

# ISAT 487: STS Futures Lab Fall 2023 (DRAFT)



## Faculty:

Dr. Emily York\*  
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See Canvas

Dr. Shannon Conley  
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Dr. Tolu Odumosu  
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No office hours

Although this is a collaborative team effort, each semester, one faculty member takes lead on class responsibility. For Fall 2023, please contact **Dr. York** for any questions or concerns about assignments, grades, attendance, or other course issues or logistics.

**Day and Time: Fridays 11:30-2**

**Location: STS Futures Lab (EnGeo 2001)**

Welcome to the STS Futures Lab! 'STS' stands for Science, Technology, and Society (and also Science and Technology Studies and maybe also Sociotechnical Systems!). The goals of the lab are to cultivate capacities for conducting responsible innovation, support student research and learning on STS topics, and facilitate a community of JMU students who seek to creatively and critically reflect on the role of science and technology in society.

As part of your experience, you will participate in an interdisciplinary and inclusive learning community (usually 10-15 students), under the mentorship of Dr. York, Dr. Conley, and Dr. Odumosu (virtually participating as possible). In this learning community, we support each other by sharing, listening, and reflecting on each other's responses and works-in-progress. If you continue in the Lab for more than one semester, you will also have an opportunity to further develop independent research or publication.

In this class, you will work out with Dr. York a focal area for your individual work, depending on your interests, objectives, and whether you are enrolled for 3 credits (required for most first-timers) or just 1 credit.

Examples of such activities may include:

- Work on a specified set of research tasks related to a research project conducted by Dr. York and/or Dr. Conley

- Develop an STS 'add-on' to your capstone research
- Develop your own independent line of STS inquiry that might become a future capstone project or publication

*New:*

- Serve as an STS Futures Lab Communications Lead
- Serve as an STS Futures Lab Co-Imagining Futures Workshop Lead
- Serve on the ISAT Podcast team

**Learning objectives:**

- Develop societally relevant research questions related to science and technology
- Competently apply relevant STS concepts and methods in the context of hands-on research and/or problem-solving.
- Critically analyze and ask questions about contemporary sociotechnical issues in the world from an STS perspective.
- Develop facility with key tools, concepts, and methods of anticipatory ethical reasoning, anticipatory governance, critical futures literacy, and moral imagination.
- Competently employ strategies for communicating about and collaboratively addressing complex socio-technical problems across disciplinary and institutional boundaries.

**If it is your first time in the Futures Lab ISAT 487 class, you should be signed up for 3 credits. You will be expected to:**

- Complete required readings/interactive lectures and assignments
- Actively participate in discussions and lab engagements and regular informal presentations/check-ins of on-going work
- Participate in Co-Imagining Futures Workshops
- Develop qualitative research skills and methods
- Develop a final presentation for lab
- Participate in research or lab activities, to be worked out with Dr. York (see below for details)

**For those returning to the lab, you will likely enroll for 1 credit. If you are interested in enrolling for 2 or 3 credits, please discuss this with Dr. York. You will be expected to:**

- Complete interactive homework lectures, review assignments sufficiently to participate in lab discussions
- Conduct research and/or pursue your project, to be worked out with Dr. York. See example activities below.
- Develop a final presentation for lab
- Participate in Co-Imagining Futures Workshops

## **Independent Research/Activities/Projects**

Each student will confer with Dr. York to outline a specific set of tasks that align with their interests, objectives, and number of course credits. Examples include:

- Contribute to Dr. York's research on the social and ethical dimensions of AI in education;  
Example activities (i.e., select one):
  - Develop literature review
  - Complete IRB training and develop a research protocol for examining student practices and perceptions of AI
  - Create design fiction interventions that spark conversations around campus on AI in education
  - Developing multi-modal ethical reasoning labs for the Futures Lab
- Contribute to Dr. Conley's research on topics tbd.
- Develop an STS "add-on" to research you are already doing on a capstone research project. Example activities (i.e., select one):
  - Develop STS questions and explore STS literature related to your capstone research topic, culminating in a literature review
  - Pursue a research question related to capstone topic employing STS methodologies
  - Create a "co-imagining futures" workshop related to your topic
  - Create a Tarot Deck or design fiction installation related to your topic
- Develop a new research question that may contribute to a future capstone project, including appropriate literature review
- Be a Futures Lab Communication Lead (2 positions)
  - This entails summarizing discussions and activities and potentially interviewing individual students in lab to support a bi-weekly blog post
  - Develop a bi-weekly blog post that is available for lab input and revise post before submitting for final post
  - Maintain and update the Futures Lab website
  - Develop updated Futures Lab members posters
  - Other Lab communications as needed
- Be a Co-Imagining Futures Workshop Lead (2-4 positions)
  - This entails coordinating with Dr. York and workshop participants in the weeks leading up to a workshop, taking extra responsibility in learning the CAER method and a leadership role in workshop facilitation, interviewing our invited guest expert, and taking a leadership role in analyzing and communication the results of the workshop
  - This may entail conducting additional interviews with participants
- Participate on the ISAT Podcast crew (note that this will entail additional meetings outside of the Futures Lab meeting) (1-3 positions)
  - Activities would be worked out with Dr. Zaini and existing members of the team, but may include engaging with podcast writing, video/audio editing work, marketing and publishing.
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## **Grading**

All regular homework assignments in the STS Futures Lab are graded Complete/Incomplete. Your final project presentation will receive a letter grade. Your final project will relate to your selected research project or activity as described above, and the details of the final project will be negotiated with Dr. York and the whole lab together. This way, although everybody is doing something different, we can collaborate transparently about levels of expectation and forms of evaluation. Attendance will also count toward the grade.

## **Attendance policy**

The STS Futures Lab is a learning community. Our expectation is that you will be present every Friday for the full time of the lab. If you will not be able to attend Lab for any reason, we expect an email to communicate this (you can email Dr. York). This will not 'excuse' the absence, but will be taken as a community-oriented and professional courtesy.

Class will usually break down as follows:

11:30-11:35 Arrive and settle in, say hello to each other

11:35-11:55 Quick round check in

11:55-12:45 Class discussion/group activities

12:45-12:50 Break

12:50-1:50 Independent project work

1:50-2 Quick report out

It is especially important to us that you are present for any Co-Imagining Futures workshops or guest visits.

**Course Outline** (Note that this is preliminary. Please see Canvas for details and for up-to-date and accurate outline)

Week 1 Introduction to the STS Futures Lab (August 25)

### Homework

Learn about alternative lab spaces and lab values and complete "Intro to Lab" interactive lecture. Come to lab ready to introduce yourself to everyone.

Analytic approach: Listening Contextually

### In Lab

Introductions

Samples of Design Fiction and Juicy Quotes

Group work: Discuss potential lab values & principles for the STS Futures Lab

Together: Lab research and projects

Week 2 Politics and Perspectives (September 1)

### Homework

Read "Being a Scientist Means Taking Sides", complete "STS Futures Lab Primer" interactive lecture

Watch “The Danger of a Single Story”

Create a design fiction, bring tech object, or select juicy quote that relates to the reading/talk and be prepared to share with the lab.

Select top three research projects/activity interests

Analytic approach: Looking for Ethics in Artifacts

In Lab

Discussion through sharing objects

Small groups: Discuss and clarify understanding of research projects/activities

### Week 3 Creative Anticipatory Ethical Reasoning (September 8)

Homework

Complete interactive lecture on CAER

All: Watch Containment Documentary

Create a design fiction. Prompt: select an object/area of technoscience that you have either hopes or fears of (or both) and create a simple design fiction to introduce lab to an ethical question related to it.

Analytical approach: Seeking Stories

In Lab

Activity: scenario analysis on our design fiction topics

Break out – projects and/or methods pop-ups

### Week 4 STS Methods (September 15)

Homework

Complete interactive lecture on STS Methods

What is data in relation to your project? Bring something that you think might be ‘data’

Project Milestone/Update #1: 1 page write-up

Analytical approach: Making Meaning

In Lab

What is data? What do we do with it?

Projects

### Week 5 Co-Imagining Futures Prep (September 22)

Homework

Readings from Expert (TBD)

Develop stakeholders and drivers

Analytical approach: Locating power in systems

In Lab

Discuss, Game out scenario crosses

Projects

### Week 6 Co-Imagining Futures Prep (September 29)

Homework

Readings from Expert (TBD)

Develop STS questions

Analytical approach: Asking STS questions

In Lab

Practice STIR and CAER

Week 7 Co-Imagining Futures Workshop with [Dr. Shraddha Joshi](#) (October 6)

Homework

Prep tbd

Analytical approach: Hosting STS parties

In Lab

Workshop

Week 8 Synthesis, Workshop Leads (October 13)

Homework

Reflection on Workshop

Revise Design Fiction

Project Milestone/Update #2

In Lab:

Discussion facilitated by Workshop Leads, Synthesize write-up

Possible ISAT Podcast review session led by Dr. Zaini?

Week 9 Fall Break October 20 no lab

Week 10 STS Conversations Across ISAT and Geography (October 27)

Homework

Read Technoblism

Watch Harding Interview

Co-Imagining Futures Prep

In Lab

Discussion with faculty guests?

Week 11: Co-Imagining Prep (November 3)

Homework

Readings from Expert (TBD)

In Lab

Collaboratively game out scenarios

Week 12: Co-Imagining Futures with [Professor Yasmeen Shorish](#) (November 10)

Homework

Workshop Prep

In Lab

Co-Imagining Futures with Professor Shorish

Week 13 Co-Imagining Analysis (November 17)

Homework

Design Fiction and workshop analysis  
In Lab  
Discuss and synthesize

Week 14 Break No Lab (November 24)

Week 15 Presentations (December 1)

Week 16 STS Party (December 8)

Lab values