THINK 66 | *Design that Understands Us*

Class meetings: Tuesdays and Thursdays 10:30-11:20am (Pacific)
Section meetings: Two per week
Course websites**:** Canvas site and https://artful.design/**think66/**
WAY- A-II (Aesthetic and Interpretive Inquiry), and WAY-CE (Creative Expression)

Class Instructors

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Section Instructors

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Ge: by appointment (email me to set up a time!)
Kritika: Tuesdays 11:20-12:30pm Pacific (we'll stay in the Zoom room after class and keep talking), or by appointment if you prefer to talk 1:1 (email me!)
Artemis: By appointment (email me!)
Emily: By appointment (email me!)
Kirsten: By appointment (email me!)
Chloe: by appointment (please email me to set a time!)

Course Overview

At Stanford, you will find many courses that ask you to make things—everything from algorithms, products, policies, to artworks. What is rarer is to be given the space to stop and really think about *why* we design these things, and whether we should continue to design in ways demanded by commercial and political actors. This critical thinking course examines the nature, purpose, and meaning of *design* in human life, and asks the fundamental questions of "what is design?", "why do we do it?", "how do design, technology, and society shape one another?", and "how can we design to resist, reform, and revolutionize?". We will consider two main models of design: need-based design (as we are often taught), and design that helps us flourish as human beings. As you learn about various aesthetic and ethical frameworks and a fundamental language of design, your critical tools for analyzing and conceptualizing design will sharpen and transform. From everyday objects such as media, tools, toys, games, and musical instruments, to aspirations for artificial intelligence and virtual reality, you will learn how to more clearly and critically view our technology-drenched human world—and to exercise your ethical and artful imagination to reimagine better worlds.

Course Learning Goals

Through active engagement and completion of course activities, you will be able to:

1) Compare and contrast two approaches to design: human-centered, and artful.
2) Characterize social, cultural, and ethical contexts in which design decisions are made.
3) Evaluate design along functional, ethical, and aesthetic dimensions.
4) Conceptualize the design of products aimed to promote flourishing.
5) Adapt the course to your personal experiences, interests, and circumstances.
6) Acquire "tools with which to think" that will stay and grow with you for years to come.

Course Structure

This course will be facilitated online through Canvas. Our Canvas website is: https://canvas.stanford.edu/courses/130533. All course materials - readings, videos, and assignment descriptions - will be posted on Canvas. Announcements will also be made through the Canvas site, and you can post questions in the Q&A Discussion Forum. All assignments should be submitted via the Canvas Assignments tab, unless otherwise noted.

- **Whole-Class meetings**: Our class will meet virtually on Tuesdays and Thursdays from 10:30-11:20am Pacific on Zoom. These meetings will be recorded and uploaded to our Canvas page for anyone who is unable to connect during those times. These will be a combination of short lectures and small group breakout sessions where you will discuss and complete activities with your peers. Breakout room conversations will not be recorded.
- **Section meetings**: You will attend two sections per week at assigned times over Zoom. These meetings will **not** be recorded and uploaded to Canvas. Discussion sections allow you to work more closely with your peers and section instructor.
- **Tutorials**:Three tutorials are required during the quarter. Tutorials are one-on-one or small group meetings with your instructor. Tutorials are an opportunity to discuss and strategize learning goals, fine-tune skills, and conduct quiet and focused group work like peer-reviews. Attendance is required and rescheduling very difficult. Choose your meeting time carefully and note it in your calendar. We cannot guarantee that we will be able to reschedule a missed meeting.
    - Tutorial One (one-on-one with instructor during **weeks 1 & 2**): This is an opportunity for us to get to know one another. Please bring in any questions or concerns. In addition, we may discuss early assignments.
    - Tutorial Two (small group, **week 5**): Peer-review of the Midterm Paper.
    - Tutorial Three (small group, **week 9**): Draft poster session for your final project.

Course Materials

Technology: You will need to have access to a device that connects to the internet so that you can access email, Canvas, and Zoom. We strongly recommend that you participate in the course on a computer or laptop as we will be sharing our screens and making use of various features of Zoom that are best accessed on larger devices rather than mobile ones. All course details and materials will be posted on our Canvas course site and all class meetings will occur in Zoom. Please download Zoom and follow these instructions to help you get set up. It is important that you do not share our course Zoom links or meeting passwords with anyone outside of our course to protect the privacy of everyone in attendance. Students on campus can borrow equipment from the Lathrop Learning Hub.

Readings: We will be reading portions of the following three texts, and having your own copies will enable you to mark key passages and add marginalia. They have been ordered to the Stanford Bookstore and are also available through Amazon and other retailers, so you may purchase new or used copies. In addition, you can find the Norman in the THINK 66 course reserves in Green Library, and a full-text version of the Aristotle can be accessed through Stanford University Libraries. All other course readings will be posted on Canvas.

   • Aristotle, *Nicomachean Ethics*. 350 B.C.E.
   • Don Norman, *The Design of Everyday Things*. 1988.
   • Ge Wang, *Artful Design: Technology in Search of the Sublime.* 2018.

All students should retain receipts for books and other course-related expenses, as these may be qualified educational expenses for tax purposes. If you are an undergraduate receiving financial aid, you may be eligible for additional financial aid for required books and course materials if these expenses exceed the aid amount in your award letter. For more information, review your award letter or visit the Student Budget website.
(https://financialaid.stanford.edu/undergrad/budget/index.html)

Coursework, and Grading Scheme
This course is worth 4 units of credit, which means you may be asked to complete up to 12 hours of work per week, including class time. Between weekly participation in whole-class meetings and section meetings, this leaves approximately 8 hours of work outside of class that you may be asked to do. The class schedule in the last section of the syllabus highlights assignments and due dates so that you can plan your work for the quarter accordingly. Students may opt to take the course for a letter grade, or Credit/No Credit.

Your work in this course will be evaluated in two ways. The assignments asterisked below, namely the midterm and final project, will be graded according to guidelines to be provided. Attendance and participation, reading responses, and shorter assignments will be graded according to their completion, thoughtfulness, and effort —in short, the integrity with which you carry it out. Rubrics are provided below for attendance and participation and reading responses. These guidelines should give you a sense of what is expected of you in this and other discussion classes. But please note that you will receive credit for anything above the "unacceptable" category (areas highlighted in green) and that grades will not differ between "exemplary" and "proficient/developing."

If you are taking the class credit/no credit, please see the table below for the minimum requirements to receive credit for the course.

   ● **Attendance and participation**: Attendance to lecture and section is mandatory. You should be well prepared for both: readings and assignments should be completed in advance and you should be ready to participate actively in discussions. See rubric below.
   ● **Reading or other responses**: These written responses should be 250-300 words, display understanding of the material, favor reflection and analysis over synopsis, and include well-framed questions of your own. Some will be prompted, and others will be open. Submission on Canvas by 5pm the evening before your first section meeting of the week.
   ● **Smaller assignments**: Students will explore important themes and prepare for the two major course assignments.

- **Mid-Term Analysis Paper***: Students will choose an unconventional artifact of design (e.g., no smartphones or other modern inventions in pervasive use), and critically analyze its design, taking into account its functional as well as its historical, social, culture, and ethical contexts.
- **Speculative Design Project***: The final project asks students to generate a new design aimed to promote flourishing, taking social, cultural, and ethical dimensions into account. Nothing needs to be built or prototyped in this speculative design project; students are expected to create 1) a design "blueprint" in the form of a product poster (in PDF format) as well as 2) a short-form fiction placing the design in the context of the world (present, future, or even past).

Category	% of course letter grade	Notes
Attendance and participation in class and sections	20%	2 absence 'passes', no questions asked - Arrival >15 mins late counts as an absence - Rubric for assessment
Weekly responses	20%	- Eligible for 2 late 'passes' - Complete at least 6/8 - Rubric for assessment
Smaller assignments	15%	Eligible for one late 'pass'
Mid-Term Analysis Paper*	20%	All components must be submitted on time
Speculative Design Project*	25%	All components must be submitted on time

Grading Scheme for Ongoing Assignments:

Category	Total #	A	A-	B+	B	B-	C+	C	C-	D	Sufficient quality	% of course grade
Attendance in class and sections	40	2 passes for section and 2 for lecture; for any extenuating circumstances beyond that, please get in touch with your teaching fellow.									Rubric	20%
Reading responses	8	6-8	n/a	n/a	5	n/a	n/a	3	n/a	1	Rubric	20%
Smaller assignments	3	3	n/a	n/a	2	n/a	n/a	1	n/a	n/a	Variable	20%
Midterm Analysis	1	Rubric to be provided										20%

roject*			
peculative)esign roject*	1	Rubric to be provided	20%

Credit versus No Credit: If taking the course for Cr/NC, one must earn a 70% or above. Please consult the chart above, and consult with your Teaching Fellow if you are concerned about where your grade stands.

Course Policies

Presence and Participation
Thinking through difficult issues is most productive and most fun when done out loud with others! This is why attendance and participation is a large part of your course grade (20%).

- You get 2 'passes' to be absent from class or section, no questions asked.
- Additional absences will only be excused in emergency situations. Please inform your Teaching Fellow as soon as possible to discuss any possible make-up assignments, including, 500-word written responses or a 10 minute Zoom-recording.
- Being 15 minutes or more late to a class or section counts as an absence.
- Even if an absence is excused, any work due at that class/section is subject to the policies below.
- Keeping your video on during class and section helps build social rapport since we convey a lot through facial expressions and body language. However, we understand that there are many reasons why you might need to keep your video off, so please be aware that contributing productively via Zoom Chat counts as participation.
- Students who anticipate persistent challenges to participating in synchronous class sessions and sections should indicate as much in the pre-course survey and follow up with a course instructor as soon as possible.

Deadlines and late submissions
Assignment deadlines are listed in the course schedule below, along with estimated times of completion, to enable you to effectively plan and balance your academic work and other commitments. Despite the best planning, however, we know that life happens! So:

- You get two 'passes' to submit weekly responses up to 48 hours late, and one 'pass' to submit smaller assignments up to 48 hours late, no questions asked.
- Beyond that, your grade for an assignment goes down a third of a letter grade (e.g., A- to B+) for every 12 hours the assignment is late.

The Honor Code
Class meetings and sections in this course will be highly interactive, you will hear plenty of great ideas from your peers, and if things go as planned, you might even change your mind based on what others say! However, you will be evaluated in this course as an individual and are expected

to cite sources and individuals from whom you have learned and borrowed as a display of academic, intellectual, and creative integrity. Failure to do so is a violation of Stanford's Honor Code and is a serious offense, even when the violation is unintentional. Conduct prohibited by the Honor Code includes all forms of academic dishonesty, among them unpermitted collaboration and representing others' work as one's own. Please review [Stanford's Honor Code](#), [these recommendations](#) from the Office of Community Standards, and [documentation and citation resources](#) from the Hume Center for Writing and Speaking. When in doubt, contact your section instructor.

Extended absences

Despite our efforts to take precautions and protect ourselves and those around us, it is possible that one or more of us in the class will get sick, will need to give care to someone sick, or for other reasons will require an extended absence during the quarter.

- If either Ge or Kritika requires an extended absence, the other will take over instruction.
- If a section instructor requires an extended absence, students in that section will be redistributed among other sections as fits students' schedules.
- If a student requires an extended absence before more than 70% of coursework is completed, there might be opportunities to Withdraw from the course, or develop a schedule for making up and submitting coursework later in the quarter. Students in this situation should talk to their section instructor as soon as possible.
- If a student requires an extended absence after at least 70% of coursework is completed at a passing grade or higher, students may request an [Incomplete](#). Incompletes do not award any credit and can drop students below the minimum required unit load. This could negatively impact academic progress, graduation, NCAA and Veteran's certifications, and financial aid. Students in this situation should talk to their section leader to discuss options.

Current Circumstances

We are each starting 2021 in unique circumstances, likely trying to juggle a variety of commitments and emotions. Especially under such conditions, we appreciate your participation in our course and will do everything we can to support you. We are requesting you to complete a pre-course survey so we can better address your needs in online and remote learning. We have tried to build variation in when and how you complete your coursework. There are also campus resources, such as [virtual study halls](#), [learning accommodations](#), [learner variability support](#), [well-being coaches](#), [counselors](#), [academic skills coaches](#), [Hume Center writing tutors](#), the [FLI opportunity fund](#), [assistance with home internet access](#), and [community emergency funding](#), for broader needs you might have. For information about specific policies and procedures for Winter 2021, [Re-Approaching Stanford](#) has the most up-to-date information for students. If there are additional ways we can support you in the course, please feel encouraged to reach out to us. Without requesting or expecting details of your situation, we will do everything we can to ensure your course learning is productive and enjoyable.

Course Expectations

What you can expect from us

We firmly believe that anyone can learn anything to which they put their earnest effort and thought. We also believe that answers are overrated, and in our view, what is most important is the quality of the questions you frame, the ways in which you think through the answers, and how you propose to act upon preliminary conclusions you reach. We are here to guide your learning along these pathways and will challenge you to actively engage in the learning process through activities, assignments, and more. We will strive for an inclusive and collaborative classroom - one that is respectful of gender, disability, age, race, and all other dimensions of diversity and identity, as well as each person's unique circumstances at this time. We will do our best to give you the tools, feedback, and support to succeed, and welcome any suggestions for improvement. We highly encourage each of you to ask us questions and share ideas through the Canvas Q&A forum, during live Zoom sessions, during Open Conversation Hours, and one-on-one. We want to get to know you and support you in this course learning experience!

What we expect from you

Thinking Matters courses encourage vigorous intellectual exchange, the expression of various viewpoints, and the ability to communicate effectively and cogently. We expect you to take an active role in your learning by coming prepared and ready to share your ideas and collaborate with your peers. We know it can be easy to get distracted during online meetings, so we ask that you try as best as you can to remain focused and engaged during class. Each member of this class has different ideas and perspectives that will enrich the experience for everyone else, so we ask you to be respectful and thoughtful in your interactions. Online settings can often feel anonymous and less personal, sometimes making it easier to misinterpret comments or to share thoughts with less filtering. We ask that you give each other (and your instructors) the benefit of the doubt, and remain mindful of gaps between intention and impact. As noted in university policy, we expect what happens in class to stay in class, to protect the privacy of class members and other rights of the university. Given our virtual format and the commitments we each have outside of class, we have tried to build flexibility into assignments, deadlines, and other course engagement. However, we are relying on you to give us regular feedback on what we can do to better support you in your course learning. Perhaps most importantly, we expect you to be empathetic, understanding and supportive of one another - through this course, and through these times.

Academic Accommodations

Students who may need an academic accommodation based on the impact of a disability must initiate the request with the Office of Accessible Education (OAE). Professional staff will evaluate the request with required documentation, recommend reasonable accommodations, and prepare an Accommodation Letter for instructors dated in the current quarter in which the request is being made. Students should contact the OAE as soon as possible since timely notice is needed to coordinate accommodations. The OAE is located at 563 Salvatierra Walk (phone: 723-1066, URL: http://oae.stanford.edu).

Even if you do not have a documented disability, variability in how people learn is a documented phenomenon. Staff at the Schwab Learning Center can meet with you individually and help you identify your learning strengths, as well as areas for growth, and connect you to available support.

Student athletes who anticipate challenges in being able to attend synchronous class meetings or submit assignments on time should speak to a course or section instructor as soon as possible about available accommodations.

Learning Resources

Have you ever noticed that elite performers across different fields - from athletes to musicians to leaders - work regularly with coaches? No matter what the domain and where you are starting from, consistent practice and guidance from others can help you improve your skills. In the academic context, this includes specific skills, such as essay-writing or quantitative problem-solving, as well as the more general skills of learning (anything) effectively and maintaining your well-being. Stanford has a wide range of tutors and coaches to help you up your game. Which will you take advantage of?

For this course, we especially recommend:

- [Writing tutors](#) from the Hume Center for Writing and Speaking, to sharpen your essay-writing skills
- [Academic skills coaches](#) from the Center for Teaching and Learning, to help you manage your time and work effectively during online and remote learning
- [Virtual study halls](#), organized by the Center for Teaching and Learning, to work and learn in quiet, virtual companionship with other students

Other campus resources include:

- [Remote Learning Strategies](#), from the Center for Teaching and Learning
- [Well-Being services](#), including [well-being coaches](#), Vaden Health Center
- [Tutoring for Learning Differences](#), Schwab Learning Center
- [Tutoring for Student Athletes](#), AARC

THINK 66 (Winter 2021) | Course schedule
(*Subject to redesign*, based on ongoing instructors evaluation, and student feedback!)

Lectures will be interactive and it is imperative that you complete all readings/watch any assigned videos by lecture Tuesday and Thursday.

Date	Assignment	Estimated time to complete this work	Deadline time (Pacific)
Week 1: The Complexity of Design			
Tues 1/12/21	Lecture 1: Welcome to THINK66 and introduction: "What is design?" Please complete Pre-course survey (mandatory, submit over Canvas)	~10 mins	
Thurs 1/14/21	Lecture 2 • Watch How Do You Design a Just Society? and Comment Responses (*PBS Idea Channel*, Mike Rugnetta) • Written response (250-300 words, Canvas) due ***before lecture*** via Canvas.	~25 mins < 60 mins	Written response due by 10:30am 1/14/21.
Week 2: *What* is Designed?			
Tues 1/19/21	Lecture 3 • Read Prelude + Chapter 1 of Wang's *Artful Design* • Reading response (250-300 words)	~1.5 hours < 60mins < 60 mins	Written response due by 5pm the night before section 1 of week 2.
Thurs 1/21/21	Lecture 4		
Fri 1/22/21			**Design Etude #1 due via Canvas by 11:59pm.**
Week 3: *Why* Do We Design? Part I: Human-Centered Design			
Tues 1/26/21	Lecture 5 • Read Chapters 1 and 2 of Norman's *The Design of Everyday Things* • Reading response (250-300 words, Canvas)	< 60 mins	Written response due by 5pm the night before section 1 of week 3.
Thurs 1/28/21	Lecture 6		
Fri 1/29/21	University deadline: Last day to add/drop a	N/A	5pm

	course		
Week 4: *Why* Do We Design? Part II: Artful Design			
Tues 2/2/21	Lecture 7 ● Read Chapter 2 of Wang's *Artful Design* ● Reading response (250-300 words, Canvas)	~2 hours <60 mins	Written response due by 5pm the night before section 1 of week 4.
Thurs 2/4/21	Lecture 8 ● Read: Langdon Winner's "Do Artifacts Have Politics?"		
Week 5: *How* Do We Design for Flourishing? Part I: Aristotle			
Tues 2/9/21	Lecture 9 ● Read Books I and VIII of Aristotle's *Nicomachean Ethics* ● Reading response (250-300 words, Canvas)	3 hours < 60 mins	Written response due by 5pm the night before section 1 of week 5.
Thurs 2/11/21	Lecture 10 ● Read Coca's Lines of Love, *The Stanford Daily*	30 min	**Due for Section 2 of Week 5: Weekly assignment: Paragraph Outline and Bibliography for Mid-Term Analysis Paper (Canvas)**
Week 6: *How* Do We Design for Flourishing? Part II: What Does It Mean Today?			
Tues 2/16/21	Lecture 11 ● Read Chapter 8 + Coda of Wang's *Artful Design* ● Reading response (250-300 words, Canvas)	~2 hours < 60 mins	Written response due by 5pm the night before section 1 of week 6.
Thurs 2/18/21	Lecture 12 ● Mid-term feedback		
Sat 2/20/21	**Mid-Term Analysis Paper due via Canvas (1000-1500 words)**	**4-5 hours**	**Mid-Term due via Canvas by 11:59pm.**
Week 7: *How* Do We Design for Flourishing? Part III: The Design of Social Technology			
Tues 2/23/21	Lecture 13 ● Watch *The Social Dilemma* ● Read "Flamethrowers and Fire Extinguishers" (link) ● Reading response (250-300 words, Canvas)	~90 mins 40 min	Written response due by 5pm the night before section 1 of week 7.

Thurs 2/25/21	Lecture 14 ● Guest Lecture: Srinija Srinivasan ● Read Chapter 7 of Wang's *Artful Design* ● John Lanchester, "You are the Product" (link)		

Week 8: *How* Will We Design Ourselves and Our Future? Part I: What do we (really) want from Artificial Intelligence?

Tues 3/2/21	Lecture 15 ● Read "Humans in the Loop: The Design of Interactive AI Systems" https://medium.com/artful-design/humans-in-the-loop-b83e3bffa65e ● Video: "Experimental Creative Writing Using Vectorized Words" (link) Reading/viewing response (250-300 words, Canvas)	~90 mins < 30 mins 60 mins	Written response due by 5pm the night before section 1 of week 8.
Thurs 3/4/21	Lecture 16	60 mins < 60 mins 60 mins	**Due Section 2 of Week 8: Title, abstract for Speculative Design Project**
Fri 3/5/21	University deadline: Last day to change course grading basis (e.g., letter grade to C/NC), and last day to withdraw from a course	N/A	5pm

Week 9: *How* Will We Design Ourselves and Our Future? Part II: Education Design

Tues 3/9/21	Lecture 17 ● Read Book VI of Aristotle's *Nicomachean Ethics* ● Read Hoffman's Improve Your Attention Span and Focus with this Rare Skill, *Medium* ● Reading response (250-300 words, Canvas)	~ 2 hours < 60 mins	Written response due by 5pm the night before section 1 of week 9.
Thurs 3/11/21	Lecture 18 Review: the Pi-Shaped Person (link)		

Week 10: The Design of You

Tues 3/16/21	Lecture 19 ● John W. Campbell's "Twilight"		

Thurs 3/18/21	**Lecture 20** **Submit Speculative Design Project over Canvas**	**Variable**	**Due at start of class, 10:30am 3/18/21.**
Fri 3/19/21	University calendar: Last day of classes		