Summer, 2017 Capstones

ECOSYSTEM THINKING

Anna Moehagan  | Lawncapes 2.0: Catalyzing an American Movement in Sustainable Lawn Use
Cyrus Western  | Declining Mule Deer Populations in Wyoming: Identifying & Assessing 'Shovel Ready' Solutions
Erica Gardner | Pollinator Decline and Global Micronutrient Deficiency
Marguerite Collins | Evaluating Program Performance for Natural Resource Management Programs (New South Wales, Australia): Opportunities for Increased Quantification
Paulette Laurent | Mexico’s “WindRush” vs. Sustainable Wind Farming: Harvesting Rights of Indigenous Communities

RENEWABLE CONTEXTS

Ahmad Antar | Light at the End of the Tunnel in Lebanon’s Electricity Crisis? A Feasibility Assessment of Rooftop Solar
Jeff Sloan | Solving for Zero: Proving the Business Case for Net-Zero Housing in California
Patrick Supple | Valuation of Sustainable Buildings and their Components: Consumer Willingness-to-Pay and its Drivers
Wei-Jen Yip | Electrifying Scooters!

LATERAL THINKING

Clay Gervais | Sustainable Dubai: Methods for Enhancing Reductions of Carbon Emissions
Emma Cohen | Doggy Bag Nation: How America’s Love of Takeout is Gobbling up Resources and Choking the Planet
Bradford Castro | Down the Drain: Carbon Offsets Revisited
Barbara Porco | Sustainability Accounting Toolkit: Principles of Financial Accounting
Fall, 2017 Capstones

APPLYING LIFE CYCLE ASSESSMENT WITHIN THE CIRCULAR ECONOMY

**Manuel Cassas**  Designing Defense Products for Recovery and Resource Efficiency: Aircraft Carrier Acquisition by the US Navy

**Darcy Williams**  A Wasteful Courtesy? Rethinking The Superior Court of Pennsylvania’s “Courtesy Copy” Briefing Requirements Using A Comparative LCA

**Yehia Khalil**  Comparative Environmental and Human Health Evaluations of Thermolysis & Solvolysis Recycling Technologies of Carbon Fiber Reinforced Polymer Waste

**Nicole Wilson**  Improving Development Models In Emerging Textile Markets: Analyzing Key Social & Environmental Performance Indicators of Ethiopia’s Cotton Production

MARINE SYSTEMS: STRESSORS & RESILIENCE

**Perry Dripps**  Using the Hudson River to Teach Systems Thinking to K-12 Students

**Michelle Gardner**  The Effect of Increased Atmospheric CO$_2$ Concentrations on Coccolithophore Abundance and Calcification Rates

LAND USE CHANGE: KEY DRIVERS & RESPONSES

**Laura Hanrahan**  Food System Sustainability: The Role of Production Scale

**Fran Blanchard**  “Paying for Nature” – Possible Transitions to a Self-Funding Model for Private Land Trusts in Massachusetts

**Lael Pascual**  The Pup Poop Problem: Sustainable Solutions to Dog Waste Management

RE-THINKING THE FUTURE OF ENERGY

**Yaima Roldan Casillas**  Changing the Rules of the Game: How Energy Storage Could Change Massachusetts’ Electricity Future

**Ben Elsener**  “Flattening the Duck” to Enable a More Efficient, Cleaner Grid: A Smart Home Algorithm Demonstrating Value in Utility Reform
Spring, 2018 Capstones

MARINE SYSTEMS CONSERVATION

C. Leanne Cowley
Coastal Adaptation in Massachusetts: Streamlining Permitting for ‘Living Shoreline’ Strategies

Donna Hazard
Ocean Conservation Support: Reimagining Corporate Rationale & Practice

Kimberly Malkoski
Implementing Marine Protected Areas: An Analysis of Best Management Practices for Caribbean Island Marine Resources

CREATING EX SITU SUSTAINABLE DEVELOPMENT

Robert Cronkleton
The 21st Century Mayflower: Operationalizing Sustainability for Earth-Mars Supply Chain Missions

William C. Denman
Redeveloping Contaminated Properties: Contrasting How Environmental Cleanup Programs Support Redevelopment

Michael Balluff
East Tennessee Aquaculture Feasibility Analysis

Kirk-Patrick Caron
Environmental, Social, & Governance Metrics Impact on Investment Returns

NEXT GENERATION SUSTAINABLE HOUSING

Brennan Molina
Low-Income, High Output: To What Extent Does Chapter 40B Hinder Massachusetts Climate Goals?

Jason Morse
Sick Building Syndrome Re-emergence in Massachusetts: Air-tight Homes, Uninformed Occupants

Priscila Rut Ra
Reducing the Strain on the Buenos Aires Electricity Grid: Rooftop Solar Potential Assessment & Peak-Shaving Analysis

NEW VANGUARDS IN SUSTAINABILITY EDUCATION

Zara Wasi Islam
Improving Health, Safety, & Environmental Compliance Standards in a Bangladeshi Garment Producing Factory

Jeff Overton
Community College Sustainability Curricula: Design Challenges for an Introductory Course

Carlos Villamil
Renewing Undergraduate Industrial Design Curricula: Introduction to Sustainable Design