GIT 210: Creative Thinking & Design Visualization

Course Overview

Course Description: Fundamental methods, concepts, and techniques of creative thinking, ideation, and problem solving, including communication and societal influences. Examines drawing and design visualization, from sketching to data graphics.

Course Credit: 3 credit hours

Prerequisites: None

Instructor Information:
Instructor: Sara Kremer
Email: sekremer@asu.edu

Office: N/A, Zoom office hours available by appointment

Course Learning Outcomes

In this course, students will:

- Be introduced to frameworks, parameters, and other forms of pattern recognition
- Practice simple drawing techniques they can use in the future
- Learn how to photograph drawings and send the resulting files electronically
- Understand the fundamental differences between Divergent and Convergent Thinking
- Practice methods of idea generation
- · Practice methods of idea refinement
- Learn the essentials of Design Systems
- See historical and modern examples of symbols, icons, and logos
- Discuss empathy, both in its current and historic contexts
- Explore storytelling and their frameworks
- Collaborate on projects, dividing work duties appropriately

Expected Learning Outcomes

At the completion of this course, students will gain the ability to:

- Understand and apply creative thinking
- Effectively communicate ideas with pictures
- · Identity and apply problem-solving processes and creative thinking techniques
- Apply systems thinking to design problems
- Use empathy to evaluate and compare ideas

- Craft original stories based on structures and forms, both for entertainment and business
- Work in teams to generate and present creative solutions to problems

Textbook Information

This course will not have a required textbook.

Reading List

These books are referenced in this course. They are not required, but will expand your knowledge of the subject matter.

- Show and Tell (2013) by Dan Roam
- Pattern Recognition (2004) by William Gibson
- Empathy: A History (2018) by Susan Lanzoni
- Six Thinking Hats (1985) by Edward de Bono

Course Materials

- Sketchbook (spiral bound, un-lined/un-dotted, 8.5 x 11 is best).
- · Pencils and an eraser.
- Sharpie pen and/or thin black marker.
- Colored markers and/or colored pencils.
- (Recommended) Ruler to help with straight edges.
- Computer with reliable internet access.
- Access to a scanner or phone with a camera to capture your work.
- Access to a printer for worksheets and templates provided.
- *Tip:* choose materials that fit these requirements and simultaneously *bring you joy*. If they bring a smile to your face and are a pleasure to use, you are more likely to reach for them and assignments will be that much easier!

Required Hardware & Software

- This course requires access to:
 - a computer outside of the classroom with reliable internet connection
 - a modern Web browsers (Chrome, Mozilla Firefox, Microsoft Edge, Opera, or Safari)
 - Adobe Acrobat Reader (free), Preview, or other PDF viewers
 - a webcam, microphone, headset/earbuds, and speaker
 - a camera (such as on their phone), or a scanner to capture and share images.

Course Schedule

Overview:

This course consists of 7 modules:

• Module 00 // Getting Started

- Module 01 // Creativity
- Module 02 // Ideation & Inspiration
- Module 03 // Visualization
- Module 04 // Communication
- Module 05 // Critical Thinking
- Module 06 // Storytelling

There is a group Final Project.

Course Policies

To Succeed in this Course:

- · check the course daily
- check Slack daily
- read announcements
- · read and respond to course email messages as needed
- complete assignments by the due dates specified
- · communicate regularly with your instructor and peers
- create a study and/or assignment schedule to stay on track
- access ASU Online Student Resources

Grading

Grades reflect your performance on assignments and adherence to deadlines. Your grade will be determined based on the following grading schema:

Grading Breakdown

Grade Percentage

A+	97-100%
A	94-96%
A-	90-93%
B+	87-89%
В	84-86%
B-	80-83%

76-79%

C+

- C 70-75%
- D 60-69%
- E Below 59%

Homework Help

Students are encouraged to reach out to their professor if they need help on their homework. Students may ask general questions of their classmates, but are not to work together on assignments unless it is a group project. All work submitted must be the student's original work. Failure to do so is considered an Academic Integrity Violation.

Submitting Assignments

Students enrolled in a A or B session course should expect to spend around 18 hours each week preparing for and actively participating in the course.

All assignments, unless otherwise announced, MUST be submitted to the designated area of Canvas. Assignments submitted via email will not be accepted.

Assignment due dates follow Arizona Standard time.

Late or Missed Assignments

Assignments submitted after stated deadlines will incur a 10% deduction per day, beginning immediately upon deadline. Published assignment due dates are firm and will be upheld by the instructor.

Notify the instructor at least 24 hours **BEFORE** an assignment is due if an urgent situation arises and you are unable to submit the assignment on time. This does not mean that you will receive an accommodation or forgo late points. Notifying the instructor gives the instructor time to plan grading tasks accordingly. If notification is not possible before, notify your instructor **AS SOON AS POSSIBLE**.

Follow the appropriate University policies to request an <u>accommodation for religious practices</u> or to accommodate a missed assignment <u>due to University-sanctioned activities</u>.

Course Communication

Slack

Slack is the preferred communication method for this course. All communications should occur through Slack, and it is the *quickest way to get a reply from the instructor*. If you have assignment questions, please try to post them at least 48 hours before an assignment is due. This grants you and your instructor time to communicate about the topic.

Slack is a popular chat communication tool and quickly becoming an industry standard. As of May 2019, 65 of the Fortune 100 companies are using Slack, not to mention universities like MIT and ASU who are adopting it across the institution. Slack is extremely accessible on the web, on desktop systems (Windows and Mac alike), and on mobile devices. In most cases, it's the fastest and most direct way to communicate outside of being in the same room, especially to ask a quick question or share a link or resource. Students are added to the Slack workspace based on their official enrollment in this class; no specific invitations are necessary.

As ASU will be adopting Slack more and more, it is essential that students become familiar with this tool. Please visit the Slack at ASU website for more information.

In GIT210, we use Slack for:

- Communicating directly with instructors and teaching assistants (including follow-up conversation on grades, absences, and other course dynamics.)
- · Communicating with partners on projects
- Reading class-wide updates from the instructor
- Asking questions to the class at large
- Completing certain Exercises such as scavenger hunts and discussions
- General sidebar conversation

Canvas

Canvas is the official course management system used for this class. Relevant course material including Assignment descriptions and due dates, supplemental reading, student Scores and Grades, and other permanent, pertinent items will be included on the Canvas course. It is also the single mechanism to submit Assignments and receive grades.

- Students should check this site on a regular basis and become familiar with the features.
- Students should ensure appropriate notifications from Canvas are being received. This will alert students when new Assignments are available, when due dates are approaching, when Scores are returned, etc. It is not the Instructor's duty to remind Students of published dates and details.

In GIT210, we use Canvas for:

- Reading course material and viewing embedded videos
- Reading official Assignment & Exercise descriptions
- Submitting Assignments & Exercises, unless otherwise explicitly stated
- Reading Syllabus, Policies, and Calendar of due dates

- Receiving grades on Assignments & Exercises
- Reviewing specific commentary on Assignment & Exercise submissions

Email

Any emails to your instructor will be responded to within 24 hours. You will receive a quicker response via Slack. Questions about course assignments are encouraged but should be posted on Slack so others can see the question and response.

If you do send an email to your instructor it is a potential FERPA violation for faculty to email your personal email account, or respond to an email sent from your personal email account. **So please, use your ASU email for all correspondence with your professors.**

University Policies

Title IX

Title IX is a federal law that provides that no person be excluded on the basis of sex from participation in, be denied benefits of, or be subjected to discrimination under any education program or activity. Both Title IX and university policy make clear that sexual violence and harassment based on sex is prohibited. An individual who believes they have been subjected to sexual violence or harassed on the basis of sex can seek support, including counseling and academic support, from the university. If you or someone you know has been harassed on the basis of sex or sexually assaulted, you can find information and resources at https://sexualviolenceprevention.asu.edu/faqs.

As a mandated reporter, I am obligated to report any information I become aware of regarding alleged acts of sexual discrimination, including sexual violence and dating violence. ASU Counseling Services, https://eoss.asu.edu/counseling is available if you wish to discuss any concerns confidentially and privately. ASU online students may access 360 Life Services, https://goto.asuonline.asu.edu/success/online-resources.html.

Student Conduct

All students are entitled to receive instruction free from interference by other members of the class . Please be aware that this applies to online classrooms as well. If a student is disruptive, an instructor may ask the student to stop the disruptive behavior and warn the student that such disruptive behavior can result in withdrawal from the course. An instructor may withdraw a student from a course under USI 201-10: https://www.asu.edu/aad/manuals/ssm/ssm201-10.html . Appropriate classroom behavior is expected at all times. Inappropriate discussion board messages will be deleted at my discretion. Students will be notified privately that their posting was inappropriate. Repeated inappropriate posts will be considered disruptive and sanctioned according to above policy USI 201-10. For more information on ASU's policy regarding threatening, violent, or disruptive conduct, see_
http://www.asu.edu/aad/manuals/ssm/ssm104-02.html . Anyone in violation of any of these policies is subject to sanctions.

Appropriate online behavior (also knows as *netiquette*) is defined by the instructor and includes keeping course discussion posts focused on the assigned topics. Students must maintain a cordial atmosphere and use tact in expressing differences of opinion. For more information, visit the Computer, Internet, and Electronic Communications policy at http://www.asu.edu/aad/manuals/acd/acd125.html .

The Office of Student Rights and Responsibilities accepts <u>incident reports</u>. from students, faculty, staff, or other persons who believe that a student or a student organization may have violated the Student Code of Conduct.

Academic Integrity Policy

Students in this class must adhere to ASU's academic integrity policy, which can be found at https://provost.asu.edu/academic-integrity/policy). Students are responsible for reviewing this policy and understanding each of the areas in which academic dishonesty can occur. In addition, all engineering students are expected to adhere to both the ASU Academic Integrity Honor Code and the Fulton Schools of Engineering Honor Code and academic integrity violations will be reported to the Fulton Schools of Engineering Academic Integrity Office (AIO). The AIO maintains a record of all violations and has access to academic integrity violations committed in all other ASU colleges/schools.

Disability Accommodations

Any students who have special needs or need accommodations in this course are encouraged to communicate with me as soon as possible to make appropriate arrangements for these accommodations. The Americans with Disabilities Act (ADA) is a federal antidiscrimination statute that provides comprehensive civil rights protection for persons with disabilities. One element of this legislation requires that all qualified students with documented disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation please contact the Student Accessibility and Inclusive Learning Services (SAILS) at ASU Polytechnic located in Student Affairs Quad # 4 or call 480-727-1039 / TTY: 480-727-1009. Please note that students who may need accommodations must register with the ASU Disability Resource Center and provide documentation of that registration to the instructor. Eligibility and documentation policies online: http://www.asu.edu/studentaffairs/ed/drc/

Copyright

Course content and materials, including lectures, are copyrighted materials and students may not share outside the class, upload to online websites not approved by the instructor, sell, or distribute course content or notes taken during the conduct of the course (see <u>ACD 304–06</u>, "Commercial Note Taking Services" and ABOR Policy <u>5-308 F.14</u> for more information).

You must refrain from uploading to any course shell, discussion board, or website used by the course instructor or other course forum, material that is not the student's original work, unless the students first comply with all applicable copyright laws; faculty members reserve the right to delete materials on the grounds of suspected copyright infringement.

Threatening Behavior

Students, faculty, staff, and other individuals do not have an unqualified right of access to university grounds, property, or services. Interfering with the peaceful conduct of university-related business or activities or remaining on campus grounds after a request to leave may be considered a crime. All incidents and allegations of violent or threatening conduct by an ASU student (whether on or off campus) must be reported to the ASU Police Department (ASU PD) and the Office of the Dean of Students.

Harassment and Sexual Discrimination

Arizona State University is committed to providing an environment free of discrimination, harassment, or retaliation for the entire university community, including all students, faculty members, staff employees, and guests. ASU expressly prohibits discrimination, harassment, and retaliation by employees, students, contractors, or agents of the university based on any protected status: race, color, religion, sex, national origin, age, disability, veteran status, sexual orientation, gender identity, and genetic information.

Title IX is a federal law that provides that no person be excluded on the basis of sex from participation in, be denied benefits of, or be subjected to discrimination under any education program or activity. Both Title IX and university policy make clear that sexual violence and harassment based on sex is prohibited. An individual who believes they have been subjected to sexual violence or harassed on the basis of sex can seek support, including counseling and academic support, from the university. If you or someone you know has been harassed on the basis of sex or sexually assaulted, you can find information and resources at https://sexualviolenceprevention.asu.edu/faqs.

Mandated sexual harassment reporter: As a mandated reporter, I am obligated to report any information I become aware of regarding alleged acts of sexual discrimination, including sexual violence and dating violence. ASU Counseling Services, https://eoss.asu.edu/counseling, is available if you wish to discuss any concerns confidentially and privately.

Syllabus Disclaimer

The syllabus is a statement of intent and serves as an implicit agreement between the instructor and the student. Every effort will be made to avoid changing the course schedule but the possibility exists that unforeseen events will make syllabus changes necessary. Remember to check your ASU email and the course site often.

Notice: Any information in this syllabus (other than grading or absence policies) may be subject to change with reasonable advance notice.