Course Description:
The purpose of this class is to imagine new ways for the human machine interface to become more seamless, intuitive and enjoyable in the future. We have been around for 2.6 million years. Computers have been in widespread use for less than 40. In this time, we have always been tied to a display and keyboard- and now the touchscreen. How could or should this change in the next 20 years? What could it become?

Most of the visions we see of the future are dystopian, grim and cautionary. This intensive, by contrast, will lean into the power of creativity to cultivate optimistic proposals for balancing our humanity with purpose and productivity in the future. Let’s dedicate the class to using your imagination and collaborative skills to tell a story focused on the future of work and the human/machine matrix.

According to the World Economic Forum, by 2025, 85 million jobs may be displaced by technological advancements. 97 million possible new roles will soon emerge which are adapted to a new division of labor between humans, machines and algorithms. How will our current modes of thought, work, commerce, conservation, education, career, relaxation and family change as a result of this massive handoff to drones, robots and algorithms? If we have delegated so much to our tech, what will the humans be doing and from where and how will we be doing it? Will we enjoy it more or less than we are enjoying our current paradigms? Let’s hone our skills of speculation to design beautiful, powerful and desirable new physical portals to the virtual world and describe how we will interact with them. I invite you to dream of ways we can overcome the wicked problems surrounding us and create inviting proposals for how we will work in 2040. This intensive will give you the chance to practice your written and visual storytelling and forecasting skills in product, furniture, environmental and lifestyle design.

Prompt:
How will we work in 2040? Imagine how everything will be from living to exercise to cooking and eating and tease out this one aspect of future life- work- and by day 4- you and your team will present your vision for one physical portal to the virtual world. You may use written narrative, drawings, model making, film or animation or any other tool you would like to paint a vivid, convincing picture of your concept. Sell us on your proposal as if we are the investors who could fund your vision.

Once you have met your team, choose a demographic sector and a sub-prompt such as:

- How will we socialize at work?
- How will we manage our time?
- How will we commute to work?
- How will we avoid screen fatigue?
- Will we work long hours? If yes, how will we avoid burnout?
How can we age and still work?

Demographic sectors:

- Ages K-12
- Ages 18-28
- Ages 29-50
- Ages 50-70
- People experiencing poverty and lack of home

Mission:
You and your teammates will explore your demographic sector and choose 3 personas, design and develop one physical portal to the virtual world serving your personae for the year 2040. You will do some guessing, speculating- envisioning and that is great-there are no right answers, so plan to have fun and let’s take a trip down “Speculation Lane” to create diegetic prototypes- or talismans of the future!

Deliverables through the course:

- 5 written storytelling nuggets (50-100 words) describing new ways to work
- Market study
- Problem Statement
- 5 “How Might We’s”
- 3 What Ifs for each HMW (15 total)
- 1 or more (refinement) sketch per What If
- Mock ups (you will know how many- this is iterative, and each project is slightly different)
- 3D models (analogue, digital or optional film/animation- be scrappy and communicate your vision how best you can)
- Presentation deck: your ideas in a persuasive deck which predicts the future, and also pitches your vision for it.
- Final deck: a separate “leave-behind” deck that summarizes your final solution

Learning Objectives and Outcomes

- You will research the tech of the future and how that could impact our social and particularly our work lives.
- You will learn and practice the art of design fiction or speculative design.
- You will design something which could make a positive impact on the worker of the future- which is using design as a healing art.
- You will practice thinking deeply about the psychology and physicality of task, also called ergonomics or human factors.
- Designing a physical product brings up many worthwhile questions about inclusion, which you will need to confront in your design.
- You will practice and hone your skills with drawing and model making to demonstrate your vision.
- You will practice using your imagination tempered with the trend and demographic research you do- so you will be cultivating a working dream, or visionary design.
- You will practice and hone your storytelling to aid you in accessing your imagination to solve problems you predict to arise- that’s power! (and an interesting spin on Human Centered Design methods!)
- You will practice iterative design development- the cornerstone of all great design.
- You will collaborate with classmates, possibly from other IYA programs to propose something new and original which could change the world.

Readings and Supplementary Materials:
Please visit these websites and familiarize yourself with these projects:

https://www.youtube.com/watch?v=Q13CishCKXY
https://futurist.com/2022/05/16/the-future-of-work-and-the-jobs-we-might-have-in-2040/
https://www.wellable.co/blog/malcolm-gladwell-not-your-best-interest-to-work-at-home/
### Agenda for the daily sessions:

#### Day 1: Saturday 10/1

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00–9:30</td>
<td>Introduction - who’s who - brief summary of the 4 days</td>
</tr>
<tr>
<td>9:30–9:50</td>
<td>Explanation of prompt + Team reveal!</td>
</tr>
<tr>
<td>10:00–12:00</td>
<td>Chris Do, CEO/Founder of The Futur - warm up to the future</td>
</tr>
<tr>
<td>12:00–1:00</td>
<td>Lunch Break</td>
</tr>
<tr>
<td>1:00–2:00 (break)</td>
<td>Futurecasting Workshop with Yihyun Lim (futurecasting frameworks signals/emerging issues/trends)</td>
</tr>
<tr>
<td>2:10–3:15 (break)</td>
<td>History of speculative or visionary design (lecture + discussion)</td>
</tr>
<tr>
<td>3:25–4:25</td>
<td>Team exercise: research/ identify signals/ emerging issues/trends - establish your team’s framework/choose sub prompt write story nuggets for your demographic (LK drop ins)</td>
</tr>
<tr>
<td>4:30–5:00</td>
<td>Full group share - read nuggets/ review plan for Day 2/ HW: research your market sector</td>
</tr>
</tbody>
</table>

#### Day 2: Sunday 10/2

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:00–10:15</td>
<td>Hello and Day 2 plan review</td>
</tr>
<tr>
<td>10:15–12:00</td>
<td>Team time: Choose 3 Personas- prep preliminary deck with Personas + Problem Statement + How Might We’s (LK drop ins)</td>
</tr>
<tr>
<td>12:00–1:00</td>
<td>Lunch Break</td>
</tr>
<tr>
<td>1:00–3:00 (break)</td>
<td>Shapr3D workshop: Professor Grant Delgatty</td>
</tr>
<tr>
<td>3:15–3:55</td>
<td>Continue initial deck kI</td>
</tr>
<tr>
<td>4:00–4:45</td>
<td>Initial Vision Share/feedback (TBD 1:1- or everyone)</td>
</tr>
<tr>
<td>4:45–5:00</td>
<td>Review of Day 3+4 plan/ Farewell for the week/ see you on slack during the week: checklist for week ahead</td>
</tr>
</tbody>
</table>

#### Day 3: Saturday 10/8

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:00–10:15</td>
<td>Hello and Day 3 plan review</td>
</tr>
<tr>
<td>10:15–10:30</td>
<td>Team check in</td>
</tr>
<tr>
<td>10:30–12:00</td>
<td>Techniques in analogue mock ups, photoshop hacks, cardboard- Jacob Patapoff, Creator Studio Manager</td>
</tr>
<tr>
<td>12:00–1:00</td>
<td>Lunch Break</td>
</tr>
<tr>
<td>1:00–3:00</td>
<td>Team time for producing mock ups- digital/analogue/film (LK drop ins)</td>
</tr>
<tr>
<td>3:00–3:30</td>
<td>Revisit Problem Statements/How Might We’s + What Ifs with team</td>
</tr>
<tr>
<td>3:30–4:00</td>
<td>Revisit story nuggets- revise/rewrite so they express your vision informed by research</td>
</tr>
<tr>
<td>4:00–4:45</td>
<td>Team time/Teams present 1:1 with Lisa- punch list for final review</td>
</tr>
<tr>
<td>4:45–5:00</td>
<td>Review of Day 4 plan/ Farewell</td>
</tr>
</tbody>
</table>


Day 4: Sunday 10/9

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:00–10:15</td>
<td>Hello and Day 4 plan review</td>
</tr>
<tr>
<td>10:15–11:00 (break)</td>
<td>Team time/Teams present 1:1 with LK- punch list for final review</td>
</tr>
<tr>
<td>11:15-12:00</td>
<td>Team time- continue to work on your models and/or films</td>
</tr>
<tr>
<td>12:00-1:00</td>
<td>Lunch Break</td>
</tr>
<tr>
<td>1:00-2:30 (break)</td>
<td>Team time- final updates to decks (LK drop ins)</td>
</tr>
<tr>
<td>2:45–4:45</td>
<td>Final review with Tucker Viemeister</td>
</tr>
<tr>
<td>4:45-5:00</td>
<td>Wrap up/Farewell/ speed round</td>
</tr>
</tbody>
</table>

Grading Breakdown

<table>
<thead>
<tr>
<th>Assignment/Milestone:</th>
<th>Points</th>
<th>% of Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Study: research/write up key attributes of your sector- Identify/predict signals- establish your team's framework- choose sub prompt. Choose 3 personas. Define your Problem Statement.</td>
<td>8</td>
<td>8%</td>
</tr>
<tr>
<td>Team exercise: brainstorm your demographic/personas with your team. Define 5 “How Might We” framing questions. Then individually produce: 5 written storytelling nuggets each (50-100 words) describing new ways to work- be as specific as you can.</td>
<td>8</td>
<td>8%</td>
</tr>
<tr>
<td>As a team, prep 3 “What If” descriptions with a drawing (or more) responding to each “How Might We”. (total: 15 “What If” visions) Prep preliminary deck with Personas + Problem Statement + How Might We’s + What Ifs (you will refine this to become your final deck)</td>
<td>8</td>
<td>8%</td>
</tr>
<tr>
<td>Produce mock ups- digital/analogue/film (you will know how many- this is iterative)</td>
<td>8</td>
<td>8%</td>
</tr>
<tr>
<td>3D models (analogue or digital or optional use of video storytelling) Revisit Problem Statements/How Might We’s + What Ifs with team- adjust as needed</td>
<td>8</td>
<td>8%</td>
</tr>
<tr>
<td>Presentation Deck (design, explanation, deck) all your ideas put together into one beautiful, simple persuasive deck. Not only are you predicting the future, but you are also pitching your vision for it. This is the distilled culmination of the work you and your team have built throughout the intensive. Dazzle us with your vision- and do not be caught up in perfect visuals- concepts come first.</td>
<td>20</td>
<td>20%</td>
</tr>
<tr>
<td>Final Project Deliverable: This is a separate “leave-behind” deck that summarizes your final solution. The deck should be able to survive as a stand-alone piece, without your presence. This assignment also serves as a chance for you to react to the comments and feedback received during the final project presentation, in order to improve upon the end deliverable and research narrative. As a result, feedback from the presentations should be addressed in each deck. This should be shared in a single PDF file. If you include other media (such as audio or video files), please ensure they are linked in the primary PDF for ease of access.</td>
<td>30</td>
<td>30%</td>
</tr>
<tr>
<td>Participation (teamwork, stamina, spirit)</td>
<td>10</td>
<td>10%</td>
</tr>
</tbody>
</table>

TOTAL 100 100%

Grading Scale (Course final grades will be determined using the following scale)
A 95-100
A- 90-94
B+ 87-89
B 83-86
Classroom norms:
Since we will be online, I encourage students to interact and collaborate with teammates, classmates and me on Slack, Miro, Google Drive and any other tools helpful to connect and share creative space which transcends physical distance. I will place emphasis on taking risks, and new conceptual ground, and innovation with speculative design and ergonomics- and hope students will feel reassured that should they put their passion into this work, that they will be favorably considered in the grading. Students in the LA area are encouraged to make use of the IYH Makerspace in service of their team’s final project should the team choose to produce a 3D prototype. Should a team choose to produce a 3D item at home with more limited materials and tools, I will respect and consider the more limited scope of tools- and judge your work according to your creative and conceptual reach. In short, while I require the creation of mock ups and prototypes, for the sake of equity, slick, Makerspace-produced ones are not required and will not receive grading priority.

Zoom + Team Etiquette:
You guys have got this. Please keep your cameras on unless you are indisposed momentarily, set yourselves up with the supplies and sustenance you will need to do your best on a design sprint: nutritious groceries, snacks, hydration, child and pet provisions, any meds you might need, and a comfortable space to dive into our collaboration with a minimum of external stressors. Please remember that we are a heterogeneous group in which some have great visual skills, some great tech, some business chops and some are awesome visionaries but lack skill with manifestation. Let’s work together and check our egos and judgements at the door- and come up with some awesome shared visions for the future.

Assignment Rubrics:
Please note that since you come from diverse backgrounds and have have varying skills in visual and technical product design, the grading criteria and expectations will be weighted on quality of inquiry, conceptual originality, plausibility, creativity with demonstrating your vision however you can. (Use your strong skills, practice your weak ones, divide up the work with your teammates, and remember that anyone can have a great idea whether or not they possess sophisticated visual skills.)

Assignment Submission Policy:
Please submit all milestones to the appropriate folder in the class googledrive.

Required and Optional Materials:
If you have proficiency with physical, digital and or phygital making, these would be good skills to bring to your team in the mocking up and prototyping of your ideas for the future interfaces you will be imagining and designing.

Clearly, it is hard to anticipate which supplies will be ideal since your mockups and prototypes will depend on the ideas you are exploring and the scale in which you are working. I anticipate some will design apparatuses for reclining or standing work, some will focus more on wearables and device-specific interfaces.

I would like each student to be prepared to do some mocking up using corrugated cardboard, hot glue gun + glue sticks, mat knife, metal straight edge, cutting mat and polymer clay (Sculpey of similar- Michael’s has an inexpensive, decent one.) Please reach out to me with any questions should you want to provision these items.

Participation:
To get full credit for participation, students should attend the 25 hours of Zoom class and expect to perform work and collaborative communication with team members outside of class time to prepare the conceptual and presentation materials for the different course milestones. This Includes working though coordination of different working styles, modes of communication, and willingness to learn and use remote tools for collaboration as needed.
Grading Timeline
Team final decks should be submitted by Sunday, 10/09 2:45pm when the final review will begin. Teams should submit their tweaked decks (updated to reflect feedback received during the review and further reflection) by Sunday 10/16 5pm PST so that grades can be submitted by 10/20.

Contact Hours
This 2-unit course requires 1500 minutes. This includes 25 contact hours of instructional time. In addition, it is expected that students will work, on average, an additional 3000 minutes (50 hours) outside of class on readings/viewings, homework assignments, field experiences, and individual or team projects. Synchronous class sessions will be offered as 4 meetings Saturday and Sunday 10/1+2 and 10/8+9. Class will run 9am-5pm Saturday 10/1 and 10am-5pm for the 3 other days.

Fall 2022 addendum:
· Unless students provide an accommodation letter from USC’s Office of Student Accessibility Services (OSAS) or a letter from IYA Student Services detailing visa or travel restrictions, attendance and active participation is expected in the classroom. Any student with such accommodations should submit their accommodation document to the instructor as soon as possible to discuss appropriate accommodations. Either classroom recordings or live remote access to the class via Zoom will be provided.
· Students who are experiencing illness should not attend class in person. Please inform the instructor in advance of any class sessions that you can’t attend for medical reasons, and accommodations will be arranged to view recorded lectures and submit alternatives to any missed class participation. Students will not be penalized for not attending class in person under these circumstances.
· In the event that you find yourself experiencing COVID-19 related symptoms, in keeping with university recommendations, you should Stay home! This is the best way to prevent spreading COVID-19 as supported by scientific evidence; Please do not come to an in-person class if you are feeling ill, particularly if you are experiencing symptoms of COVID-19.

Synchronous session recording notice
Our synchronous sessions will be recorded and provided to all students asynchronously (generally through recorded Zoom sessions, integrated into Blackboard).

SCampus Section 11.12(B)
Distribution or use of notes or recordings based on university classes or lectures without the express permission of the instructor for purposes other than individual or group study is a violation of the USC Student Conduct Code. This includes, but is not limited to, providing materials for distribution by services publishing class notes. This restriction on unauthorized use also applies to all information, which had been distributed to student or in any way had been displayed for use in relationship to the class, whether obtained in class, via email, on the Internet or via any other media. (See Section C.1 Class Notes Policy).

Class notes policy: Notes or recordings made by students based on a university class or lecture may only be made for purposes of individual or group study, or for other non-commercial purposes that reasonably arise from the student’s membership in the class or attendance at the university. This restriction also applies to any information distributed, disseminated, or in any way displayed for use in relationship to the class, whether obtained in class, via e-mail or otherwise on the Internet, or via any other medium. Actions in violation of this policy constitute a violation of the Student Conduct Code, and may subject an individual or entity to university discipline and/or legal proceedings. Again, it is a violation of USC’s Academic Integrity Policies to share course materials with others without permission from the instructor.

No recording and copyright notice: No student may record any lecture, class discussion or meeting with the instructor without his/her prior express written permission. The word “record” or the act of recording includes, but is not limited to, any and all means by which sound or visual images can be stored, duplicated, or retransmitted whether by an electro-mechanical, analog, digital, wire, electronic or other device or any other means of signal encoding. The instructor reserves all rights, including ownership, to his/her lectures, course syllabi and related materials, including summaries, slides (e.g., Keynote, PowerPoint), prior exams, answer keys, and all supplementary course materials available to the students enrolled in the class whether posted to the LMS or otherwise. They may not be reproduced, distributed, copied, or disseminated in any media or in any form, including but not limited to all course note-sharing websites. Exceptions are made for students who have made prior arrangements with The USC Office of Disability Services and Programs and the instructor.
Participation: Students are expected to actively participate in this course. In an online forum, participation includes:

- Careful reading and viewing of assigned materials by the date due
- Regular, substantive contributions to discussions
- Active engagement with online content
- On-time attendance and full attention in synchronous sessions
- Significant collaboration with classmates and teammates

Course grades may be affected for students who do not contribute to the course through active participation. Students should notify the instructor in advance if they are unable to attend class. Those unable to attend will be required to review the online recording for the session missed, and submit thoughtful feedback to the Instructor.

HOW TO PURCHASE SOFTWARE AT THE DISCOUNTED ACADEMY RATE

For classes that require them, the following software are available for purchase online through the USC Iovine and Young software catalog at the Academy discounted rate:

<table>
<thead>
<tr>
<th>Software</th>
<th>IYA Short-Term License at USC Bookstore</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adobe Creative Cloud</td>
<td>$70 (2022–2023 annual license)</td>
</tr>
<tr>
<td>Apple Logic Pro</td>
<td>$35 semester licenses</td>
</tr>
<tr>
<td>Solidworks</td>
<td>$35 semester license</td>
</tr>
<tr>
<td>Apple Final Cut Pro</td>
<td>$35 semester license</td>
</tr>
</tbody>
</table>

To purchase:
- Visit: [https://commerce.cashnet.com/IOVINE](https://commerce.cashnet.com/IOVINE)
- Select the software license(s) you would like to purchase by clicking “View Details” or the software title, and make your purchase
- You will receive an order confirmation receipt at the email address you provided
- You will be notified by email when the software license has been activated

If you have any questions about this process, please do not hesitate to contact Academy IT Support at iyahelp@usc.edu.

Statement on Academic Conduct and Support Systems

Academic Conduct:

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in SCampus in Part B, Section 11, “Behavior Violating University Standards” [policy.usc.edu/scampus-part-b](http://policy.usc.edu/scampus-part-b). Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on [Research and Scholarship Misconduct](http://policy.usc.edu/scampus-part-b).

Students and Disability Accommodations:

USC welcomes students with disabilities into all of the University’s educational programs. The Office of Student Accessibility Services (OSAS) is responsible for the determination of appropriate accommodations for students who encounter disability-related barriers. Once a student has completed the OSAS process (registration, initial appointment, and submitted documentation) and accommodations are determined to be reasonable and appropriate, a Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodations are not retroactive. More information can be found at [osas.usc.edu](http://osas.usc.edu). You may contact OSAS at (213) 740-0776 or via email at osasfrontdesk@usc.edu.

Statement on Academic Conduct and Support Systems

Support Systems:

*Student Health Counseling Services - (213) 740-7711 – 24/7 on call*
**engemannshc.usc.edu/counseling**
Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

**National Suicide Prevention Lifeline - 1 (800) 273-8255 – 24/7 on call**
suicidepreventionlifeline.org
Free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.

**Relationship and Sexual Violence Prevention Services (RSVP)**
213-740-9355 (WELL)
https://studenthealth.usc.edu/sexual-assault/
Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

Relationship and Sexual Violence Prevention and Services provides immediate therapy services for situations related to gender- and power-based harm (e.g., sexual assault, domestic violence, stalking). (wording from the site)

**Office of Equity and Diversity (OED) | Title IX - (213) 740-5086**
equity.usc.edu, titleix.usc.edu
Information about how to get help or help a survivor of harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants. The university prohibits discrimination or harassment based on the following protected characteristics: race, color, national origin, ancestry, religion, sex, gender, gender identity, gender expression, sexual orientation, age, physical disability, medical condition, mental disability, marital status, pregnancy, veteran status, genetic information, and any other characteristic which may be specified in applicable laws and governmental regulations.

**USC Policy Reporting to Title IX (213) 740-5086**
https://policy.usc.edu/reporting-to-title-ix-student-misconduct/
The university encourages individuals to report prohibited conduct to the Title IX Office. Individuals can report to the university Title IX Coordinator in the Office of Equity and Diversity.

**Bias Assessment Response and Support - (213) 740-2421**
studentaffairs.usc.edu/bias-assessment-response-support
Avenue to report incidents of bias, hate crimes, and microaggressions for appropriate investigation and response.

**The Office of Disability Services and Programs - (213) 740-0776**
dsp.usc.edu
Support and accommodations for students with disabilities. Services include assistance in providing readers/notetakers/interpreters, special accommodations for test taking needs, assistance with architectural barriers, assistive technology, and support for individual needs.

**USC Support and Advocacy - (213) 821-4710**
studentaffairs.usc.edu/ssa
Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

**Diversity at USC - (213) 740-2101**
diversity.usc.edu
Information on events, programs and training, the Provost’s Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

**USC Emergency - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call**
dps.usc.edu, emergency.usc.edu
Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

**USC Department of Public Safety - UPC: (213) 740-6000, HSC: (323) 442-120 – 24/7 on call**
dps.usc.edu
Non-emergency assistance or information.