missed as a result of participation. It is the responsibility of the student to make arrangements with the Professor for making up the work prior to any missed scheduled quiz, examination, or other assignment. (See University Undergraduate Catalogue)