

Course Title: Artful Design: How We Shape Technology and How Technology Shapes Us

Course Code: DSN 100

Instructor: Ge Wang

Course Webpage: <https://artful.design/dsn100>

Course Summary

**Please see course page for full description and additional details.*

Class Meeting Schedule (virtual in Zoom)

Spring 2021: April 29th-June 3rd | Thursdays 5-6:50pm

Grade Options and Requirements

- **No Grade Requested (NGR)**
 - This is the default option. No work will be required; no credit shall be received; no proof of attendance can be provided. Readings are optional but highly recommended.
- **Credit/No Credit (CR/NC)**
 - Students must participate in at least 5 of 6 weekly Zoom sessions/discussions and do the assigned readings.

Please Note: If you require proof that you completed a Continuing Studies course for any reason (for example, employer reimbursement), you must choose either the Letter Grade or Credit/No Credit option. Courses taken for NGR will not appear on official transcripts or grade reports.

Lecture Participation: while the lectures will be recorded for asynchronous viewing, it is highly recommended that students attend each lecture and participate live (time zones and other obligations permitting).

Coursework

Coursework includes readings and discussion. Those interested in additional coursework have the **option** to craft a reflective paper or a speculative design that considers the social and cultural contexts of a specific designed artifact or system (as well as the new contexts that such design creates); this assignment is not required but available to anyone interested.

Readings in this course include *Artful Design: Technology in Search of the Sublime*—an unconventional photo-comic textbook (and a “hidden ethics book”)—as well as selected essays on design, technology, and way of life.

Textbook

Wang, Ge. *Artful Design: Technology in Search of the Sublime*.

Stanford University Press. 2018 | ISBN: 978-1503600522 (<https://artful.design/>)

Note: Please acquire the printed hardcopy version when possible. If you prefer to get the eBook, the iBooks version is generally good; the quality on Kindle/Kindle app can vary widely depending on device.

Weekly Outline (Subject to Adjustment)

Week 1 “What is Design and Why Do We Do It?”

Learning objectives

1. Develop a broad and precise working definition of design.
2. Gain tools to examine works of design, discerning elements of pragmatics, aesthetics, function, form, means, and ends—and to unpack the human motivations underlying a design.
3. Identify ways in which design shapes our everyday life and our world in 2021.

Topics

1. More than meets the eye: design is all around us, sometimes hiding in plain sight
2. Why do we design? The infinite cycle of necessity and invention
3. Case study: the toilet and the smartphone
4. Case study: the design of a strange pencil case
5. Case study: the design of Ocarina, the iPhone’s Magic Flute
6. Discussion: reflect on design in our lives, and ways in which it influences our way of life, using the frameworks introduced.

Readings

- *Artful Design* Prelude, Chapters 1 “Design Is ____” and 2 “Designing Expressive Toys”

Week 2 “Models of Design; Artful Design”

Learning objectives

1. Characterize three design approaches: “human-centered design”, “design thinking”, and “artful design”, highlight the key similarities and differences between them.
2. Identify two kind of motivations for design: “deficits-based” vs. “assets-driven”—and recognize examples of each.
3. Understand what is meant by “artful design” and its emphases on values, aesthetics, and flourishing; start to apply artful design as a lens to understand and carry out design in our world, alongside other lenses.

Topics

1. Contextualizing artful design: problem solving that critically questions the underlying premise
2. Design for flourishing: what does it mean?
3. Case study: the design of toys, games, musical instruments
4. Case study: the design of public policy, laws, and constitutions
5. Discussion: the critical and uncynical unpacking of human motivations in design

Readings

- Langdon Winner, “[Do Artifacts Have Politics?](#)”
- *Artful Design* Chapters 6 “Game Design”
- (video) “[The Idyllic Video Game Sublime](#)” by Ge Wang

Week 3 “Social Tools: The Medium and the Message”

Learning objectives

1. Gain historical perspectives on the evolution of communication media through the ages.
2. Critique how our everyday tools shape our behaviors and our way of life.
3. Articulate artful design principles towards creating more virtuous social tools.

Topics

1. What is a “medium”?
2. Volume, velocity, virality: a brief history of the design of media
3. Case study: when humans built the internet by hand
4. Case study: social media and free society (how we got here)
5. Virtue and design: “what does it mean to design *well*?”

6. Discussion: what might a “virtuous social tool” look like?

Readings

- *Artful Design* Chapters 7 “Social Design”

Week 4 “The Ethics of Design”

Learning objectives

1. Identify key questions in ethics and design—and connect them to Week 1’s “why do we design?”.
2. Acquire a broad perspective on ethics and technology *beyond* “do no harm” by also considering “what does it mean to do good” and “how do we want to live with our technologies?” as ethical questions.
3. Gain tools in a real-world context to understand ethical issues in design, and strategies for working through them when they represent a conflict of underlying values.

Topics

1. Ethics is more than a “leash” on technology (it is the soul).
2. The Platinum Rule: what if this was the bottom line of doing business?
3. The conflict of values; ethics and economics
4. Case studies: the good, the bad, and the ethically sublime
5. Discussion: in search of the balance of intrinsic and economic values

Readings

- *Artful Design* Chapters 8 “Manifesto: A Philosophy of Artful Design”

Week 5 “What Do We (Really) Want From Artificial Intelligence?”

Learning objectives

1. Understand what constitute “artificial intelligence”, ways in which it is designed, and its potential promise and perils.
2. Formulate critical questions about AI and the design of artificial intelligence systems.
3. Gain a conceptual understanding of human-in-the-loop approaches to design AI systems

Topics

1. What is AI and how is shaping our world today? Where is it going?
2. The Oracle or the Tool – what do we want?
3. Case study: word embeddings using word2vec
4. Humans in the loop: the artful design of AI systems
5. The importance of seeking better questions in AI
6. Discussion: what *do* we (really) want from AI?

Readings

- “[Humans in the Loop: The Design of Interactive AI Systems](#)” by Ge Wang
- (video) “[Experimental Creative Writing with Vectorized Words](#)” by Allison Parrish

Week 6 “The Future History of Design”

Learning objectives

1. Recognize what is at stake in our technology-drenched world, presently and moving forward.
2. Contemplate what engineers of today and tomorrow need to be, as well as the role of multi-disciplinary education. How can we do better?
3. Take stock of what you’ve learned so far and how you might apply them in work, study, and life.

Topics

1. The Humanist Engineer / “Pi-Shaped Person”
2. The Design of Us: Design for flourishing revisited
3. Social justice; what does it mean for design to be truly “artful”?
4. Discussion: where we go from here