

TRANSFORMATIONAL NOT TRANSACTIONAL SUSTAINABILITY & CIVIC ENGAGEMENT @ GEORGIA TECH

NCSCE Science & Engineering for
Social Good Conference

By Jennifer Hirsch, PhD, SLS Director

February 10, 2018

CREATING THE NEXT®



Mission

SLS educates students - through classroom, co-curricular, and real-world learning, on campus and off - to contribute to the task of “creating sustainable communities”

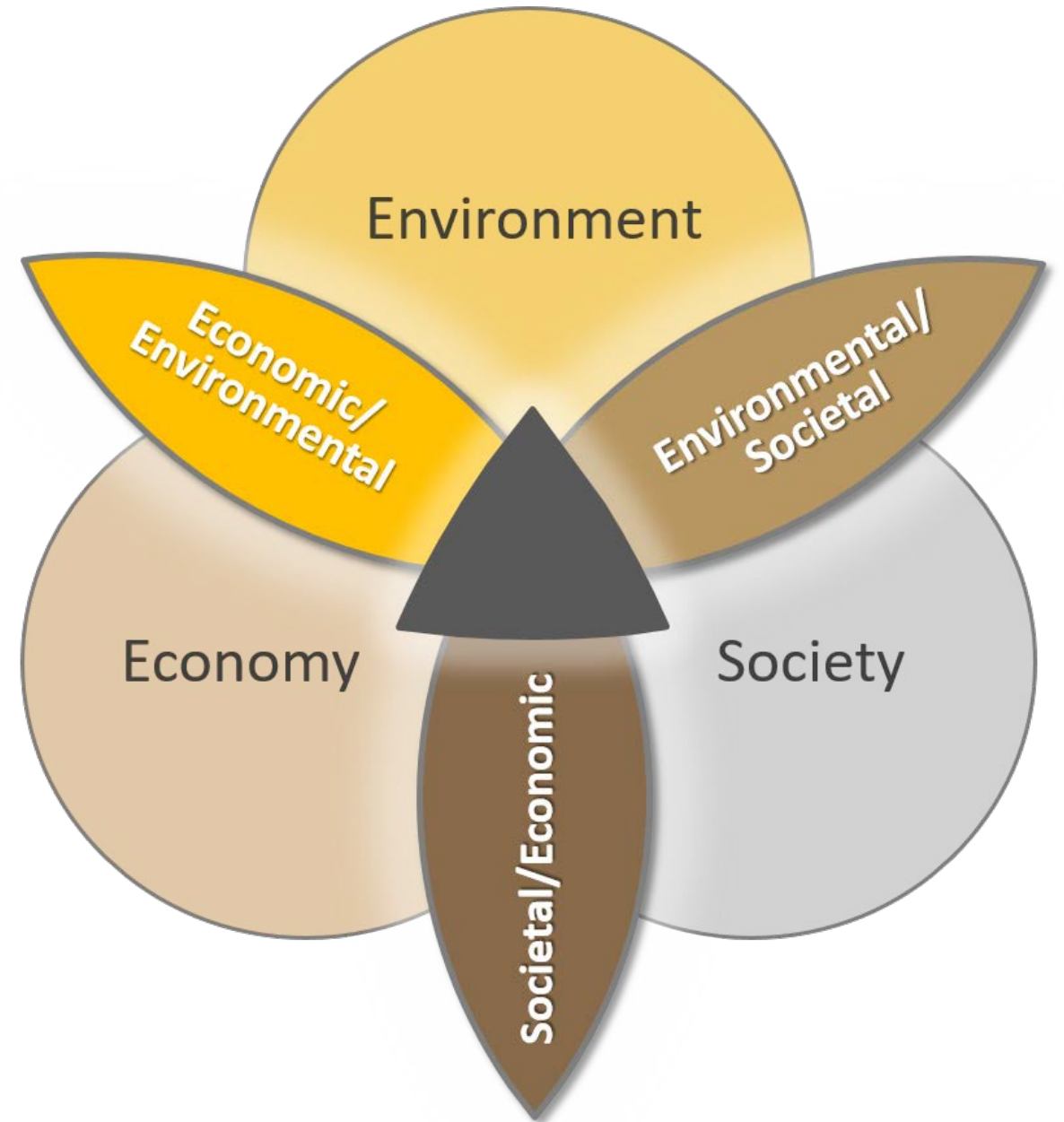


Vision

Georgia Tech graduates are using their disciplinary expertise related to science and technology to help “create sustainable communities” where humans and nature flourish, now and in the future, in Georgia, the U.S., and around the globe

SUSTAINABLE COMMUNITIES FRAMEWORK

- *Holistic* – connecting environmental, economic, and social systems
- *Social Sustainability* – equity, justice, voice
- *Technology* – to empower communities to create their own sustainable futures



SLCE PROJECTS

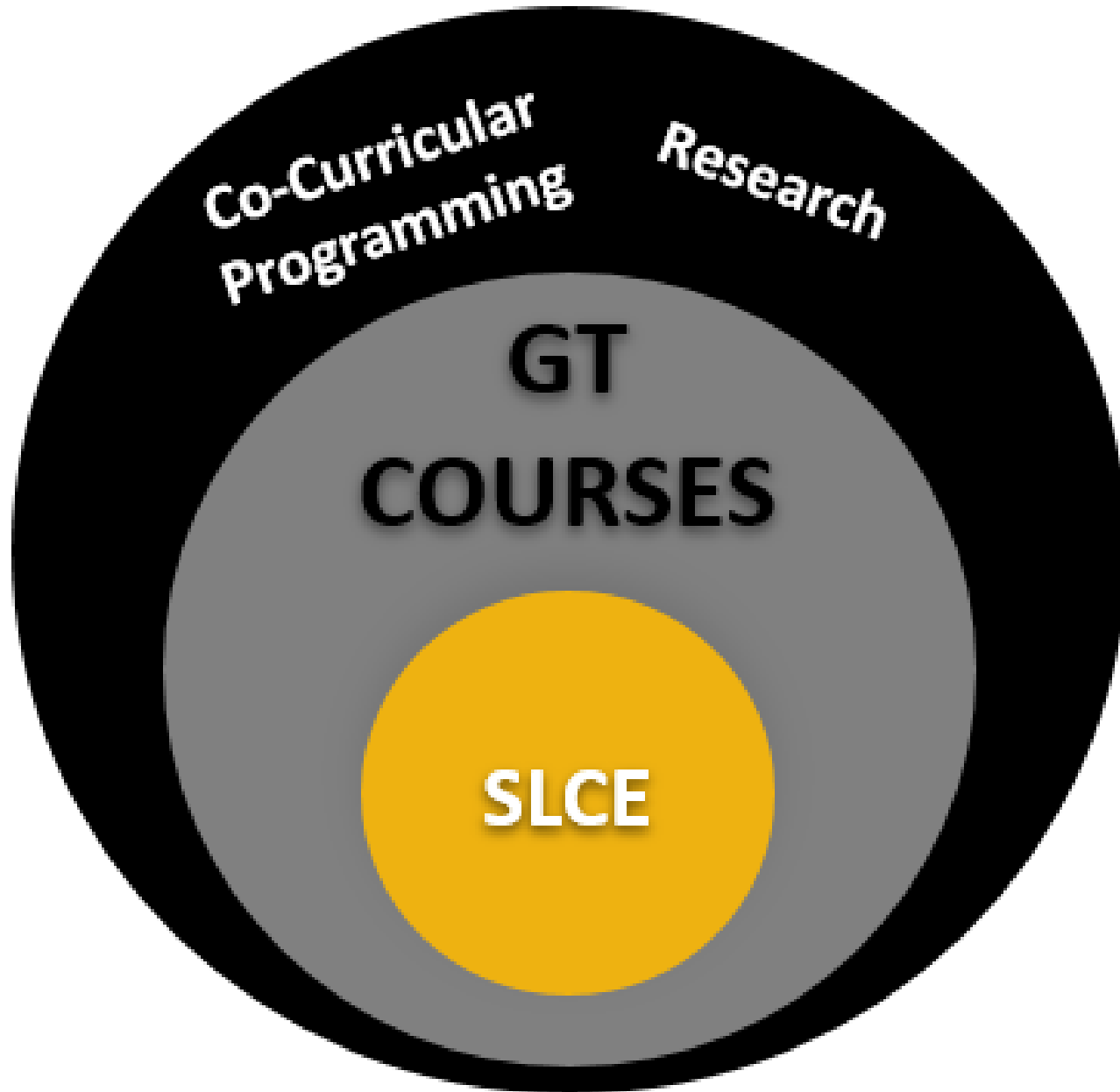
Long-term Partners: co-educators, co-researchers, co-actors

Student Learning Outcome: TRANSDISCIPLINARY ANALYSIS & ACTION skills

1. Advance broader social change efforts addressing systemic causes
2. Incorporate technological expertise as one of many types of expertise
3. Highlight community expertise and assets
4. Prioritize equity
5. Forward community visions and solutions
6. Enhance human capital and self-sufficiency



CENTER for
SUSTAINABLE
COMMUNITIES



METHODS

- Course-based SLCE
- Supported by co-curricular programs, course linking, and faculty research and course development programs

SLS Jeopardy

SLCE COURSES &
PARTNERSHIPS

\$100
Linked Courses
w/Buzz Course

\$200
ME Capstone
w/SME Adviser

\$300
Affiliated
Courses Program

FACULTY
SUPPORT
& DEVELOPMENT

\$100
Teaching Toolkit

\$200
Fellows
Programs

\$300
Communities of
Practice

CO-CURRICULAR
PROGRAMS

\$100
Env Justice Series

\$200
United Nations
University RCE

\$300
Key Issue Forums

QUOTES –
& A CARTOON

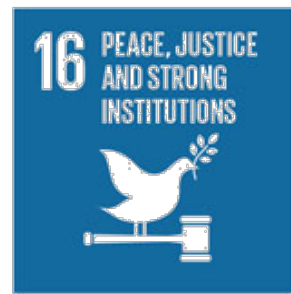
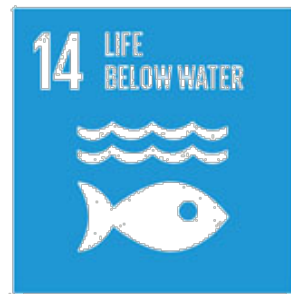
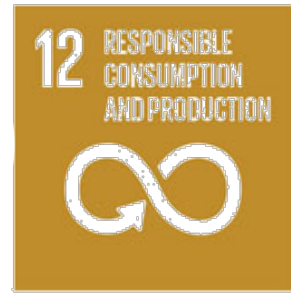
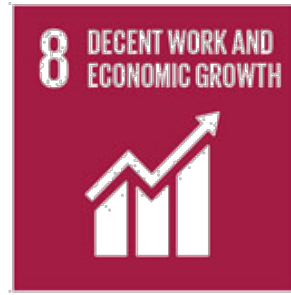
\$100
What Faculty Are
Excited About

\$200
Biggest Challenge
for Faculty

\$300
In A Student's
Words



SUSTAINABLE DEVELOPMENT GOALS



RCE Greater Atlanta

serve-learn-sustain.gatech.edu/atlanta-un-rce





"In S-L-S events, we are having interdisciplinary conversations that are unlike any other I've had in the nine years I've been at Tech. We actually have people in a room together from every college, have substantive discussions about the social value and impact of our work. This hasn't happened before. "

- Carl DiSalvo, LMC Faculty Member





Teaching Toolkit



The Teaching Toolkit is a library of lesson-planning resources that help instructors integrate sustainability, community engagement, and service-learning into their courses.



Browse by topic, keyword, or disciplinary interests, for example, or simply feel free to explore the options below. We also invite you to **contribute by adding your own tools** that you've successfully tried in your classrooms.

Tool Category

- Any -

Tool Type

- Any -

Time Commitment

- Any -

Big Ideas

- Any -

Tool Categories

Intro to SLS & Creating Sustainable Communities

Equity, Justice & Sustainability

GT1000

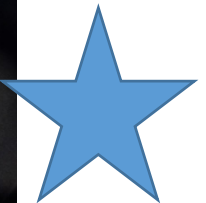
Service Learning and Community Engagement (SLCE)

Case Studies on Sustainable Communities

Using Data

Assessment

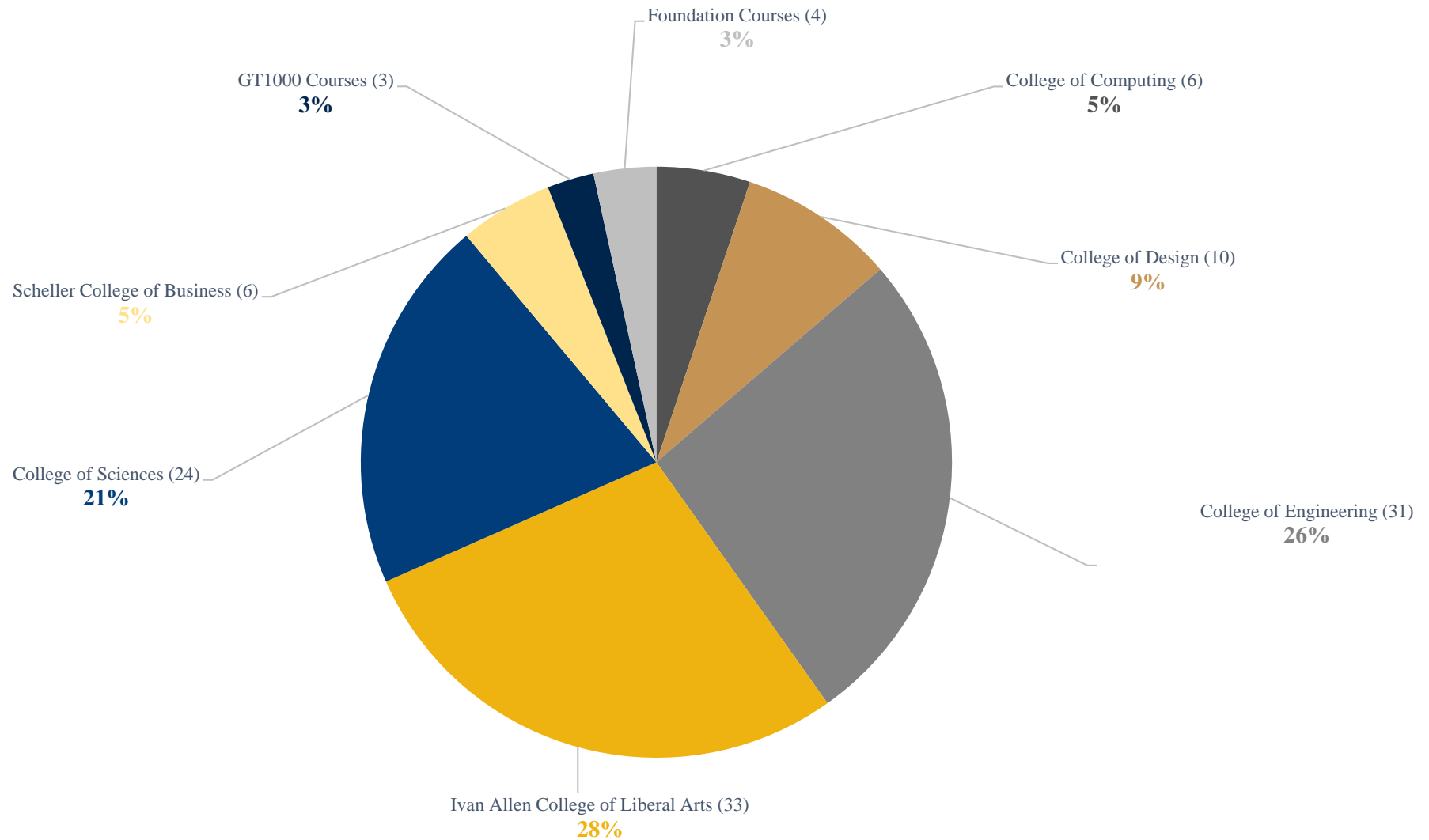






"Where do you see yourself not getting tenure in seven years?"





AY16-17: 117 courses, 5062 students





AF2 AgTech "Skunkworks"

Following our experience with hosting six GA Tech Mechanical Engineering senior students for the Fall 2017 semester as part of the GT Capstone Design program, our firm will establish a permanent research and development division to design and launch innovations in technological solutions for urban agriculture.

(Source: [AF2](#) Opportunity Harvest Souvenir Booklet, Dec. 2017)



ENVIRONMENTAL JUSTICE SERIES 2016-17

FALL SEMESTER SCHEDULE

ATTEND **3 SLS EVENTS** THIS SEMESTER
AND RECEIVE **2 FREE TICKETS** TO THE
CENTER FOR CIVIL AND HUMAN RIGHTS

EJ Series Kick-off & Liam's Legacy Symposium

Tue., Sept. 27th, 4:30-6pm,
Student Success Center, Clary Theater

**Data-driven Research for Environmental Justice:
How Universities Can Help Move Vulnerable
Communities from Surviving to Thriving**

*Featuring: Dr. Paul Mohai, University of Michigan,
Mustafa Ali, Sr. Advisor to EPA Administrator Gina McCarthy,
Samantha Shattuck, NEJAC Youth Perspectives on Climate
Justice Workgroup*



Key Issue Forums – Thought Leadership

- Community Health
- Water & Green Infrastructure
- Climate Change & Energy
- Social Innovation
- Civic Data & Design
- Sustainable & Equitable Development





STUDENT PROFILE

Delaney Rickles, CEE, 2020

“I am so fortunate to have gotten involved with SLS early in my college career! The program has made me an all-around more aware and thoughtful person in addition to influencing my decision to pursue a career in designing equitable and sustainable communities.”

- **Fall 2016:** Learns about SLS during Freshmen Orientation and participates in SLS Foundation Course, “Technology and Sustainable Communities” as a result
- **Spring 2017:** Switches major to CEE to focus more on sustainable cities; elected to executive board of Enterprise to Empower as Marketing Chair
- **Summer 2017:** Begins working with SLS as a student assistant, attends “Measuring the Dream” symposium
- **AY18 and beyond:** Continues to work with SLS and pursues minor in Sustainable Cities; assumes leadership in RCE Youth Network
- **Career Interest:** Using a background in civil engineering to design more equitable and productive public space in Atlanta



Measuring the Dream Symposium



INSS: “Smart Cities” Conference



LEARN MORE ABOUT

SERVE-LEARN-SUSTAIN

<http://serve-learn-sustain.gatech.edu/>

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Small Group Discussions

- Discussion Questions:
 1. What stood out to you most?
 2. What similar models do you have at your schools?
 3. What ideas do these models inspire?
 4. What would you be interested in trying out?
- Last 5 minutes: jot down individual 3-2-1 answers for share-out:
 - 3- Key ideas you're taking away from this session
 - 2- Models/stories standing out in your mind as we wrap up
 - 1- Person you'd like to follow up with to learn more