Last Updated: Vankeerbergen, Bernadette Chantal 09/08/2025

Term Information

Effective Term Autumn 2026

General Information

Course Bulletin Listing/Subject Area Arts and Sciences

Fiscal Unit/Academic Org ASC Administration - D4350

College/Academic Group Arts and Sciences Level/Career Undergraduate

Course Number/Catalog 4500

Advanced Computational Social Science Toolbox **Course Title**

Transcript Abbreviation

Provides students with hands-on experience in advanced computational, simulation, and analytical techniques, with a strong emphasis on their application to theory and data in the computational social **Course Description**

sciences

Semester Credit Hours/Units Fixed: 3

Offering Information

Length Of Course 14 Week, 12 Week, 8 Week, 7 Week, 6 Week

Flexibly Scheduled Course Never Does any section of this course have a distance No

education component?

Grading Basis Letter Grade

Repeatable No **Course Components** Lecture **Grade Roster Component** Lecture Credit Available by Exam No **Admission Condition Course** No Off Campus Never **Campus of Offering** Columbus

Prerequisites and Exclusions

Prerequisites: CSS 3500 or STAT 3302 Suggested: CSE 1224 Prerequisites/Corequisites

Exclusions

Electronically Enforced Yes

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code 30.3001

Subsidy Level Baccalaureate Course

Intended Rank Junior, Senior

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Requirement/Elective Designation

Required for this unit's degrees, majors, and/or minors

Course Details

Course goals or learning objectives/outcomes

- Construct computational or mathematical models based on new and existing social theory
- Explain and communicate the significance and implications of adapted and original CSS models.
- Demonstrate knowledge of how shared values relates to CSS as a interdisciplinary field of study, and within the student's field of study.
- Employ logics of inference in experimental and observational studies
- Recognize and address threats to inference in experimental and observational studies
- Be able to construct an overall strategy for integrating different components of a study (data gathering, cleaning, inference, testing, etc.) to address a research problem
- Conduct statistical and computational analysis in the most widely used and useful software environments of the day
- Identify statistical methods and computational algorithms that might usefully be applied to a given problem and assess the pros and cons of each
- Design statistical approaches and computational algorithms whose logic conforms to the logic of theoretical models
- Use theory-guided computational social science techniques to regularize datascience models based on consistency with theory.
- Use comparative model testing, model-based clustering algorithms, and theory-guided data science techniques to compare the explanatory utility of multiple behavioral models.
- Explore issues of critical importance to society

Content Topic List

- Ties That Bind: Mapping Social Structure with Networks
- Translating Code Worlds Python for R Thinkers
- Meaning from Words: Language, Culture, and Computational Text Analysis
- From Individuals to Institutions: Simulating Social Systems
- Predicting Behavior: Learning from Decisions
- Why Things Happen: Causal Reasoning in Social Contexts
- Where Matters: Mapping Social Inequality
- Power in the Pipeline: Ethics and Accountability in CSS

Sought Concurrence

Yes

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Attachments

(Syllabus. Owner: Steele,Rachel Lea)

• Using ARTSSCI transcript abbreviation for new CSS course submissions.pdf: Explanatory Document

(Other Supporting Documentation. Owner: Steele,Rachel Lea)

Concurrences Sought for CSS Curriculum.pdf: Concurrences Sought

(List of Depts Concurrence Requested From. Owner: Steele, Rachel Lea)

Concurrences Sought for CSS Curriculum.pdf: Concurrences

(Concurrence. Owner: Steele,Rachel Lea)

Comments

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Steele,Rachel Lea	09/06/2025 05:43 PM	Submitted for Approval
Approved	Vankeerbergen,Bernadet te Chantal	09/08/2025 10:39 AM	Unit Approval
Approved	Vankeerbergen,Bernadet te Chantal	09/08/2025 10:39 AM	College Approval
Pending Approval	Jenkins,Mary Ellen Bigler Neff,Jennifer Vankeerbergen,Bernadet te Chantal Steele,Rachel Lea	09/08/2025 10:39 AM	ASCCAO Approval

Explaining the use of "ARTSSCI" transcript abbreviation for new Computational Social Science course submissions

The new Computational Social Science program will ideally have the course transcript abbreviation of "CSS." However, until the new degree is approved, the Registrar is unable to provide a transcript abbreviation. For submission purposes, newly designated Computational Social Science courses will be submitted using the generic College of Arts and Sciences transcript abbreviation of "ARTSSCI." This transcript abbreviation will be swapped once the degree is approved and a new transcript abbreviation is created in SIS.

CSS 4500: Advanced Computational Social Science Toolbox

Course Information

• Proposed course number: CSS 4500

• Course times and location: Tuesdays and Thursdays 9:55-11:35

• Credit hours: 3

• Mode of delivery: Lecture and Lab

Instructor

Name: Brutus Buckeye
 Email: <u>brutus.1@osu.edu</u>
 Office location: The Oval

• Office hours: Wednesdays from 3 – 5 PM

• **Preferred means of communication:** Email. Class-wide communications will be sent through announcements in CarmenCanvas. Please check your <u>notification preferences</u> to be sure you receive these messages.

Course description

This course provides students with hands-on experience in advanced computational, simulation, and analytical techniques, with a strong emphasis on their application to theory and data in the computational social sciences. Students will learn to design and implement data mining and machine learning workflows tailored to the complexities of social science data, while also modeling and simulating behavioral and institutional processes. Provides transition module to leverage previous coursework in R programming with basic skills for implementing ML and Al code templates in python. Organized around bi-weekly modules, the course integrates foundational theories from disciplines such as anthropology, psychology, political science, and sociology with computational methods like natural language processing, network analysis, agent-based modeling, and causal inference. Through applied assignments and critical engagement with real-world data, students will develop both technical fluency and theoretical insight. The course also emphasizes interdisciplinary collaboration, preparing students to work effectively with both technical experts and social theorists.

By the end of this course, students will be able to:

- Apply advanced computational methods to analyze and simulate social phenomena.
- Translate prior knowledge of R data structures and programming to basic Python.
- Build and evaluate machine learning models tailored to social science data.
- Design and implement agent-based models to explore theoretical constructs.
- Conduct large-scale text and network analysis using Python or R.
- Develop reproducible and collaborative research workflows.
- Critically assess the ethical implications of computational methods in social research.

Prerequisite: CSS 3500 or STAT 3302.

Suggested: CSE 1224: Introduction to Computer Programming in Python

Course structure and assignments

This is a required course for the CSS B.S. degree, and it is a prerequisite for CSS 4900, where students will be expected to develop a capstone project, so the course is organized around thematic (~2 week) modules that link CSS theory and methods that will provide students with a broad survey of the scope of social science research questions that can be addresses with CSS methods. There is no midterm, final exam, or final project in order to maximize student exposure to a wider range of social science theory and CSS methods. For each module, the instructor will introduce the social science theory, research question, and CSS methods, as well as appropriate datasets and R and python code templates that students will then adapt and integrate to complete their bi-weekly assignments. Each assignment consists of three deliverables:

1. Code Notebook

- o A well-documented Jupyter Notebook (Python) or R Markdown file that includes:
 - Data loading and cleaning
 - Method implementation
 - Visualizations (e.g., plots, maps, networks)
 - Comments explaining each step

2. Analytical Report (2–3 pages)

- A concise write-up that includes:
 - A brief summary of the social theory or concept
 - A description of the computational method used
 - Interpretation of results in light of the theory
 - Discussion of limitations and next steps

3. Reproducibility Checklist

- A short checklist or README that includes:
 - Data sources and access instructions
 - Software and packages used
 - Instructions for reproducing the analysis

Course Learning Outcomes

Goals	Outcomes	Proficiencies
1. Ideation: Translation, Theoretical Modeling, Social Theory. Students should be able to articulate and translate a wide array of social theories into theoretical models, in the form of computational or mathematical algorithms.		
	mathematical models based on new and	Explain the limitations of existing computational or mathematical models for social phenomena
		Adapt existing computational and mathematical models for use explaining and analyzing social phenomena.
	Explain and communicate the significance and implications of adapted and original CSS models.	
		Document models clearly, using concise descriptions appropriate to specialists, using discipline-standard formats (e.g., workflows, ODD, UML, mathematical notation) that permit independent replication.
	values relates to CSS as a interdisciplinary field of study, and within the student's field of study.	Explain how computational analyses can produce unintended and negative consequences for individuals, groups, and society (by, e.g., reproducing human biases, institutionalizing biased training data, etc.) and identify practical solutions.
2) Research Design / Learning from Data. Students should understand the diverse approaches to the generation of knowledge in social science and computational disciplines and be able to integrate them in a way that is methodologically sound.	Employ logics of inference in experimental and observational studies	

		Use inductive inference, deductive inference, and abductive inference to generate knowledge, and use theoryguided data science to combine different modes of inference.
	Recognize and address threats to inference in experimental and observational studies	Match modeling assumptions with the generative dynamics of the system in question using principles of parsimony and/or maximum entropy.
		Recognize and ameliorate sources of bias in research design (e.g., biased data, algorithmic bias, etc.)
		Identify and apply statistical approaches for resolving threats to inference (e.g., missing data, confounding, etc.)
	Be able to construct an overall strategy for integrating different components of a study (data gathering, cleaning, inference, testing, etc.) to address a research problem	Decompose, evaluate, and repair existing research designs.
3) Computation, Modeling, and Statistical Aptitude. Students should be proficient in computation, modelling, and statistics, be able to connect theoretical models to empirical models, understand the tradeoffs and appropriateness of computational models for varying circumstances, and	Conduct statistical and computational analysis in the most widely used and useful software environments of the day	Demonstrate proficiency in relevant statistical and computational environments.

be able to compare empirical		
performance across models.		
		Be able to visualize data and model
		outputs using cutting-edge statistical
		and computational environments. [I]
	Identify statistical methods and	
	computational algorithms that might	
	usefully be applied to a given problem	
	and assess the pros and cons of each	
	and assess the pros and conson each	Identify and collect data that is useful
		-
		for evaluating social theories
		Match computational algorithms to data
		problems based on task definition
	Design statistical approaches and	Tailor statistical tests to social-science
	computational algorithms whose logic	theories (e.g., be able to construct
	conforms to the logic of theoretical	likelihood functions based on the logic
	models	of social theories and find their global
		maxima).
		Identify and use key attributes,
		processes, and patterns in study systems
		to construct generative computational
		models (agent-based, multi-agent,
		cellular automata, etc.).
	Use theory-guided computational social	Develop appropriate priors for statistical
	science techniques to regularize data-	models that are guided by theoretical
	science models based on consistency	models [I]
	with theory.	
		Develop machine learning optimization
		criteria that are regularized by
		theoretical constraints.
		Develop plan for sharing research
		materials (results, models, code, data)

	Use comparative model testing, model- based clustering algorithms, and theory- guided data science techniques to compare the explanatory utility of multiple behavioral models.	
		Integrate statistical inference and model-based clustering algorithms to identify multiple data-generating processes (e.g., flexible mixture models) [A]
Skilled Collaboration and Interpersonal Skills. Students should be flexible, curious, open-minded and supportive inter- and transdisciplinary team scientists who address critical social problems and can translate knowledge into forms that are readily accessible to diverse audiences in the private and non-profit sectors, Government and the Academy.		
,	Explore issues of critical importance to society	Conduct both basic and applied social research [P]

Course Materials

Software

This class requires the free statistical software packages called R (The R Project for Statistical Computing; http://www.r-project.org/) and RStudio (https://rstudio.org), and Python (https://www.python.org/).

Readings

Berger, P. L., & Luckmann, T. (1966). The Social Construction of Reality. Anchor Books. (Ch. 1–2)

Bail, C. A. (2014). "The cultural environment: Measuring culture with big data." Theory and Society, 43(3–4), 465–482.

Grimmer, J., Roberts, M. E., & Stewart, B. M. (2022). Text as Data: A New Framework for Machine Learning and the Social Sciences. Princeton University Press. (Ch. 1–3)

Granovetter, M. (1973). "The Strength of Weak Ties." American Journal of Sociology, 78(6), 1360–1380.

Borgatti, S. P., Everett, M. G., & Johnson, J. C. (2018). Analyzing Social Networks. SAGE. (Ch. 2–4)

Jackson, M. O. (2008). Social and Economic Networks. Princeton University Press. (Ch. 1–2)

Schelling, T. C. (1971). "Dynamic Models of Segregation." Journal of Mathematical Sociology, 1(2), 143–186.

Ostrom, E. (2009). Understanding Institutional Diversity. Princeton University Press. (Ch. 5)

Wilensky, U., & Rand, W. (2015). An Introduction to Agent-Based Modeling. MIT Press. (Ch. 1–3)

Kahneman, D. (2011). Thinking, Fast and Slow. Farrar, Straus and Giroux. (Ch. 1–5)

Kleinberg, J., Mullainathan, S., & Raghavan, M. (2017). "Inherent Trade-Offs in the Fair Determination of Risk Scores." Proceedings of Innovations in Theoretical Computer Science.

Salganik, M. J. (2019). Bit by Bit: Social Research in the Digital Age. Princeton University Press. (Ch. 5)

Weber, M. (1949). The Methodology of the Social Sciences. Free Press. (Ch. 2: "Objectivity in Social Science")

Morgan, S. L., & Winship, C. (2015). Counterfactuals and Causal Inference. Cambridge University Press. (Ch. 1–3)

Pearl, J., Glymour, M., & Jewell, N. P. (2016). Causal Inference in Statistics: A Primer. Wiley. (Ch. 1–2)

Massey, D. S., & Denton, N. A. (1993). American Apartheid: Segregation and the Making of the Underclass. Harvard University Press. (Ch. 1–2)

Logan, J. R. (2012). "Making a Place for Space: Spatial Thinking in Social Science." Annual Review of Sociology, 38, 507–524.

Rey, S. J., & Anselin, L. (2010). "PySAL: A Python Library of Spatial Analytical Methods." The Review of Regional Studies, 40(1), 1–27.

Foucault, M. (1977). Discipline and Punish. Vintage. (Part 1: "Docile Bodies")

Eubanks, V. (2018). Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor. St. Martin's Press. (Intro + Ch. 1)

Barocas, S., Hardt, M., & Narayanan, A. (2019). Fairness and Machine Learning. fairmlbook.org. (Ch. 1–3)

How your Grade is Calculated

ASSIGNMENT CATEGORY	PERCENTAGE
Module Assignments (7 total). One assignment per bi-weekly module, each with a code notebook, analytical report, and reproducibility checklist.	70%
Participation & Engagement Includes inclass discussions, peer feedback, and lab activities.	30%
Total	100%

Instructor Feedback and Response Time

I am providing the following list to give you an idea of my availability throughout the course.

- **Grading and feedback:** For large weekly assignments, you can generally expect feedback within **7 days**.
- Email: I will reply to emails within 24 hours on days when class is in session at the university.
- **Discussion board:** I will check and reply to messages in the discussion boards every **24 hours on school days**.

Course map

Modules 1-5 are required for all offerings. Modules 6-8 (indicated by a *) are provided as examples that may vary slightly by instructor.

Module	Week	Social Science Focus	Computational Method	Readings	Sample assignments
Course Introduction	1	Review core CSS concepts	Review R	Course syllabus review	Goal: Introductions, and install necessary software
1 - Ties That Bind: Mapping Social Structure with Networks	2-3	Social Networks & Structuralism (Granovetter, Bourdieu)	Network Analysis	Granovetter, M. (1973). "The Strength of Weak Ties." American Journal of Sociology, 78(6), 1360–1380.	Goal: Construct and analyze a social network using real or simulated data, and interpret structural patterns using network theory.
				Borgatti, S. P., Everett, M. G., & Johnson, J. C. (2018). Analyzing Social Networks. SAGE. (Ch. 2–4)	Code Template: Network construction and analysis using igraph (R).
				Jackson, M. O. (2008). Social and Economic Networks. Princeton University Press. (Ch. 1–2)	Sample Dataset: Enron Email Network; Reddit Comment Network; or Sampson's Monk's
					Connection to Readings: Apply Granovetter's "strength of weak ties" to interpret centrality and clustering. Use Borgatti's metrics to quantify network structure.
2 - Translating Code Worlds — Python for R Thinkers	4-5		Transition module that provides basic Python fluency by explicitly translating familiar R workflows into	Barter, R. An introduction to Python for R Users. https://rebeccabarter.com/blog/2023-09- 11-from r to python	Goal: To build fluency in Python by leveraging students' existing knowledge of R, and to cultivate an understanding of how different programming environments shape analytical thinking in computational social science.
			Python equivalents.	Benthly, Glen. R & Python Cheat Sheet. https://www.rpubs.com/Bentley 87/542213	Code Template: A Jupyter Notebook scaffold with the following sections (R vs. Python): Load and inspect data; data cleaning and transformation;

					Visualization; Simple linear regression; Each section includes commented placeholders for students to fill in Python code and compare it to a provided R snippet. Sample dataset: General Social Survey.
					Connection to readings: Technical introduction that provides scaffolding for subsequent modules which require Pythion.
3 - Meaning from Words: Language, Culture, and Computational Text Analysis	6-7	Social Construction of Reality (Berger & Luckmann; symbolic interactionism)	Text Analysis, Natural Language Processing, and Large Language Models (LLMs)	Berger, P. L., & Luckmann, T. (1966). The Social Construction of Reality. Anchor Books. (Ch. 1–2) Bail, C. A. (2014). "The cultural environment: Measuring culture with big data." Theory and Society, 43(3–4), 465–482. Grimmer, J., Roberts, M. E., & Stewart, B. M. (2022). Text as Data: A New Framework for Machine Learning and the Social Sciences. Princeton University Press. (Ch. 1–3)	Goal: Analyze political or cultural discourse using NLP techniques and interpret findings through the lens of social constructionism. Code Template: NLP pipeline using spaCy or tidytext for tokenization, sentiment analysis, and topic modeling. Sample Dataset: Congressional Speeches Dataset or Trump Twitter Archive
					Connection to Readings: Use Grimmer et al.'s Text as Data framework to structure the analysis. Link findings to Berger & Luckmann's theory of meaning- making.
4 - From Individuals to Institutions: Simulating Social Systems	8-9	Collective Behavior & Emergence (Durkheim, Schelling, Ostrom)	Agent-Based Modeling	Schelling, T. C. (1971). "Dynamic Models of Segregation." Journal of Mathematical Sociology, 1(2), 143–186. Ostrom, E. (2009). Understanding Institutional Diversity. Princeton University Press. (Ch. 5)	Goal: Build an agent-based model simulating a collective behavior scenario (e.g., resource sharing), and analyze outcomes using institutional theory. Code Template: Agent-based model using Mesa (Python) or NetLogo.

				Wilensky, U., & Rand, W. (2015). An Introduction to Agent-Based Modeling. MIT Press. (Ch. 1–3)	Sample Dataset: No dataset required—students simulate behavior (e.g., segregation, cooperation). Connection to Readings: Replicate Schelling's segregation model. Apply Ostrom's institutional design principles to modify agent rules.
5 - Predicting Behavior: Learning from Decisions	10-11	Cognition, Decision-Making & Bounded Rationality (Kahneman, Simon)	Supervised Machine Learning	Kahneman, D. (2011). Thinking, Fast and Slow. Farrar, Straus and Giroux. (Ch. 1–5) Kleinberg, J., Mullainathan, S., &	Goal: Train a supervised machine learning model to predict a behavioral outcome and interpret results using decision-making theory. Code Template: Classification
				Raghavan, M. (2017). "Inherent Trade-Offs in the Fair Determination of Risk Scores." Proceedings of Innovations in Theoretical Computer Science.	model using scikit-learn (Python) or caret (R).
				Salganik, M. J. (2019). Bit by Bit: Social Research in the Digital Age. Princeton University Press. (Ch. 5)	Sample Dataset: ANES (American National Election Studies) or UCI Adult Income Dataset
					Connection to Readings: Use Kahneman's heuristics to interpret model features. Discuss fairness trade-offs using Kleinberg et al.
6* - Why Things Happen: Causal Reasoning in Social Contexts	12-13	Causality & Historical Explanation (Weber, Mill, counterfactuals)	Causal Inference & Quasi- Experiments	Weber, M. (1949). The Methodology of the Social Sciences. Free Press. (Ch. 2: "Objectivity in Social Science")	Goal: Design a causal inference strategy using observational data to answer a social science question, grounded in historical or sociological theory.
				Morgan, S. L., & Winship, C. (2015). Counterfactuals and Causal Inference. Cambridge University Press. (Ch. 1–3)	Code Template: Matching or regression-based causal inference using DoWhy, EconML, or MatchIt (R).
				Pearl, J., Glymour, M., & Jewell, N. P. (2016). Causal Inference in Statistics: A Primer. Wiley. (Ch. 1–2)	Sample Dataset: General Social Survey (GSS) or World Bank Development Indicators

					Connection to Readings: Frame causal questions using Weber's interpretive sociology. Apply Pearl's DAG-based reasoning.
7* - Where Matters: Mapping Social Inequality	14	Space, Place, and Inequality (Sociology of segregation, urban studies.	Geospatial Analysis & Clustering	Massey, D. S., & Denton, N. A. (1993). American Apartheid: Segregation and the Making of the Underclass. Harvard University Press. (Ch. 1–2)	Goal: Use geospatial data to map and analyze spatial inequality, and interpret findings using urban sociology or anthropology of space.
	а	anthropology of space)		Logan, J. R. (2012). "Making a Place for Space: Spatial Thinking in Social Science." Annual Review of Sociology, 38, 507–524.	Code Template: Spatial clustering and mapping using geopandas, PySAL, or sf (R).
				Rey, S. J., & Anselin, L. (2010). "PySAL: A Python Library of Spatial Analytical Methods." The Review of Regional Studies, 40(1), 1–27.	Sample Dataset: US Census Tract Data or OpenStreetMap
					Connection to Readings: Visualize segregation patterns à la Massey & Denton. Apply Logan's spatial thinking framework.
8* - Power in the Pipeline: Ethics and Accountability in	optional	Ethics, Power, and Reflexivity (Foucault, critical theory, STS)	Model Auditing, Bias Detection, and Interpretability	Foucault, M. (1977). Discipline and Punish. Vintage. (Part 1: "Docile Bodies")	Goal: Audit a predictive model for bias and fairness, and reflect on the ethical implications using critical theory.
css				Eubanks, V. (2018). Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor. St. Martin's Press. (Intro + Ch. 1)	Code Template: Fairness audit using AIF360, Fairlearn, or SHAP for interpretability.
				Barocas, S., Hardt, M., & Narayanan, A. (2019). Fairness and Machine Learning. fairmlbook.org. (Ch. 1–3)	Sample Dataset: COMPAS Recidivism Dataset or Adult Income Dataset
					Connection to Readings: Use Eubanks and Foucault to critique algorithmic power. Apply Barocas et al.'s fairness metrics.

OTHER COURSE POLICIES

Statement on Academic Misconduct

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-48.7 (B)). For additional information, see the Code of Student Conduct.

Statement about Disability Services

The university strives to maintain a healthy and accessible environment to support student learning in and out of the classroom. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion.

If you are ill and need to miss class, including if you are staying home and away from others while experiencing symptoms of a viral infection or fever, please let me know immediately. In cases where illness interacts with an underlying medical condition, please consult with Student Life Disability Services to request reasonable accommodations. You can connect with them at slds@osu.edu; 614-292-3307; or slds.osu.edu.

Statement on Religious Accommodation

Ohio State has had a longstanding practice of making reasonable academic accommodations for students' religious beliefs and practices in accordance with applicable law. In 2023, Ohio State updated its practice to align with new state legislation. Under this new provision, students must be in early communication with their instructors regarding any known

accommodation requests for religious beliefs and practices, providing notice of specific dates for which they request alternative accommodations within 14 days after the first instructional day of the course. Instructors in turn shall not question the sincerity of a student's religious or spiritual belief system in reviewing such requests and shall keep requests for accommodations confidential.

With sufficient notice, instructors will provide students with reasonable alternative accommodations with regard to examinations and other academic requirements with respect to students' sincerely held religious beliefs and practices by allowing up to three absences each semester for the student to attend or participate in religious activities. Examples of religious accommodations can include, but are not limited to, rescheduling an exam, altering the time of a student's presentation, allowing make-up assignments to substitute for missed class work, or flexibility in due dates or research responsibilities. If concerns arise about a requested accommodation, instructors are to consult their tenure initiating unit head for assistance.

A student's request for time off shall be provided if the student's sincerely held religious belief or practice severely affects the student's ability to take an exam or meet an academic requirement and the student has notified their instructor, in writing during the first 14 days after the course begins, of the date of each absence. Although students are required to provide notice within the first 14 days after a course begins, instructors are strongly encouraged to work with the student to provide a reasonable accommodation if a request is made outside the notice period. A student may not be penalized for an absence approved under this policy.

If students have questions or disputes related to academic accommodations, they should contact their course instructor, and then their department or college office. For questions or to report discrimination or harassment based on religion, individuals should contact the <u>Civil Rights Compliance Office</u>. (Policy: <u>Religious Holidays</u>, <u>Holy Days and Observances</u>).

Statement on Intellectual Diversity

Ohio State is committed to fostering a culture of open inquiry and intellectual diversity within the classroom. This course will cover a range of information and may include discussions or debates about controversial issues, beliefs, or policies. Any such discussions and debates are intended to support understanding of the approved curriculum and relevant course objectives rather than promote any specific point of view. Students will be assessed on principles applicable to the field of

study and the content covered in the course. Preparing students for citizenship includes helping them develop critical thinking skills that will allow them to reach their own conclusions regarding complex or controversial matters.

Your Mental Health

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting http://ccs.osu.edu or calling 614--292--5766. CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on call counselor when CCS is closed at 614--292--5766 and 24 hour emergency help is also available 24/7 by dialing 988 to reach the Suicide and Crisis Lifeline.

Concurrences Sought for Computational Social Science

Concurrence for all new CSS courses was sought from the following units. Some units did not respond in the two-week concurrence window, therefore concurrence was assumed. However, all units were collaborative partners on the creation of the overall degree program, so all units are familiar with the new courses.

Concurrence list:

- Communication
- Computer Science & Engineering
- Economics
- Geography
- Linguistics
- Sociology
- Statistics
- Anthropology (did not respond)
- Political Science (did not respond)
- Psychology (did not respond)

From: Garrett, Kelly To: Stotlar, Jackson

Subject: Re: School of Communication concurrence requests for Computational Social Science curricula

Date: Monday, February 10, 2025 12:08:38 PM

Attachments: image001.png

image002.png

Hi Jackson,

The School of Communication has reviewed these courses and is happy to provide concurrence.

Best, Kelly

From: Stotlar, Jackson <stotlar.1@osu.edu> **Sent:** Wednesday, February 5, 2025 3:49 PM To: Garrett, Kelly <garrett.258@osu.edu>

Subject: School of Communication concurrence requests for Computational Social Science curricula

Good afternoon Dr. Garrett,

I'm writing on behalf of Dean Ryan King and the faculty committee for the Computational Social Science major. You will recall your department granted concurrence last spring for the CSS program itself. However, the committee has been informed that all new courses for the major need to be approved separately from programmatic concurrence.

Below you will find a link to a folder containing all six syllabi for new courses designed as part of the CSS major. The courses are:

- CSS 2100: Core Concepts in Computational Social Science
- CSS 2500: Methods and Theory in Computational Social Science I
- CSS 3100: Social Theory Guided Computational Social Science
- CSS 3500: Methods and Theory in Computational Social Science II
- CSS 4500: Advanced Computational Social Science Toolbox
- CSS 4900: Capstone in Computational Social Science

Link to folder: CSS New Course Syllabi

If feasible, Dean King asks that the School of Communication's curriculum committee review the courses within the typical two-week concurrence timeframe. However, we recognize that you may need additional time to review given the volume of courses. Please let me know if you require more time to complete the concurrence review. Additionally, please let me know if you have any questions. Thank you for your time.

Best, Jackson



THE OHIO STATE UNIVERSITY

Jackson Stotlar

Business Operations Consultant

The Ohio State University

College of Arts & Sciences
Office of the Deans
170B University Hall
230 N. Oval Mall, Columbus, OH 43210
614-292-1268 Office
stotlar.1@osu.edu / artsandsciences.osu.edu

From: Schuler, William
To: Stotlar, Jackson

Subject: Re: Linguistics concurrence requests for Computational Social Science curricula

Date: Friday, February 14, 2025 3:05:50 PM

Attachments: image001.png image002.png

Hello Jackson,

Yes, we grant concurrence.

William Schuler Professor and Chair Department of Linguistics The Ohio State University

From: Stotlar, Jackson < stotlar.1@osu.edu>
Date: Wednesday, February 5, 2025 at 3:51 PM
To: Schuler, William < schuler.77@osu.edu>

Subject: Linguistics concurrence requests for Computational Social Science

curricula

Good afternoon Dr. Schuler,

My name is Jackson Stotlar and I'm writing on behalf of Dean Ryan King and the faculty committee for the Computational Social Science major. You will recall your department granted concurrence last spring for the CSS program itself. However, the committee has been informed that all new courses for the major need to be approved separately from programmatic concurrence.

Below you will find a link to a folder containing all six syllabi for new courses designed as part of the CSS major. The courses are:

- CSS 2100: Core Concepts in Computational Social Science
- CSS 2500: Methods and Theory in Computational Social Science I
- CSS 3100: Social Theory Guided Computational Social Science
- CSS 3500: Methods and Theory in Computational Social Science II
- CSS 4500: Advanced Computational Social Science Toolbox
- CSS 4900: Capstone in Computational Social Science

Link to folder: CSS New Course Syllabi

If feasible, Dean King asks that Linguistics' curriculum committee review the courses within the typical two-week concurrence timeframe. However, we recognize that you may need additional time to review given the volume of courses. Please let me know if

you require more time to complete the concurrence review. Additionally, please let me know if you have any questions. Thank you for your time.

Best, Jackson



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From: <u>Colen, Cynthia</u>
To: <u>Stotlar, Jackson</u>

Subject: RE: Sociology concurrence requests for Computational Social Science curricula

Date: Tuesday, March 4, 2025 3:03:29 PM

Attachments: image003.png

image004.png image005.png

Hi Jackson,

The Department of Sociology grants concurrence. My apologies for the delayed response.

Best,

Cindy



Cynthia Colen, PhD, MPH

she/her/hers

Professor and Interim Chair

Department of Sociology, College of Arts & Sciences

Division of Health Behavior & Health Promotion, College of Public Health

Research Affiliate, Institute for Population Research

colen.3@osu.edu

From: Stotlar, Jackson <stotlar.1@osu.edu> **Sent:** Wednesday, February 5, 2025 3:48 PM **To:** Colen, Cynthia <colen.3@osu.edu>

Subject: Sociology concurrence requests for Computational Social Science curricula

Good afternoon Dr. Colen,

My name is Jackson Stotlar and I'm writing on behalf of Dean Ryan King and the faculty committee for the Computational Social Science major. You may recall your department granted concurrence last spring for the CSS program itself. However, the committee has been informed that all new courses for the major need to be approved separately from programmatic concurrence.

Below you will find a link to a folder containing all six syllabi for new courses designed as part of the CSS major. The courses are:

- CSS 2100: Core Concepts in Computational Social Science
- CSS 2500: Methods and Theory in Computational Social Science I
- CSS 3100: Social Theory Guided Computational Social Science
- CSS 3500: Methods and Theory in Computational Social Science II
- CSS 4500: Advanced Computational Social Science Toolbox

CSS 4900: Capstone in Computational Social Science

Link to folder: CSS New Course Syllabi

If feasible, Dean King asks that Sociology's curriculum committee review the courses within the typical two-week concurrence timeframe. However, we recognize that you may need additional time to review given the volume of courses. Please let me know if you require more time to complete the concurrence review. Additionally, please let me know if you have any questions. Thank you for your time.

Best, Jackson



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From: <u>King, Ryan</u>
To: <u>Stotlar, Jackson</u>

Subject: FW: Concurrence for CSS Major Courses

Date: Tuesday, April 29, 2025 11:10:47 AM

Hi Jackson,

See below for Statistics' concurrence.

Ryan

From: Kaizar, Elly <kaizar.1@osu.edu> **Sent:** Tuesday, April 29, 2025 10:53 AM **To:** King, Ryan <king.2065@osu.edu>

Cc: Lee, Yoonkyung <yklee@stat.osu.edu>; Peruggia, Mario <peruggia@stat.osu.edu>

Subject: Concurrence for CSS Major Courses

Dear Dr. King,

The Department of Statistics grants concurrence for the six courses created to serve the proposed major in Computational Social Science: CSS 2100, CSS 2500, CSS 3100, CSS 3500, CSS 4500, and CSS 4900. The Department of Statistics understands that its faculty are eligible to each these courses, and our support for the CSS courses does not preclude the development of Statistics courses with overlapping content.

Best wishes,

Elly

Eloise Kaizar, PhD
Professor and Chair
Department of Statistics
404B Cockins Hall
Ohio State University
(614) 247-2585

From: Stotlar, Jackson
To: McGraw, Scott

Subject: Anthropology concurrence requests for Computational Social Science curricula

Date: Wednesday, February 5, 2025 3:47:00 PM

Attachments: image001.png

image002.png

Good afternoon Dr. McGraw,

I'm writing on behalf of Dean Ryan King and the faculty committee for the Computational Social Science major. You will recall your department granted concurrence last spring for the CSS program itself. However, the committee has been informed that all new courses for the major need to be approved separately from programmatic concurrence.

Below you will find a link to a folder containing all six syllabi for new courses designed as part of the CSS major. The courses are:

- CSS 2100: Core Concepts in Computational Social Science
- CSS 2500: Methods and Theory in Computational Social Science I
- CSS 3100: Social Theory Guided Computational Social Science
- CSS 3500: Methods and Theory in Computational Social Science II
- CSS 4500: Advanced Computational Social Science Toolbox
- CSS 4900: Capstone in Computational Social Science

Link to folder: CSS New Course Syllabi

If feasible, Dean King asks that Anthropology's curriculum committee review the courses within the typical two-week concurrence timeframe. However, we recognize that you may need additional time to review given the volume of courses. Please let me know if you require more time to complete the concurrence review. Additionally, please let me know if you have any questions. Thank you for your time.

Best, Jackson



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stotlar.1@osu.edu / artsandsciences.osu.edu

From: Stotlar, Jackson
To: Kurtz, Marcus

Subject: Political Science Concurrence requests for Computational Social Science curricula

Date: Wednesday, February 5, 2025 3:41:00 PM

Attachments: image001.png

image002.png

Good afternoon Dr. Kurtz,

My name is Jackson Stotlar and I'm writing on behalf of Dean Ryan King and the faculty committee for the Computational Social Science major. You may recall your department granted concurrence last spring for the CSS program itself. However, the committee has been informed that all new courses for the major need to be approved separately from programmatic concurrence.

Below you will find a link to a folder containing all six syllabi for new courses designed as part of the CSS major. The courses are:

- CSS 2100: Core Concepts in Computational Social Science
- CSS 2500: Methods and Theory in Computational Social Science I
- CSS 3100: Social Theory Guided Computational Social Science
- CSS 3500: Methods and Theory in Computational Social Science II
- CSS 4500: Advanced Computational Social Science Toolbox
- CSS 4900: Capstone in Computational Social Science

Link to folder: CSS New Course Syllabi

If feasible, Dean King asks that Political Science's curriculum committee review the courses within the typical two-week concurrence timeframe. However, we recognize that you may need additional time to review given the volume of courses. Please let me know if you require more time to complete the concurrence review. Additionally, please let me know if you have any questions. Thank you for your time.

Best, Jackson



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From: Houser, Jana

To: <u>Coleman, Mat; Stotlar, Jackson</u>

Subject: Re: Geography concurrence requests for Computational Social Science curricula

Date: Friday, February 14, 2025 1:04:19 PM

Attachments: image001.png

image002.png image003.png Outlook-lf1zbhpl.png

Hello Jackson,

The Geography Undergrad Committee and faculty have looked at the syllabi below and grant concurrence.

Thanks!

-Jana



Dr. Jana Houser
Director of Undergraduate Studies
Associate Professor of Meteorology
Atmospheric Sciences Program
Department of Geography
The Ohio State University
Columbus, OH

From: Coleman, Mat <coleman.373@osu.edu> **Sent:** Wednesday, February 5, 2025 3:50 PM **To:** Houser, Jana <houser.262@osu.edu>

Subject: FW: Geography concurrence requests for Computational Social Science curricula

Hi Jana—

I apologize, but this is coming from the dean. I am anticipating that we are going to concur, but for the sake of appearances we should likely affirmatively concur rather than allowing the time window to lapse. Can you assign this to UGS committee members?

Link to the docs below.

Thanks,

Mat



Mat Coleman

Professor and Department Chair Department of Geography, College of Social and Behavioral Sciences http://u.osu.edu/coleman.373/

1036B Derby Hall (main office suite) 154 N. Oval Mall Columbus, OH 43210-1361

The Ohio State University occupies land that is the ancestral and contemporary territory of the Shawnee, Potawatomi, Delaware, Miami, Peoria, Seneca, Wyandotte, Ojibwe and Cherokee peoples. The university resides on land ceded in the 1795 Treaty of Greeneville and the forced removal of tribes through the Indian Removal Act of 1830.

The Ohio State University is a land grant institution. Land grants nationwide received funding through the 1862 Morrill Act, which gave so-called 'public' land taken from tribal nations to states to seed institutions of higher education. The Ohio State University was funded through the sale of 630,000 acres of 'public' land, carefully documented at https://www.landgrabu.org/universities

From: Stotlar, Jackson < stotlar.1@osu.edu>
Date: Wednesday, February 5, 2025 at 3:43 PM
To: Coleman, Mat < coleman.373@osu.edu>

Subject: Geography concurrence requests for Computational Social Science curricula

Hi Mat,

I'm writing on behalf of Dean Ryan King and the faculty committee for the Computational Social Science major. You may recall Geography granted concurrence last spring for the CSS program itself. However, the committee has been informed that all new courses for the major need to be approved separately from programmatic concurrence.

Below you will find a link to a folder containing all six syllabi for new courses designed as part of the CSS major. The courses are:

- CSS 2100: Core Concepts in Computational Social Science
- CSS 2500: Methods and Theory in Computational Social Science I
- CSS 3100: Social Theory Guided Computational Social Science

- CSS 3500: Methods and Theory in Computational Social Science II
- CSS 4500: Advanced Computational Social Science Toolbox
- CSS 4900: Capstone in Computational Social Science

Link to folder: CSS New Course Syllabi

If feasible, Dean King asks that Geography's curriculum committee review the courses within the typical two-week concurrence timeframe. However, we recognize that you may need additional time to review given the volume of courses. Please let me know if you require more time to complete the concurrence review. Additionally, please let me know if you have any questions. Thank you for your time!

Best, Jackson



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stotlar.1@osu.edu / artsandsciences.osu.edu

From: Williamson, Donald

To: Stotlar, Jackson

Subject: Re: Revised concurrence request for CSS 4500

Date: Friday, August 29, 2025 2:13:16 PM

Attachments: image001.png

image002.png

Hi Jackson,

CSE's curriculum committee discussed this course, and we do not have any issues with the updated version. Hence, we offer concurrence.

Best,

Donald S. Williamson

Associate Professor
Director, The ASPIRE Group
Affiliated faculty, Translational Data Analytics Institute
Computer Science and Engineering
493 Dreese Labs, 2015 Neil Ave, Columbus, OH 43210
williamson.413@osu.edu



From: Stotlar, Jackson <stotlar.1@osu.edu>
Date: Friday, August 15, 2025 at 10:17 AM

To: Williamson, Donald <williamson.413@osu.edu> **Subject:** Revised concurrence request for CSS 4500

Dear Donald,

Reaching out as promised on behalf of Ryan King and the faculty committee for the Computational Social Science major. Attached is the revised syllabus for CSS 4500. We ask that the CSE faculty review the revised syllabus for concurrence by August 29. Below are comments from Sean Downey, the faculty committee member who edited the syllabus following your feedback:

Thanks for your helpful feedback about CSS 4500. This syllabus slipped through the cracks during my sabbatical, and you are right to point out the problems with this syllabus. Let me respond in-line to your comments. If anything still jumps out as problematic, I'm happy to adjust further. But I hope this is sufficient to address your concerns.

For CSS 4500, from the course description and outcomes, the proposed course seems much different from any of CSE's Al-related courses (e.g., CSE 3521, 5523, or 5052). However, the

required textbooks and course schedule/topics appear to follow a generic AI course in the veins of CSE 3521or 5523, instead of one specialized to a specific area. So based on how the course currently stands, we cannot provide concurrence.

I have significantly revised it, and I believe it should be clear how it differs from CSE's Al-related courses.

However, we can reconsider it if the following items are addressed:

We would expect each weekly topic to have a specific CSS application and/or dataset that drives the AI/ML learning topic. Hence, like week 8 from the provided syllabus, we would expect to see CSS related topics/applications next to each AI/ML topic.

The course is now divided into 2-week modules which are thematically categorized to link social science theory with suitable computational methods. I added a "standardized assignment format" and eliminated exams to facilitate practical learning.

We would expect to see more CSS-related textbooks and readings associated with this course, especially ones that use applied AI/ML for CSS topics.

I expanded the reading list to include many social science and CSS readings.

Similarly, we would expect to see social science datasets that will drive the AI/ML algorithms. We really liked how CSS 2500 listed social science datasets that will be used for the labs and lectures.

Please see the course map beginning on page 12 – this table links everything together, including readings and assignments. Of course, these are just suggestions for the first instructor. Things are likely to change and be updated when it is first taught.

Since this course has a Python programming element and the other CSS courses don't appear to have one, we suggest that 'CSE 1224: Introduction to Computer Programming in Python' is included as a pre-requisite for this course, to ensure the students are comfortable with Python before using it.

I added this as a suggested course, rather than a prerequisite. I hope that is OK. The CSS curriculum is rather tightly engineered as it was, so I fear that adding another prereq would complicate student progression and timing.

In our experience, it is difficult to combine learning Python with learning AI/ML at the same time, so separating the two may be more beneficial to the students and the instructors.

Noted, thank for that guidance. After thinking about this a bit, we decided to add a 2-

week module, "Translating Code Worlds — Python for R Thinkers" which will help students leverage their prior CSS coursework in R. The focus of this course is to provide broad exposure to a range of CSS research and methods, and we hope that this module and the "code-template" approach will help with this. But we are going into this with our eyes open.

Separately, from an AI/ML perspective, the schedule does seem rather aggressive in terms of the pace and the number of topics. It may be worth reducing the number of topics to help facilitate learning. Again, this is only a recommendation, but one that we've had to learn based on teaching similar AI survey courses.

Agreed and noted. But because this version of the syllabus is for review – and also a guide for the first professor to teach it -- I opted to be inclusive in terms of the possible topics and coverage. This seemed most useful for your concurrence. I anticipate that the instructors will reduce the number of modules, with 1-5 being standard for all offerings and 6-7 varying slightly by instructor, likely with more depth into one or two of those modules.

-Sean

Please let me know if you have any questions. Thank you!

Best, Jackson



The Ohio State University

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stotlar.1@osu.edu / artsandsciences.osu.edu

From: Williamson, Donald

To: Stotlar, Jackson

Subject: Re: Concurrence request for Computational Social Science Curricula

Date: Friday, May 9, 2025 2:49:23 PM

Attachments: image001.png

image002.png image003.png image004.png

Hi Jackson,

The CSE curriculum committee met earlier today to discuss the concurrence requests for the six proposed CSS courses (e.g., CSS 2100, 2500, 3100, 3500, 4500, and 4900). For five of the six courses, CSE provides concurrence (e.g., CSS 2100, 2500, 3100, 3500, and 4900).

For CSS 4500, from the course description and outcomes, the proposed course seems much different from any of CSE's AI-related courses (e.g., CSE 3521, 5523, or 5052). However, the required textbooks and course schedule/topics appear to follow a generic AI course in the veins of CSE 3521or 5523, instead of one specialized to a specific area. So based on how the course currently stands, we cannot provide concurrence. However, we can reconsider it if the following items are addressed:

- 1. We would expect each weekly topic to have a specific CSS application and/or dataset that drives the Al/ML learning topic. Hence, like week 8 from the provided syllabus, we would expect to see CSS related topics/applications next to each Al/ML topic.
- 2. We would expect to see more CSS-related textbooks and readings associated with this course, especially ones that use applied AI/ML for CSS topics.
- Similarly, we would expect to see social science datasets that will drive the AI/ML algorithms.
 We really liked how CSS 2500 listed social science datasets that will be used for the labs and lectures.
- 4. Since this course has a Python programming element and the other CSS courses don't appear to have one, we suggest that 'CSE 1224: Introduction to Computer Programming in Python' is included as a pre-requisite for this course, to ensure the students are comfortable with Python before using it. In our experience, it is difficult to combine learning Python with learning AI/ML at the same time, so separating the two may be more beneficial to the students and the instructors.

Separately, from an AI/ML perspective, the schedule does seem rather aggressive in terms of the pace and the number of topics. It may be worth reducing the number of topics to help facilitate learning. Again, this is only a recommendation, but one that we've had to learn based on teaching similar AI survey courses.

Please let me know if you have any follow-up questions or comments. I'd be happy to discuss it further.

Best,

Donald S. Williamson

Associate Professor

Director, The ASPIRE Group

Affiliated faculty, Translational Data Analytics Institute

Computer Science and Engineering

493 Dreese Labs, 2015 Neil Ave, Columbus, OH 43210

williamson.413@osu.edu



From: Williamson, Donald <williamson.413@osu.edu>

Date: Wednesday, May 7, 2025 at 4:26 PM **To:** Stotlar, Jackson < stotlar.1@osu.edu>

Subject: Re: Concurrence request for Computational Social Science Curricula

I plan to get back to you by then, since our committee will meet this Friday.

Best,

Donald S. Williamson

Associate Professor
Director, The ASPIRE Group
Affiliated faculty, Translational Data Analytics Institute
Computer Science and Engineering
493 Dreese Labs, 2015 Neil Ave, Columbus, OH 43210
williamson.413@osu.edu



From: Stotlar, Jackson < stotlar.1@osu.edu>

Date: Monday, May 5, 2025 at 2:47 PM

To: Williamson, Donald <williamson.413@osu.edu>

Subject: RE: Concurrence request for Computational Social Science Curricula

I appreciate that, Donald. I know it is such a busy time of year! Would it be possible to hear back from the CSE curriculum committee by Monday, May 12? We're hoping to be able to incorporate all feedback with the CSS committee before the departure of faculty who are not on appointment over the summer.

Best, Jackson

From: Williamson, Donald <williamson.413@osu.edu>

Sent: Monday, May 5, 2025 1:11 PM

To: Stotlar, Jackson <stotlar.1@osu.edu>

Subject: Re: Concurrence request for Computational Social Science Curricula

Thanks Jackson. I'll pass this information along to the committee. I'll get back to you should we have any further questions or comments. Things were hectic last week with final exams and travel, but I hope to get back to you soon.

Best,

Donald S. Williamson

Associate Professor
Director, The ASPIRE Group
Affiliated faculty, Translational Data Analytics Institute
Computer Science and Engineering
493 Dreese Labs, 2015 Neil Ave, Columbus, OH 43210
williamson.413@osu.edu



From: Stotlar, Jackson <<u>stotlar.1@osu.edu</u>>

Date: Monday, April 28, 2025 at 12:59 PM

To: Williamson, Donald < williamson.413@osu.edu >

Subject: RE: Concurrence request for Computational Social Science Curricula

Hi Donald,

I've heard back from Sean Downey, the faculty chair of the CSS committee, for feedback on differentiation between the courses. Here is his response:

The key differentiating factors in this course are in providing students exposure, experience, and training in:

Social-theory driven applications of machine learning techniques.

The process of translating of social theory into advanced computational models, including machine learning and agent-based models.

Applied "tool-box" or "vignette" approach designed for students with less background in computer science and math.

Transdisciplinary team-science approach focused on collaboration.

Does this help shed light on the differences between the curricular aims, even if there is some overlap in topics? Let me know if I can provide any additional information from the committee.

Best,

Jackson

From: Stotlar, Jackson

Sent: Wednesday, April 23, 2025 12:35 PM

To: Williamson, Donald <<u>williamson.413@osu.edu</u>>

Subject: RE: Concurrence request for Computational Social Science Curricula

Hi Donald,

Thanks for these questions. I've shared your email with CSS committee for feedback and have asked for a quick response. One of us will respond to you asap.

Best, Jackson

From: Williamson, Donald < williamson.413@osu.edu >

Sent: Wednesday, April 23, 2025 10:32 AM **To:** Stotlar, Jackson <<u>stotlar.1@osu.edu</u>>

Subject: Re: Concurrence request for Computational Social Science Curricula

Hi Jackson,

I finally had a chance to look through the syllabi that were provided. Generally, I don't have concerns with most of the courses, where I think that they are rather interesting and would be beneficial to CSE students as well. I haven't discussed the courses with CSE's curriculum committee yet, but before I do so I did have questions about CSS 4500, which would help me answer potential questions the committee may have.

Basically, I want to see how CSS 4500 may differ from CSE 3521: Survey of AI, since the two courses have noticeable overlap in terms of topics? I've attached a syllabus from when I taught this course previously, along with a link to our general course information that can be found here. I noticed that CSE 3521 has more pre-requisites, which indicates that the two courses may target students with differing skill sets. It seems like CSS 4500 will also require programming in Python, but I'm not sure how extensive this will be since students will also program in R. CSE 3521 only programs in Python. CSE 3521 is also mathematically rigorous, where we cover derivations and proofs? Are there any other differences that I can share with the committee to help ease any concerns?

Best,

Donald S. Williamson

Associate Professor
Director, The ASPIRE Group

Affiliated faculty, Translational Data Analytics Institute

Computer Science and Engineering

493 Dreese Labs, 2015 Neil Ave, Columbus, OH 43210 williamson.413@osu.edu



From: Stotlar, Jackson <<u>stotlar.1@osu.edu</u>>

Date: Tuesday, April 15, 2025 at 1:04 PM

To: Fosler-Lussier, Eric < fosler@cse.ohio-state.edu >, Williamson, Donald

<wi>williamson.413@osu.edu>, Morris, Jeremy <morris.343@osu.edu>

Cc: Ramnath, Rajiv < ramnath.6@osu.edu >

Subject: RE: Concurrence request for Computational Social Science Curricula

Terrific, thank you so much. Again, please let me know if I can assist in answering any questions.

Best, Jackson

From: Fosler-Lussier, Eric < fosler@cse.ohio-state.edu >

Sent: Tuesday, April 15, 2025 1:01 PM

To: Stotlar, Jackson <stotlar.1@osu.edu>; Williamson, Donald <williamson.413@osu.edu>; Morris,

Jeremy < morris.343@osu.edu >

Cc: Ramnath, Rajiv < <u>ramnath.6@osu.edu</u>>

Subject: FW: Concurrence request for Computational Social Science Curricula

Hi Jackson,

I'm forwarding this to our curriculum and undergrad studies chairs.

Donald, I **think** the concurrence would flow through our curriculum committee given that these are course level requests, but you can coordinate with Jeremy as seems best.

Cc:ing Rajiv for visibility.

Best wishes, -Eric

Eric Fosler-Lussier

John I. Makhoul Professor and Acting Chair, CSE Professor by Courtesy of Linguistics and Biomedical Informatics Dept. of Computer Science and Engineering, The Ohio State University fosler-lussier.1@osu.edu

Nodie Antoine

Interim Assistant to the Chair, CSE

antoine.28@osu.edu

From: Stotlar, Jackson <<u>stotlar.1@osu.edu</u>>

Date: Tuesday, April 15, 2025 at 12:47 PM

To: Fosler-Lussier, Eric < fosler@cse.ohio-state.edu >

Subject: Concurrence request for Computational Social Science Curricula

Good afternoon Dr. Fosler-Lussier,

My name is Jackson Stotlar and I'm writing on behalf of Dean Ryan King and the faculty committee for the Computational Social Science major. You may recall we reached out to Computer Science and Engineering last Spring for concurrence to the CSS program itself. However, the committee has been informed that all new courses for the major need to be approved separately from programmatic concurrence.

Below you will find a link to a folder containing all six syllabi for new courses designed as part of the CSS major. The courses are:

- CSS 2100: Core Concepts in Computational Social Science
- CSS 2500: Methods and Theory in Computational Social Science I
- CSS 3100: Social Theory Guided Computational Social Science
- CSS 3500: Methods and Theory in Computational Social Science II
- CSS 4500: Advanced Computational Social Science Toolbox
- CSS 4900: Capstone in Computational Social Science

Link to folder: CSS New Course Syllabi

Additionally, I've attached a draft of the current proposal as a reminder of the program. Please let me know if I can answer any questions and thank you for your time.

Best, Jackson



Jackson Stotlar

Business Operations Consultant

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From: Yang, Huanxing To: Stotlar, Jackson

Subject: Re: Economics concurrence requests for Computational Social Science curricula

Tuesday, February 11, 2025 10:01:36 AM Date:

Attachments: image001.png

image002.png

Hi Jackson,

The Econ department has reviewed these courses and gave concurrence.

Best.

Huanxing

Huanxing Yang Professor and Chair OSU Econ

From: Stotlar, Jackson <stotlar.1@osu.edu> Sent: Wednesday, February 5, 2025 3:46 PM **To:** Yang, Huanxing <yang.1041@osu.edu>

Subject: Economics concurrence requests for Computational Social Science curricula

Good afternoon Dr. Yang,

My name is Jackson Stotlar and I'm writing on behalf of Dean Ryan King and the faculty committee for the Computational Social Science major. You will recall your department granted concurrence last spring for the CSS program itself. However, the committee has been informed that all new courses for the major need to be approved separately from programmatic concurrence.

Below you will find a link to a folder containing all six syllabi for new courses designed as part of the CSS major. The courses are:

- CSS 2100: Core Concepts in Computational Social Science
- CSS 2500: Methods and Theory in Computational Social Science I
- CSS 3100: Social Theory Guided Computational Social Science
- CSS 3500: Methods and Theory in Computational Social Science II
- CSS 4500: Advanced Computational Social Science Toolbox
- CSS 4900: Capstone in Computational Social Science

Link to folder: CSS New Course Syllabi

If feasible, Dean King asks that Economics' curriculum committee review the courses within the typical two-week concurrence timeframe. However, we recognize that you may need

additional time to review given the volume of courses. Please let me know if you require more time to complete the concurrence review. Additionally, please let me know if you have any questions. Thank you for your time.

Best, Jackson



THE OHIO STATE UNIVERSITY

Jackson Stotlar

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From: Stotlar, Jackson To: Wegener, Duane

Subject: Psychology concurrence requests for Computational Social Science curricula

Wednesday, February 5, 2025 3:38:00 PM Date:

Attachments: image001.png

image002.png

Good afternoon Dr. Wegener,

My name is Jackson Stotlar and I'm writing on behalf of Dean Ryan King and the faculty committee for the Computational Social Science major. You will recall your department granted concurrence last spring for the CSS program itself. However, the committee has been informed that all new courses for the major need to be approved separately from programmatic concurrence.

Below you will find a link to a folder containing all six syllabi for new courses designed as part of the CSS major. The courses are:

- CSS 2100: Core Concepts in Computational Social Science
- CSS 2500: Methods and Theory in Computational Social Science I
- CSS 3100: Social Theory Guided Computational Social Science
- CSS 3500: Methods and Theory in Computational Social Science II
- CSS 4500: Advanced Computational Social Science Toolbox
- CSS 4900: Capstone in Computational Social Science

Link to folder: CSS New Course Syllabi

If feasible, Dean King asks that Psychology's curriculum committee review the courses within the typical two-week concurrence timeframe. However, we recognize that you may need additional time to review given the volume of courses. Please let me know if you require more time to complete the concurrence review. Additionally, please let me know if you have any questions. Thank you for your time.

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