

# Sustainable Communities Partnership

## SCP Projects: 2016-2023

SCP expands partners' capacity to address long-standing and emerging sustainability challenges facing our communities and prepares University of St. Thomas students to be sustainability leaders and collaborators in their future careers.

Partner	Project	Course
<b>City of Big Lake</b> (2017-2019)	Analyzing Costs and Benefits of Going Paperless	Service Operations Management
	Developing Design Ideas for a Bandshell	Engineering Graphics and Design
	Designing Natural Playgrounds	Engineering Graphics and Design
	Designing Parks for Experiential Engagement	Psychology for Sustainability
	Marketing the Northstar Village and City of Big Lake Marketplace	Marketing Management
	Minnesota Avenue Pedestrian and Bicycle Safety Demonstration Project	Transportation Engineering
	Surveying Residents' Preferences for Environmental Amenities	Marketing Research
	Assessing Ridesharing Opportunities for City of Big Lake Commuters	Marketing Research
<b>City of Cottage Grove</b> (2019-2020)	Analyzing the Effects of a Smart Irrigation Controller Subsidy Program	Economics of the Public Sector
	Investigating Benefits of and Barriers to Residential Outdoor Water Conservation	Psychology for Sustainability
	Open Space Connectivity and Park Information Mapping	Applied Geographic Information Systems
<b>City of Delano</b> (2016)	Analyzing Energy Efficiency Upgrades of Public Infrastructure	Managerial Decision Making & Economics of the Public Sector
<b>City of Elk River</b> (2016-2017)	Bike Route Analysis	Geographic Information Systems
	Climate Adaptation: Learning from Historical Perspectives	History and Climate
	Creating a Solar-Powered Picnic Table Prototype	Engineering Senior Design Clinic

<b>City of Elk River</b> (2016-2017)	Decreasing Use of Plastic Shopping Bags (multi-year project)	Christian Faith and the Management Professions
	Decreasing Use of Polystyrene	Christian Faith and the Management Professions
	Developing Public Relations Information for Organics and Recycling	Christian Faith and the Management Professions
	Evaluating Current Solid Waste Rate Structure	Industrial Organizational
	Examining Effects of Climate Change on Tree Species	Conservation Biology
	Floodplain Assessment	Applied Geographic Information Systems
	Fostering Sustainable Behaviors with City Employees	Psychology and Work
	Green Roof Design	Environmental Problem Solving
	Marketing "Energy City"	Applied Business Research
	Modeling Pollutant Levels in Lake Orono After Rainfall Events	Aquatic Biology & Environmental Problem Solving
	Park Trail Mapping	Geographic Information Systems
	Translation for Climate-Smart Municipalities	Introduction to German Studies
	Wetland Buffer Assessment	Geographic Information Systems
	William H. Houlton Conservation Area Mapping	Geographic Information Systems
<b>City of St. Paul</b> (2020)	City of Saint Paul Fleet Services Vehicle Idling Reduction	Service Operations Management
<b>City of Woodbury</b> (2020-2023)	Analyzing Sustainable Waters Future Policy	Construction and Engineering Economic Analysis
	Analyzing Water Savings from Woodbury's Residential Smart Irrigation Program	Environmental Problem Solving
	Reanalysis of Woodbury Smart Irrigation Controller data	Environmental Problem Solving
	Stormwater Basin Study (multi-phase project)	Environmental Geology & Introduction to Environmental Science
	Urban Tree Canopy Plan	Senior Research Seminar
<b>Caponi Art Park</b> (2020-2023)	Analyzing User Accessibility of Website	Introduction to Professional Writing

<b>Caponi Art Park</b> (2020-2023)	Caponi Art Park Habitat Assessment	Environmental Science Capstone
	Designing a Nature Tour Guide for Caponi Art Park (multi-phase project)	Design Concepts in Communication & Plants, Food, and Medicine
	Developing Nature Interaction Stations at the Caponi Art Park	Psychology for Sustainability
	Developing STEAM Lesson Plans for Park Sculptures	Statics, Materials, and Structures
	Interactive Web Design to Explore the Ecology of the Caponi Art Park	Writing and Designing for the Web
	Market Assessment for Outdoor Venue Use	Marketing Management
	Preferences for Online Educational Programming During COVID-19 Pandemic	Marketing Research
<b>Creation Care Team</b> Serving the Archdiocese of Saint Paul and Minneapolis (2022-2023)	Climate Vulnerability in Minnesota - Laudato Si' Action Plan	Theology and the Environment
	Investigating College Students' Perspectives on Climate Change	Psychology for Sustainability
	Recommendations to Integrate Environmental Justice into Laudato Si' Action Plan	Theology and the Environment
<b>Freshwater Society</b> 2016-2017)	Designing Urban Garden Perimeter Plantings	Plants, Food, and Medicine
	Examining Urban Agriculture as a Stormwater Best Management Practice	Urban Ecosystem Ecology
	Marketing and Recruitment for Master Water Stewards	Advertising Portfolio
	Modeling Mining Impacts on Groundwater	Center for Applied Math
	Strategic Communication for Master Water Stewards	Writing for Strategic Communications
	User-Centered Design: Creating an App for Tracking Stormwater Projects and Volunteer Hours	Systems Analysis and Design II
<b>GreenStep Cities</b> (2022-2023)	Recommendations for Alignment and Integration of Envision into Green Step Cities Resources (multi-year)	Construction and Engineering Economic Analysis
	GIS Analysis to Support Sustainability Best Practices	Geographic Information Systems
<b>Keys4/4Kids</b> (2022-2023)	Designing Musical Instruments from Discarded Piano Parts	Introduction to Engineering Design & Music and the Creative Process

<b>Melinda Vaughn School Pollinator Fund</b> (2022-2023)	Developing Community Outreach Materials about the Importance of Pollinators	Plants, Food, and Medicine
<b>Metro Transit</b> (2017-2022)	"College Pass" Market Research	Advanced Business Research
	A Study in Organizational Change: Metro Transit Main Campus Expansion	Business Writing
	Advertising and PR for the 63 Bus Line	Principles of Strategic Communication
	Assessing Perceptions of Public Health Safety of Ride Share Options during COVID-19	Marketing Research
	Designing a Bus Bike Rack Demo	Senior Engineering Design Clinic
	Engaging Transit Riders' Stories through Art	Leadership for Social Justice
	Improving Customer Satisfaction for Native Spanish Speakers	Business Spanish
	Investigating Preferred and Sustainability Promotional Give-Aways for College Students	Marketing Research
	Market Demand Research for Metro Transit Merchandise	Marketing Research
	Preventing Littering at Transit Stops	Psychology for Sustainability
	St. Thomas Shuttle Use	Marketing Research
	Strategic Communications to Promote Transit Lines to College Students	Writing for Strategic Communications
	Tracking Metro Transit Advertising Inventory	Decision Analysis
	Tracking Metro Transit's Fleet Vehicles	Services Operations Management & Systems Analysis and Design II
<b>Metropolitan Council</b> (2017-2023)	Transit Surveys	Marketing Research
	Analyzing Equity, Inclusion, and Justice Implications of Potential Climate Action Strategies	Environmental Policy
	Analyzing Viewsheds for the Mississippi River Corridor Critical Area Program and Future Recommendations (multi-phase project)	Art and the Environment
	Climate Planning	Society and Sustainability

<b>Metropolitan Council</b> (2017-2023)	Climate Vulnerability Assessment: Extreme Heat Report	Environmental Studies Capstone
	Community Climate Change Conversations	Environmental Writing and Community Outreach
	Earth's Record of Climate in Twin Cities Lakes	Earth's Record of Climate
	Examining the Urban Tree Canopy	Environmental Studies Capstone
	Factsheets for Climate Resiliency Planning	Policy Writing and Rhetoric
	Heat and Flooding Story Maps	Geographic Information Systems
	Metro-wide Tree Planting Prioritization Analysis	Advanced Geographic Information Systems
	Promoting Employment Opportunities with the Metropolitan Council	Writing for Strategic Communication
	Recommendations for Climate Vulnerability Visuals for City Staff	Visual Rhetoric and Design
	Recommendations for Engaging with Communities about Environmental Justice	Leadership for Social Justice
	Stories of Climate Vulnerability in the Twin Cities	City Lights: Urban Experience
	Sustainability Landscape Analysis at Metropolitan Council Wastewater Treatment Plants	Environmental Science Capstone
	User Assessment of Growing Shade Resources	Marketing Research
<b>Mississippi Watershed Management Organization</b> (2016-2020)	Analyzing the Mississippi Watershed Management Organization's Water Reuse Projects and Developing Recommendations for Future Projects	Environmental Science Capstone
	Culturally Diverse Environmental Engagement	Large Client Systems
	Designing Stormwater Management and Water Quality Surveys	Psychological Testing
	Evaluating Stormwater Management Graphics	Environmental Communication
	Examining Land Use Scenarios for Vacant Lots	Environmental Problem Solving
	Exploring Mississippi River Experiences	Society and Sustainability
	Mississippi River Corridor Habitat Assessment	Environmental Science Capstone
	Mississippi River Stories Art Exhibit	Society and Sustainability

<b>Mississippi Watershed Management Organization</b> (2016-2020)	Organizational Communication with Volunteers	Organizational Communication
	Public Media for Master Water Stewards	Analytical and Persuasive Writing
	River Stories: The Mississippi River and Ideas of Sanctuary	Critical Thinking: Lit/Writing
	Stormwater Best Management Practices Curriculum Units	Engineering in the P-12 Classroom
	Urban Agriculture Ethnography	Ethnographic Writing
<b>Pillsbury United Oak Park Farm</b> (2019-2020)	Oak Park Outdoor Improvement Project	Civil Engineering Senior Design
	Urban Agriculture Grant Writing	Writing Grants and Proposals
<b>PLACE</b> (2017-2019)	Affordable Living	Economics of the Public Sector
	Analyzing and Communicating Costs for PLACE's EcoVillage Development	Managerial Decision Making
	Analyzing Sustainability Infrastructure	Construction and Engineering Economic Analysis
	Creating a Holistic Carbon Footprint Calculator for PLACE	Urban Ecosystem Ecology
	Designing an 'Energy Champion' App for PLACE's EcoVillage Development	Systems Analysis and Design II
	Developing a Marketing Strategy for PLACE	Marketing Management
	Developing Survey Constructs for Happiness and Well-Being	Psychological Testing
	Exploring Issues of Funding and Policy for Affordable Living	Law and Economics
	Gathering Stories of PLACE Developments	Leadership for Social Justice
	Using Models to Explore Sustainability Goals and Tradeoffs	Environmental Problem Solving
<b>University of St. Thomas Dining Services</b> (2023)	Developing Behavior Change Strategies to Reduce Food Waste at the View and Northsider	Psychology for Sustainability
<b>University of St. Thomas Facilities</b> (2018)	Bicycle and Pedestrian Safety on Campus	Transportation Engineering
	Designing Bike Racks	Engineering Graphics and Design
	Developing a Bicycle Master Plan	Advanced Business Research

<b>University of St. Thomas Medicinal Garden</b> (2021)	Developing a Medicinal Plant Guide	Plants, Food, and Medicine
	Creating Interactive Activity Guides and Designs for Experiential Engagement for the St. Thomas Pollinator Path	Plants, Food, and Medicine & General Biology Labs
<b>University of St. Thomas Pollinator Path</b> (2017-2023)	Designing St. Thomas Pollinator Path Gardens as an Immersive Experience	Engineering Graphics and Design
	Developing Content for the University of St. Thomas Pollinator Path	Intermediate Spanish 1 & The Christian Theological Tradition
	Little Free Library Design	Engineering Graphics and Design
	Modeling Pollinator Movement and Behavior	Center for Applied Math
	Reimagining Processes for Pollinator Counts on the St. Thomas Pollinator Path	Introduction to Engineering Design
	St. Thomas Pollinator Path Outreach	Marketing Research
	Surveying the St. Thomas Pollinator Path on South Campus	Surveying
	Modeling Nutrient Dynamics	Environmental Problem Solving
	Analysis of Community Environmental Justice Interviews for Faculty Learning Resources	Qualitative Methods: Research for Social Justice
	Developing Virtual Exhibits	Writing and Designing for the Web
<b>University of St. Thomas Sustainability Initiatives</b> (2017-2023)	Video Production to Document Stories of Sustainability	Environmental Communication
	Newsletter Template Design	Design Concepts in Communication
	Applying Biology to Communicate and Inform Campus Sustainability Initiatives	Biology of Sustainability
	Applying Moral Theories to Inform Campus Sustainability Strategic Planning	Introductory Ethics
	Highlights of Sustainability Achievements at the University of St. Thomas	Critical Thinking: Lit/Writing
	Researching Sustainability Give-aways for St. Thomas	Marketing Research

	Sharing Stories of Sustainability Leadership among Staff and Alumni	Theology and the Environment
	Surveying Visions for Sustainability at St. Thomas	Marketing Research
<b>Walker Art Center</b> (2021)	Developing STEAM Curriculum for Minneapolis Sculpture Garden Structures	Statics, Materials, and Structures