

MCAD MA in Sustainable Design: Systems Thinking course outline

Knowing/Being

- Relating & Relationships
 - Voices: Gregory & Nora Bateson, Janine Benyus, Orland Bishop, Dave Gray, Enrique Salmón
 - Topics: mapping, systems traditions, wayfinding
- Distinction & Identity
 - Voices: Vanessa Andreotti, Rosalind Armson, Derek & Laura Cabrera, Ray Ison, Francisco Varela, Margaret Wheatley & Myron Rogers
 - Topics: autopoiesis, double bind, mind map, rich picture, situation and system
- Patterning
 - Voices: Gilles Deleuze & Félix Guattari, Donna Haraway, Douglas Hofstadter, George Lakoff & Mark Johnson, Robert Rosen
 - Topics: abduction, analogy, biomimicry, metaphor, rhizome
- Time
 - Voices: Karen Barad, Lisa Feldman Barrett, Sean Carroll, Jim Dator, Rasheedah Phillips
 - Topics: anticipation, embodied and enactive cognition, feedforward, futures cone, imaginaries

Patterns

- Circularities
 - Voices: DS4SI, Donella Meadows, Charles & Ray Eames, Elizabeth Sawin, Peter Senge
 - Topics: behavior over time, causal loop diagram, diffusion of innovations, feedback, iceberg, limits to growth, nonlinearity, shifting the burden, success to the successful
- Coordination
 - Voices: Joy Buolamwini, Chris Corrigan, Stephanie Kelton, Cynthia Kurtz, Melanie Mitchell, Eli Pariser, Kate Raworth, Marilyn Waring
 - Topics: commons, concept map, complexity, currencies, emergence, governance, money, organization and self-organization
- Creativity
 - Voices: Christopher Alexander, Steven Johnson, Stuart Kauffman, Ian McHarg, M.C. Richards, Brenda Zimmerman
 - Topics: adjacent possible, aesthetics, affordances, ecocycle, exaptation
- Change
 - Voices: Howard Becker, Oonsie Biggs, Mindy Fullilove, Buzz Holling, Marshall McLuhan, Geoffrey Vickers, Margaret Wheatley & Deborah Frieze
 - Topics: adaptive cycle, attractor landscape, inertia, niche, path dependence, power, regime shift, resilience, social attractors, tetrad, two curves

Praxis

- Visioning
 - Voices: Roman Krznaric, Donella Meadows, Kate Raworth, Paul Stamets, Astra Taylor
 - Topics: care, circular economy, good ancestor, pattern language, three horizons
- Coordinating
 - Voices: Chris Argyris, adrienne maree brown, Brené Brown, Steve Easterbrook, Fernando Flores, Barry Johnson, Werner Ulrich, Etienne & Beverly Wenger-Trayner
 - Topics: boundary critique, ladder of inference, polarities, reflexivity, standpoint, trust
- Contextualizing
 - Voices: Marina Gorbis, Kurt Lewin, Diana Searce & Katherine Fulton
 - Topics: driving forces, force fields, salience, scanning, scenarios, trends
- Learning & Evaluating
 - Voices: Carol Gilligan, Michael Quinn Patton
 - Topics: double-loop learning, ethics, logic model, principles and indicators, theory of change
- Speculating & Playing
 - Voices: Bayo Akomolafe, Anthony Dunne & Fiona Raby, Ursula Le Guin, Bonnitza Roy
 - Topics: laughter, randomness, weirding