University of Houston in collaboration with OCAD University DESIGN FUTURES WORKSHOP & Summer Course

Designing the future to make better decisions today.

## Welcome to the Design Futures Workshop and Summer Course!

### Workshop Introduction

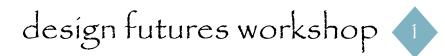
### What if...

Rather than designing for today based on yesterday, what if we designed with the idea of tomorrow in mind? By imagining the future more clearly, will you design more strategically with foresight and long-term concerns? Will your organization be more durable and prepared for change? Can you become comfortable with accelerating uncertainty?

### In 2050...

- how will people work, and where?
- how will you design buildings and build communities?
- what gadgets will you carry, what would they look like?
- what sports will you play or watch?
- how will we overcome global challenges like climate change, education, or food shortages?

In **Design Futures**, you will explore the world of 2050 using futures tools and generate tangible scenarios and futures artifacts using design, creativity, and problem solving techniques. During the three-day intensive seminar and workshop, you will hear from industry and academic experts and engage in multiple hands-on design projects working individually and in teams. The capstone day will be spent in a design futures charrette creating places, things, organizations, and collective actions for 2050.



# **Registration information**

#### Workshop June 6-

### Houston and OCAD University

In Houston, practitioners and students from futures, strategic foresight, architecture and design in a threeday intensive workshop, Cameron Building Room 229.

#### Summer Course June 6 to July 11

Students continue with design futures projects and virtual classes till July 11th.

#### **Design Futures Workshop Registration**

- Professionals: <u>https//ceregister.uh.edu</u> under TECH 6397 Design Futures, cost: \$1,000 through May 31, \$1,350 after. Workshop runs June 6- ursday-Saturday 9-5pm.
- Students: Graduate level course TECH 6397, regular tuition fees, 3 credit hours. Course runs June , Workshop June 6-8, Virtual Class June 9-July 11 Th 5:30 – 8:30 CDT
- Free online kickoff and information session Th May 16, 5:30 CDT <u>http://uh.adobeconnect.com/design</u> (register as a guest, no password)

**Contact** Graduate Assistant of Futures Studies April Koury \_\_\_\_\_\_ for details.

### **Summer Course University of Houston**

UH Course Number: Special Topics (TECH 6397)
Course Title: Design Futures
Semester:
UH Course Location: Cameron 229
UH Instructor: Cindy Frewen, Peter Bishop (program director)
Office Hours: by appointment, online
Email: cfrewen@uh.edu; p.bishop@uh.edu
Phone: 913-961-1702, 281-433-4160
Prerequisites: None
Course schedule –

- Kickoff meeting (on campus and online), May 16, 5:30 pm CDT
- Pre-readings and instructional sessions (on campus and online), May 17-June 5
- Design workshop (Cameron 229), June 6-8
- Design teamwork and weekly Th eves online, June 9-July 10
- Project presentations (on campus and online), July 11

The Futures Studies program at the University of Houston is offering

entitled Design Futures. Its overall purpose is to explore and integrate two perspectives for influencing the future – design thinking and futures studies. It is planned as an elective for graduate students and excellent upper level undergraduate students in good standing in any UH program.



## **Day 1 Design Futures**

Design Futures marries futures methods with the design process to anticipate and materialize alternative futures and tangible speculative worlds.

*Topics and tools:* Anticipatory systems, complexity, creative problem solving, creativity and innovation, design fictions and design futures, generating tangible future scenarios, and learning to design futures artifacts, collective actions, places, and organizational models using a design futures process, Three Horizon Scenarios.

#### Thursday morning

8:30 to 9:00	:30 to 9:00 Coffee and conversation			
9:00 to 10:30	Introductions and Card Game	Pairs, small groups		
	Design Futures/ Design Process Readings: Raford 2012, Sterling 2009, 2012, Inayatullah 2007	Cindy Frewen		
10:45 to 11:48	5 Design Futures/ Research Readings: Van Alstyne 2010, Thackara 2005, Sterling 2009, 2012	Greg Van Alstyne		
	Creative Design Process Insights Readings: Brown 2008, Farson 2008, Koberg 1972	Rives Taylor		
Lunch				
Thursday aft	ernoon			
-	ernoon Three Horizons Scenarios Reading: Curry 2008, Gregory, et al	Andrew Curry		
-	Three Horizons Scenarios	Andrew Curry Cindy Frewen 3 teams at each site		
-	Three Horizons Scenarios Reading: Curry 2008, Gregory, et al Creativity, Imagination, and Novelty	Cindy Frewen		
12:15 to 2:30	Three Horizons Scenarios Reading: Curry 2008, Gregory, et al Creativity, Imagination, and Novelty Readings: Koberg 1972, Kelley 2001, Senge Strategic Design	Cindy Frewen 3 teams at each site		
12:15 to 2:30	Three Horizons Scenarios Reading: Curry 2008, Gregory, et al Creativity, Imagination, and Novelty Readings: Koberg 1972, Kelley 2001, Senge Strategic Design Reading: Zimbardo 1999	Cindy Frewen 3 teams at each site Todd Gentzel		

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# **Day 2 Futures Thinking**

Strategic foresight to anticipate possible opportunities and disruption. How to build design futures into your business practices.

*Topics and tools:*, ethical design principles, reframing issues, scenarios and innovation in 2050, big complex systems strategies and design futures outlook.

#### **Friday Morning**

8:30 to 9:00	Coffee and conversation	
9:00 to 10:15	Intro Futures Thinking and Tools Readings: Bishop 2010, 2011	Cindy Frewen Peter Bishop
	2050 Scanning Context Arup 2013, See resources	Small groups, each site
10:30 to noon	Design Futures Outlook Readings: Cramer 2013	Jim Cramer
	Anticipatory Systems, Complexity Readings: Bishop 2010, 2011	Peter Bishop Jeremy Bowes
	Reflections	Group
Lunch		
Friday Aftern	oon	
1:00 to 2:30	Big Complex Systems Reading TBD	Todd Gentzel
	2050 Context	Teams across sites
	Ethical Design Readings: Resilience ( <u>Part 1</u> , <u>Part 2</u> , <u>Part 3</u> ) McDonough 2002	Rives Taylor
2:45 to 5:00	Creativity and Reframing Readings: Michalko 2000, Senge 1990	Individuals
	Design Futures Practice Reading: Cramer 2013, Farson 2008	Jim Cramer

Reflections and look to DF Charrette



# **Day 3 Design Futures Charrette**

8:30 to 9:00 Coffee and conversation

Materializing scenarios, innovations, and models for 2050, design review with industry experts, debrief and reflections to carry forward.

Tools and topics: Generating tangible futures, how to use design futures in business, community, and design projects

### Saturday morning

9:00 to 11:00 Introduction Cindy Frewen Greg Van Alstyne Peter Bishop

**Design Futures Charrette** 

Lunch

### Saturday Afternoon

1:00 to 2:45	Design Jury Presentations	DF Teams Faculty/Jury
	Recaps	
3:00 to 5:00	Final Instructions	Cindy Frewen Greg Van Alstyne

Reflections

Closing Comments

Sending off

Group

Peter Bishop

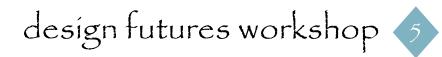
DF teams

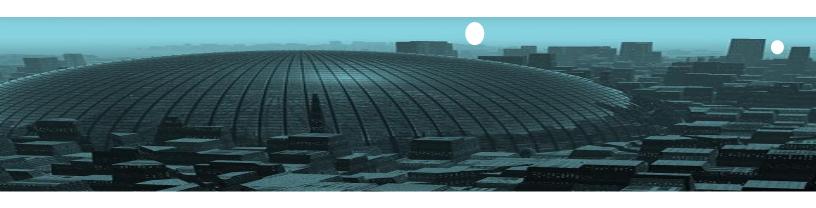
Faculty

Cindy Frewen Greg Van Alstyne Peter Bishop

Completion of Design Futures Workshop on campus

Professionals, Students, and Faculty are welcome to join us July 20 or 21 for a Celebration in Chicago.





### **Design Futures Workshop Faculty**

#### **University of Houston**



**Dr Cindy Frewen, FAIA, UH**, teaches at the University of Houston graduate program in Futures Studies, consults with cities and organizations on future cities and organizations, and writes a column for *The Kansas City Star*. Her projects include Kansas City downtown civic center, Ilus Davis Park/Civic Mall, City Hall Addition, and KC Police Department master planning. Cindy has worked with Urban Land Institute, Nelson-Atkins Museum, IBM, Innovaro, and UNESCO, chairs the Association of Professional Futurists, and instructs the course for UH.



**Dr Peter Bishop, UH,** is an Associate Professor of Strategic Foresight, Director of the graduate program in Futures Studies at the University of Houston, and co-author of *Thinking about the Future: Guidelines for Strategic Foresight* and *Teaching about the Future: The Basics of Foresight Education.* He delivers keynote addresses, and conducts seminars on the future for business, government and not-for-profit organizations, and is a founding member of APF.

#### **OCAD University**



**Greg Van Alstyne, OCAD U,** Director of Research, is a futurist, design educator and creative director with twenty-five years of experience in communication and experience design, art direction, and design strategy. Previously Greg was the inaugural director of the Institute without Boundaries, established by Bruce Mau Design and directed the conception, development and production of *Massive Change: The Future of Global Design.* Greg instructs the course for OCAD.



**Jeremy Bowes**, Professor of Design at OCAD University, teaches environmental design, leads the SystemCity research group at sLab, and co-teaches Systems in the Strategic Foresight and Innovation Program. With 35 years of experience as an interior and architectural designer, he has developed film and television studios, interior and architectural design, exhibits, furniture, urban infill, cottage and residential projects, with a focus on sustainable methods, systems and materials.

#### **Industry Experts**



Jim Cramer, Greenways Partnership and Design Futures Council, researches, consults, and gives seminars for leading professional firms around the world. He is the author of several hundred articles and several books, including the critically acclaimed *Design Plus Enterprise: Seeking a New Reality in Architecture.* He is co-author of *How Firms Succeed: A Field Guide to Management Solutions*, editor of the *Almanac of Architecture and Design,* and former CEO of the American Institute of Architects.



**Todd Gentzel**, is a Chief Strategist at Yaffe Deutser, a Houston-based management consulting firm that specializes in strategy, organizational alignment and demand generation. His sector experience includes healthcare, education, retail, aviation, energy, technology, industrial services and not-for-profit.



**Rives Taylor, FAIA,** Gensler, is a sustainable design leader with more than 25 years experience in institutional and commercial architecture, He spent 18 years focusing on strategic planning, programming, and sustainable design. Rives casts a wide net in elevating both the why and how of sustainable design, including students, faculty, professionals, public officials and the general public.

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# Summer Course Design Futures

## **UH Course:** Special Topics (TECH 6397)

### Thursdays 5:30 pm to 8:30 pm CDT, Adobe Connect at UH, Canvas at OCAD U

May 16 Introduction to Design Futures Workshop and Summer Course (Optional attendance)

Workshop June 6 – 8, Thursday, Friday, Saturday 9:00 am to 5:00 pm at University of Houston and OCAD University, required onsite attendance.

June 13	Design Development
	How to frame a design futures project
	Working in virtual teams
	Elevating the range of outcomes
	Submit: 2 Project Teams interim presentations
	Readings: Senge 1990 "Shared Vision" and "Team Learning"

- June 20 Design Futures in Research, Greg Van Alstyne How to write a good research question Design Futures Project Reviews Submit: 2 Project Teams interim presentations Submit Midterm Design Futures Workshop and Charrette Reflection Essays
- June 27 Design Futures in Use, Cindy Frewen Presentational skills Communications Design Futures Project Reviews Submit: 2 Project Teams interim presentations Submit Midterm Reading Reflections
- July 2 Synthesizing Futures and Design Processes Mental time travel, 2050 Final presentation q and a
- July 11 Final Presentations
- July 20 or 21 Celebration in Chicago for Students, Professionals, and Faculty



# **Design Futures Readings**

Required for summer course		Optional	
1.	Design Futures	1	
a. b. c. d.	Raford, Noah, 2012. "From Design Fiction to Experiential Futures" Van Alstyne, Greg, 2010. "How We Learned to Pluralize the Future: Foresight Scenarios as Design Thinking." In <u>Creating Desired Futures: How Design Thinking Innovates Business.</u> Bleecker, Julius, 2009. "Design Fiction" Sterling, Bruce, 2012. " <u>An Essay</u> on the New Aesthetic." <i>Wired</i>	e. f. g.	Johnson, Brian David, 2011. <u>Science Fiction</u> <u>Prototyping: Designing the Future with</u> <u>Science Fiction.</u> Shedroff, Nathan, and Christopher Noessel. 2012. <u>Make It So: Interaction Design Lessons</u> <u>from Science Fiction</u> Sterling, Bruce, 2009, "Design Fiction"
0	Design this line, design process are still a such		
2.	Design thinking, design process, creative probl	em s	solving
a.	Brown, Tim, 2008. "Design Thinking." HBR	d.	Brown, Tim, 2009. "Change by Design"
b.	Farson, Richard, 2008. <u>The Power of Design</u> (Meta-design: applying design to big problems) ( <i>Ch1, 2, 3, 6,7,11, 21</i> )	e. f.	Kelley, Tom, 2001. <u>The Art of Innovation</u> (read book if you want to more on innovation) Thackara, John, 2005. In the Bubble :
C.	Kelley, Tom, 2001. <u>The Art of Innovation</u> "Innovation" and "Hot Groups"		Designing in a Complex World. Ch10 Flow
3.	Creativity, Visioning, Teamwork	I	
a.	*Koberg and Bagnall, 1972. <u>The Universal</u> <u>Traveler (</u> book)	d.	Gray, David, Sunni Brown, and James Macanufo. 2010. <u>Gamestorming: A Playbook</u> for Innovators, Rulebreakers, and
b.	Senge, 1990. <u>The Fifth Discipline</u> , "Mental Models", "Visioning", "Team Learning"		Changemakers.
c.	Michalko, Michael, 2000. "Four Steps Toward	e.	Senge, et al, <u>The Fifth Discipline Field Book,</u>
0.	Creative Thinking" <i>The Futurist</i>	f.	Sutton, 2001. "The Weird Rules of Creativity"
4.	Futures thinking		
a.	Bishop, Peter, 2010. "Futures framework"	f.	Bezold, Clem, 2009. "Aspirational Futures",
b.	Bishop, Peter, 2011. "Anticipatory futures"		Journal of Futures Studies
C.	Curry, Andrew and Anthony Hodgson, 2008. "Seeing in Multiple Horizons: Connecting	g.	Dator, Jim, 1994, "Surfing the Tsunamis of Change"
	Futures to Strategy," <i>Journal of Futures Studies</i>	h.	Tibbs, Hardin, 1994. "Making the Future Visible" (future landscape)
d.	Gregory, Erika, Gerald Harris, and Jay Ogilvy, nd. "After the Scenarios, Then What?	i.	Gordon, Adam, 2008. <u>Future Savvy</u> , Ch8 "Systems
	Strategic Conversation, Early Indicators, and	j.	Zimbardo, Philip & John Boyd, 1999. "Putting

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e.	the Art of Communication Scenarios." Inayatullah, Sohail, 2007. "Six Pillars: Futures Thinking for Transforming," <i>Foresight</i>		Time in Perspective." (esp intro, discussion and conclusions)
5.	2050	1	
a.	Arup Foresight, 2013. "It's Alive: Can You Imagine the Urban Building of the Future" (a	а.	Canada Energy Report
	design futures case study)	b.	Randers, Jorgen, 2012. <u>2052: A Global</u> Forecast for the Next Forty Years.
		c.	The Economist, 2012. Megachange 2050
		d.	Smith, Laurence, 2011. The World in 2050
6.	Design futures resources, content, mindsets, ir	nspir	ation
a.	Cramer, Jim, 2013. " <u>It's Better</u> to be a Perpetrator than a Victim of Change." <i>Design</i> <i>Intelligence</i>	g.	Farson, Richard, 2008. <u>The Power of Design</u> (On professions, experts: PtVI Shooting ourselves in the foot.)
b.	<i>Metropolis,</i> 2013. Resilence, ( <u>Part 1</u> , <u>Part 2</u> , <u>Part 3</u> ).	C.	McDonough, William & Michael Braungart, 2002. <u>Cradle to Cradle</u> .
		d.	Antonelli, Paola, 2008. <u>Design and the Elastic</u> <u>Mind</u> . (Recent MoMA exhibition of speculative/critical design)
		e.	Berger, Warren, 2009. <u>Glimmer: How Design</u> <u>Can Transform Your Life, and Maybe Even</u> <u>the World</u>
		f.	Alexander, Christopher, 1979. <u>The Timeless</u> <u>Way of Building</u> (Design embedded as cultural knowledge)
		g.	Benyus, Janine, 1997. <u>Biomimicry: Innovation</u> inspired by nature (Groundbreaking text)
		h.	Orr, David, 2004. <u>The Nature of Design</u> (Essential ecological design text)
		i.	Mau, Bruce, Jennifer Leonard, and Institute without Boundaries, 2004. <u>Massive Change.</u>
		j.	Steffen, Alex, 2008. <u>Worldchanging: A User's</u> <u>Guide for the 21<sup>st</sup> Century.</u> (Essays on Design, Building, Community, Cities, Planet)
		k.	Papanek, Victor, 1984. <u>Design for the Real</u> <u>World</u> (Classic about design ethics by an industrial designer)
		I.	Sterling, Bruce, 2005. <u>Shaping Things.</u> (Bridging things and futures)

\*<u>Universal Traveler</u> is the only full book. Others are online via links or posted on google docs.

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