From:	Smith, Randy
To:	Downey, Sean; King, Ryan
Cc:	Williams, Valarie; Bowles, Wendy; Smith, Randy; Griffiths, Rob; Reed, Katie; Duffy, Lisa; Hunt, Ryan; Vankeerbergen, Bernadette; Martin, Andrew; Horn, David; Talbot, Ann; Warren, Adam; Eveland, Jessica; Brown, Trevor
Subject:	Proposal to establish a Computational Social Science Major program leading to the Bachelor of Science
Date:	Friday, October 23, 2026 4:09:49 PM
Attachments:	image001.png

Ryan and Sean:

The proposal from the College of Arts and Sciences to establish a Computational Social Science Major program leading to the Bachelor of Science degree was approved by the Council on Academic Affairs at its meeting on October 21, 2026. Thank you for attending the meeting to respond to questions/comments.

The proposal will now be sent to the Board of Trustees for action at its meeting on December 3, 2026. If approved by the Board, my office will work with you on the submission process with the Ohio Department of Higher Education.

Once fully approved, the Office of the University Registrar will work with you on any implementation issues.

Please keep a copy of this message for your file on the proposal and I will do the same for the file in the Office of Academic Affairs.

If you have any questions please contact the Chair of the Council, Professor Val Williams (.1415), or me.

Randy

THE OHIO STATE UNIVERSITY

W. Randy Smith, Ph.D.
Vice Provost for Academic Programs
Office of Academic Affairs
University Square South, 15 E. 15th Avenue, Columbus, OH 43201
614-292-5881 Office
smith.70@osu.edu
Assisted by:
Katie Reed
Executive Assistant
(614) 292-5672

Proposal for an undergraduate Bachelor of Science major in Computational Social Science (CSS)

Questions:

1. Clarification on the interdisciplinary approach:
    a. With the proposed curriculum having an interdisciplinary approach, we are seeking an implementation plan that outlines the following:
        i. What department(s) will be the host. Is this an interdisciplinary degree or a collaborative approach? How will this interdisciplinary approach be implemented? How is the chair selected and clarity about the rotation of the chair role.

Responses:

What department(s) will be the host?

Political science will serve as the host (that department officially submitted the curriculum proposal on behalf of the other SBS units and Statistics), mindful that a steering committee will work closely with the host department and advisor. This is akin to the PPE major. Economics was the host, but the steering committee worked closely with the contributing departments.

Is this an interdisciplinary degree or a collaborative approach?

I'm not sure I understand the distinction between an interdisciplinary degree and a collaborative approach. I would see CSS as both; multiple disciplines are collaborating to offer a curriculum in an inherently interdisciplinary field. CSS sits at the intersection of the social sciences (sociology, political science, economics, psychology, communication) and computational methods, statistics, and network science.

How will this interdisciplinary approach be implemented?

Building on sections 5-7 of the proposal, the CSS major implements its interdisciplinary approach through a shared core and a governance structure built with collaborating units. All students complete a 17-credit core plus two electives on technology and society, which gives everyone common grounding in social theory, computation, and research design.

The new courses were developed by an interdisciplinary committee from sociology, statistics, anthropology, and communication science, with input and review from the other units (a political scientist also contributed before his untimely death). As such, the core courses draw on examples from multiple disciplines and, more importantly, the courses show how developments in one field (e.g., network science) have applications in others (e.g., answering sociological or anthropological questions).

The curriculum map shows how these components scaffold from beginner to advanced levels across all four program goals, converging in the CSS 4901 capstone, where students apply interdisciplinary computational methods to a social problem grounded in disciplinary training (from their electives).

How is the chair selected and clarity about the rotation of the chair role?

The chair of the steering committee will be appointed by the Divisional Dean of Social and Behavioral Sciences ("SBS Dean") with input from current and previous committee members. The PPE major in the College of Arts and Sciences provides a good template for this structure. CSS will organize the steering committee in a similar way, as mentioned in the proposal.

i. How advising / student support / recruitment services will be implemented with the nine departments within ASC? The advisor position was described; however, the uniqueness of the integrative approach with the other nine departments within ASC should be considered as this will impact advising interactions throughout departments, recruitment efforts, growth factors, and volume for this type of advisement. A bit more about the cost and impact on all departments from both an interdisciplinary and growth perspective would add clarity.

Responses

How advising / student support / recruitment services will be implemented with the nine departments within ASC?

An ASC advisor, likely from political science but the final decision will be made based on workload in consultation with the ASC Assistant Dean for Advising (Mary Ellen Jenkins), will be assigned to the CSS program. Here, again, PPE provides a template for advising an interdisciplinary program. While nine departments offer courses that can count towards the major, most of those are electives and the CSS advisor will guide students. Akin to PPE, which offers courses in multiple departments, the advisor works directly with students but communicates as needed about scheduling with the unit-level advisors.

Most of the recruitment efforts will be conducted by the steering committee. This has been done with great success by PPE, which now has 200 majors. If the number of majors exceeds the capacity of one advisor (typically about 300 students per advisor), then we will work with ASC Advising to dedicate additional staff as needed.

A bit more about the cost and impact on all departments from both an interdisciplinary and growth perspective would add clarity.

This prompt is vague. I'm happy to elaborate if the following does not address the key point.

Growth will be handled in a manner consistent with other interdisciplinary units in the college, such as International Studies, Neuroscience, and PPE. ASC has experience with multiple collaborative and interdisciplinary programs to draw on. In the case of Neuroscience, the major grew remarkably quickly and additional advising staff were deployed to serve the growth in majors.

The number of students in a major can change over time, and ASC Advising continually reexamines how advisors are deployed to maintain acceptable ratios and workloads. E.g., International Studies majors have declined during the last decade and an advisor was recently deployed elsewhere. ASC's process will apply to CSS as well.

i. **AAS – CSS committee signed it – will they maintain the committee for the oversight? Cross-disciplinary committee to oversee the cross-disciplinary support might be more robust. Page 9 as reference**

With apologies, I don't know what AAS refers to here, and I'm unsure what is being asked. Please clarify and I'm happy to respond.

2. Enrollment goals
    a. To meet Ohio Department of Higher Education, enrollment goals need to be met. To help solidify this with, the following will add clarity in the proposal.
    b. pg 8 comparison There was reference to OSU Data Analytics (DA) - Social Science Analytics specialization - "We do not interpret this as evidence of low demand for CSS at OSU. Rather, we think it is due to the lack of bespoke training in computational social science theory and methods." More clarity about the difference with the CSS degree and how this will overcome the enrollment challenges noted in data analytics.

Responses:

CSS is distinct from the DA-SSA (Data Analytics-Social Science Analytics) curriculum. Frankly, the DA-SSA is a hodgepodge of classes without a core. CSS is distinct in that we carefully created new classes with an interdisciplinary core, which was created by an interdisciplinary committee that sought external input from the private sector and academia – to develop core methods and principles. There is no steering committee for DA-SSA and very little advertising or attendance by staff at recruitment events. Respectfully, we saw the DA-SSA as an example of how *not* to develop an interdisciplinary major.

Because CSS has a core, a steering committee, an advising structure, buy-in from all departments, and a clear workforce connection, we anticipate enrollments akin to the University of Illinois' CS+X BS enrollments. As mentioned in the proposal (page 8), these number in the hundreds for social sciences and humanities (e.g., 200 in economics; 26 in anthropology; 100 in linguistics).

3. Other benchmarking school's enrollment
    a. Need comparison enrollment data if possible
    b. More historical information about why this is popular and important now in terms of other schools – ie: in proposal it states there were only small number in comparison – clarification as this is a new idea vs. enrollment was poor and they needed to close.

Responses:

a) See above (example from Illinois) for enrollments in comparable programs at other universities. Enrollment data was not abundantly available when drafting the proposal because, at the time, we were an innovator and not a follower in developing this curriculum. That has changed (see 'b' below). We cannot predict with specificity how many students will major in CSS, but the numbers from the University of Illinois suggest 200 or more.

b) The small number of programs nationally does **not** indicate that others have tried and failed. Rather, CSS is a new interdisciplinary field that has quickly taken shape, as outlined in the proposal. It is particularly strong in graduate programs in the social sciences, and we are one of only a few universities with a critical mass of social scientists and statisticians to develop a unique, carefully crafted curriculum.

Peer institutions are also moving quickly into this space, and indeed have passed Ohio State recently. While we've been developing this proposal, Princeton created a summer program in CSS. The University of Chicago started offering a master's in Computational Social Science (MACSS), along with a graduate certificate and 4+1 pathway for undergraduates. The University of Tennessee beat OSU to become the first comprehensive undergraduate CSS major; a 30-credit CSS curriculum that includes foundational courses in computational and statistical methods and advanced electives in geography, anthropology, psychology, and more. The University of Amsterdam (Netherlands) hosts an English-language BSc in Computational Social Science with about 300 students enrolled.

4. Concurrence / support
    a. In the concurrence / support letters, clarity on the role for each of the departments to include who is collaborating directly vs who is providing support that this does not overlap with current initiatives / offerings in other departments.

Response:

This program was developed through a collaborative process with units in the Social Sciences, and they are all excited about participating. The steering committee will continue to engage with these units to provide updates around curricular overlap/course enrollment/new course development. In a college as large as Arts and Sciences, with a new program like the proposed computational social science major, this ongoing communication and collaboration are central, and the college has a strong record of such efforts (PPE and the leadership major, for example).

    b. There is no guarantee of course offerings in the future with the interdisciplinary approach in the proposal. This should be considered as a point of clarification needed and describe how this barrier would be addressed. One suggestion would be to add to the concurrence letters or a statement that addresses this potential challenge.

Response:

I'm not sure what is being asked here. We see no issues with the availability of courses now or in the future. I'm happy to elaborate if the question can be stated more clearly.

In case it's relevant, the college is recruiting strongly in CSS areas and thus the collaborative structure is designed to accommodate flexible additions of these new scholars and ensure they will be able to teach in these cutting-edge areas.

    c. Considerations of overlapping courses/degrees.
        i. CSE – recommend seeking concurrence – in proposal they did not respond but given the overlap with their specialization (see below) asking again is important.

Response:

This strikes me as a highly unusual request and a departure from the rules governing curriculum review. We reached out to CSE extensively as we developed this proposal, dating back to 2021. CSE was well aware of the proposed major and had every opportunity to either collaborate or to raise concerns if they had any. Early on, CSE mentioned that they were at capacity and declined our invitation to partner, but there was no indication that CSE objected to the proposal, as evidenced by their acquiescence to the major during the concurrence process. **We will not circle back again**. We did our due diligence with CSE and operated within the rules of the curriculum process. We will proceed based on the university rule that non-response indicates concurrence, as has been the case with other curriculum proposals.

ii. PPE / ASC (page 9) – It was mentioned this is used as a model. More clarity about the use of this model. How has this model been implemented with the interdisciplinary approach? Who leads and how does the approach mirror this new degree?

Response:

Please see my above responses where I make several references to the structure of PPE. I'm not sure what I can add beyond this. I would be happy to elaborate in person.

iii. Core courses and specializations – Upon review of the Data Analytics Social Sciences specialization mentioned in the proposal, it appears there are only Stats courses included in the new CSS degree and not computational courses in CSE. Needing a bit more clarity about how computational is different in the CSS degree?

Response:

As mentioned in a previous response, CSE did not wish to partner in this effort. Furthermore, the CSE courses include no social science content, which is obviously critical for CSS. The Department of Statistics offers courses that cover the required coding and fundamentals of the general linear model that are needed for more advanced CSS coursework.

Perhaps an example will help clarify how CSS is distinct from CSE. Throughout the development of this curriculum, it became clear that there is some misunderstanding of the social sciences and what types of methods have been employed in these disciplines. These fields have long been quantitative and several methods developed in statistics and in the social and cognitive sciences developed in parallel with computer science. For instance, a core idea in computer science and AI – the neural network – can be traced back to the work of psychologists in the 1950s (Donald Hebb and later Frank Rosenblatt). While this concept would be further developed in computer science for purposes of prediction and optimization, it simultaneously developed in social sciences through network analysis as a framework for representing and analyzing social relationships. The computer science approach is focused on prediction without asking "why." The social science approach is explanatory. For CSS, the network is an object of study. For computer science, it's a tool for prediction and classification. CSS (e.g., in CSS 4500 and in SOC 4650) teaches the complementary use of networks and integrates the modeling and the theory.

I hope this example helps clarify.

How is it the CSS degree different and the place in the specializations – specifically focus B where there is only 6CH of CSS?

iv. How much overlap is there between CSE 5544 and CSS 3500 given the latter is referenced as including data analytics in the proposal https://data-analytics.osu.edu/sites/default/files/2021-11/social_science_analytics_curriculum_sheet.pdf

Response:

The overlap is minimal. In CSE 5544, the main products are software interfaces. Labs involve building Tableau visualizations, a D3 interface for word tags from text, a D3 graph-layout tool, and a D3 tool linking data to maps. In CSS 3500, students write homework analyses and a final project fitting regression models to secondary data provided by the instructor, with no interface building. CSE 5544 uses Tableau, D3.js, Processing, HTML/CSS/JavaScript, and SVG, so it's a front-end programming and design course. CSS 3500's materials are R-based (Melamed & Doan; Finch et al.), focused on statistical modeling rather than building software. CSE 5544 covers networks/trees, maps, dimensionality reduction, and scientific visualization (scalar and vector fields, volume rendering). CSS 3500 has none of these. CSS 3500's topics (nonlinear regression families, multilevel models, causal inference) don't appear in CSE 5544 (based on https://ai4biosci.osu.edu/CSE5544.html).

They are both 3 credit courses and project based, but the differences are substantial.

TDAI – is there a support network where this may fit here too - https://tdai.osu.edu/research-action/communities-practice/computational-social-sciences

Response:

Thank you. Most of the committee members who developed the curriculum are members of TDAI. We have been engaged with the Institute.

College of Arts and Sciences

THE OHIO STATE UNIVERSITY

186 University Hall
230 North Oval Mall
Columbus, OH 43210

614-292-1667 Phone

artsandsciences.osu.edu

April 29, 2024

Dear Curriculum Committee,

We submit this letter in support of the proposal for an undergraduate Bachelor of Science major in Computational Social Science (CSS). The proposed curriculum is informed by, and contributes to, the University's Academic Plan. A hallmark feature of this plan is accelerating student success, which requires that programs engage in curricular innovations to align with modern-day challenges, to promote interdisciplinary training, and to prepare students for the modern workforce. The CSS major aligns with these aspirations and promises to bring distinction to The Ohio State University. Only a few CSS programs exist nationally, although many colleges or divisions of social science are moving in this direction. At Ohio State, we are ahead of the curve and can serve as a model for others to emulate.

The College of Arts and Sciences has a critical mass of faculty working in computational social science. These faculty were recruited because of their research distinction, and they are eager to train CSS majors in computational social science so that they can be viable candidates for top graduate programs and to succeed in the workforce, where these skills are in high demand.

The proposed curriculum is unique in that it is genuinely interdisciplinary. The social sciences at Ohio State have a long tradition of collaboration. Importantly, the CSS curriculum is not merely a collection of courses that touch on a similar topic. It represents a genuine effort to integrate disciplinary expertise and social theory with computational approaches that are used across the social sciences, such as network analysis and agent-based modeling.

Computational social science will soon be a feature of highly ranked colleges and universities. We are uniquely positioned at OSU to serve as a model for advancing this curriculum. As such, the major would serve our students and bring distinction to the university.

Sincerely,

David Horn
Dean

Ryan King
Divisional Dean, Social and Behavioral Sciences

THE OHIO STATE UNIVERSITY

Department of Sociology

238 Townshend Hall
1885 Neil Avenue
Columbus, OH 43210

614-292-6681 Phone
614-292-6687 Fax

sociology.osu.edu

Professor Ila Nagar
Chair, Arts and Sciences Curriculum Committee

April 9, 2026

Dear Professor Nagar and Members of the Arts and Sciences Curriculum Committee:

On May 12, 2025, the Social and Behavioral Sciences Subcommittee of the ASC Curriculum Committee reviewed a proposal for a New Bachelor of Science in Computational Social Science (CSS) put forward by the College of Arts and Sciences, to be implemented in Autumn 2027.

The primary motivation for the program is to train students to integrate social theory with computational and quantitative expertise. The goal is to train future transdisciplinary CSS professionals to develop practical solutions for contemporary social problems. The program includes newly developed computational social science courses that combine computational modeling and theory-guided data science. OSU is a leader in the field of computational social science, with a range of expertise in the College of Arts and Sciences, including Political Science, Anthropology, Sociology, Geography, and Economics as well as Statistics. This program also builds on other university investments in Data Analytics and AI Fluency. The new major thus leverages the intellectual breadth and disciplinary breadth of expertise of The Ohio State University to train students at the very cutting edge of societal developments.

The program offers two curricular pathways tailored to students' interests: Focus A on Social Science and Focus B on Statistics. All students regardless of focus will receive consistent training in core Computational Social Science skills, tools, and theory.

The program was developed with the leadership of a steering committee of college leadership, faculty from several disciplines, as well as leading representatives from industry in Ohio. I would also like to join with the proposers in acknowledging Professor Bear Braumoeller's foundational vision and leadership in developing this Computational Social Science major proposal. Bear was the Baronov and Timashev Chair in Data Analytics in the Department of Political Science at OSU prior to his untimely passing on May 3rd, 2023, in Oslo, Norway.

The SBS Subcommittee voted unanimously to approve the request with contingencies. The proposers have satisfied the contingencies and the proposal is now advanced to the ASCC with a motion to approve.

Sincerely,



Rachel E. Dwyer, Ph.D.
Professor and Vice Chair of Sociology
Chair of the Social and Behavioral Sciences Subcommittee of the
Arts and Science Curriculum Committee

COMPUTATIONAL SOCIAL SCIENCE: UNDERGRADUATE PROGRAM PROPOSAL

College of Arts & Sciences at The Ohio State University

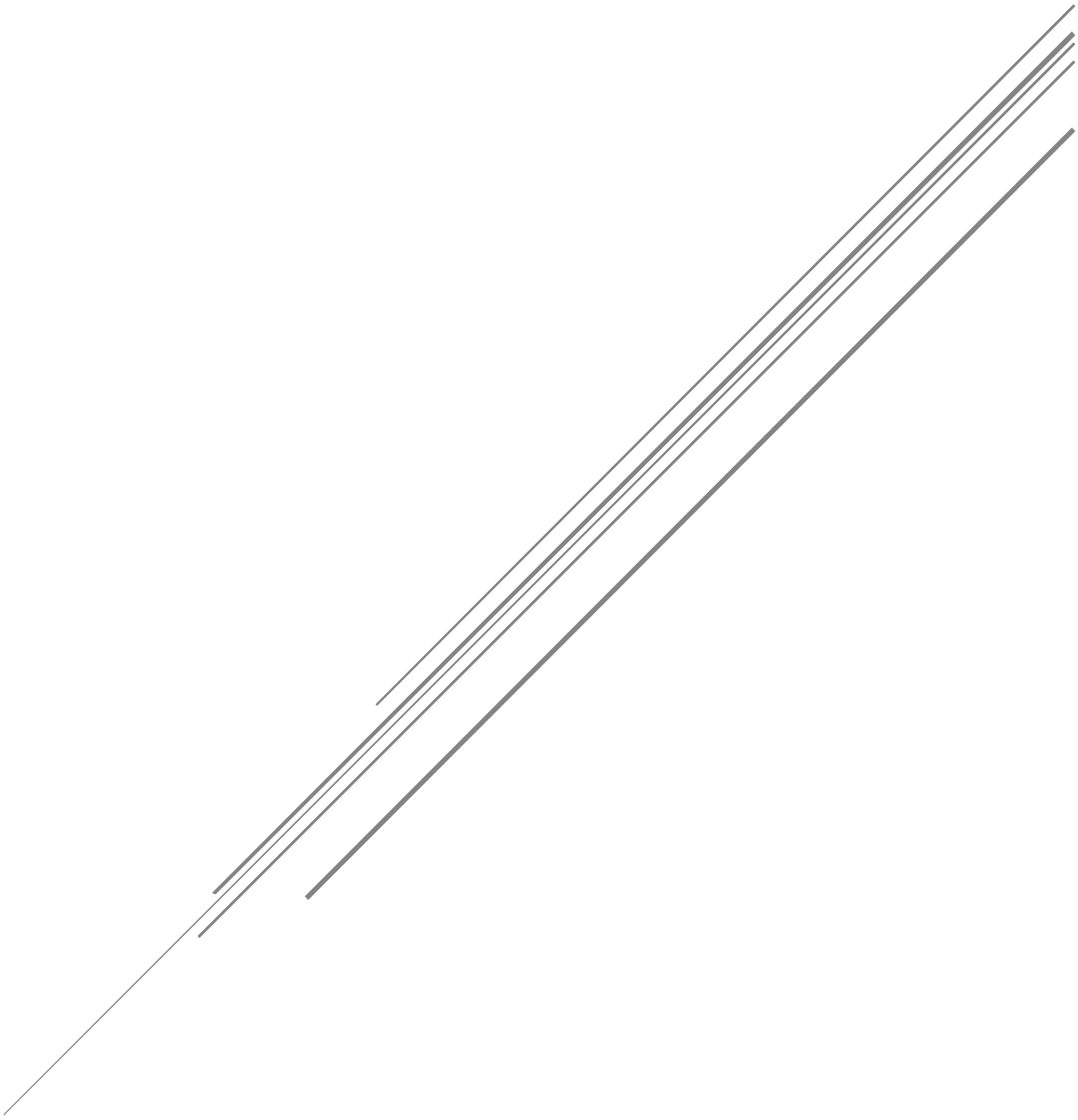


Table of Contents

Section 1: General Information 2

Section 2: Rationale 2

- Overview 2
- Narrative 2
  - Intellectual Justification 3
  - Pedagogical Justification 3
  - Vocational Justification and Workforce Contributions 4

Section 3: Goals/Outcomes & Evaluation of Program 5

- Goals & Outcomes 5
- Assessment Plan 6
  - Criteria to Evaluate Successful Student Learning 6
  - Timeline for Implementation of Assessment Plan 7

Section 4: Relationship to Other Programs & Benchmarking 7

- Market demand 7

Section 5: Student Enrollment & Program Structure 9

- Projected Enrollments 9
- Staffing 9
  - Faculty Director 9
  - CSS core faculty 9
  - Faculty recruitment 9
  - Program Coordinator 9
  - Academic Advisor 9
- Program Organization 9
  - Advisory Committee 10
  - Affiliated Faculty 10
- Collaborating Departments 10
- CSS Operating Budget 11

Section 6: Curricular Requirements 11

- CSS Prerequisite Classes 12
- CSS Major Core Classes 12
- CSS Elective Classes 12
- Transdisciplinary CSS education Focuss 13

Focus A: Social Science Minor 13
Focus B: Statistics 14
Double Majoring in CSS 16
CSS New Course Offerings 16
AI Fluency 17
Example student pathways 178
Sample Student Pathway - Social science minor (Focus A) 18
Sample Student Pathway - Statistics minor (Focus B) 19
Section 7: Integrated Learning Goals and Outcomes 20
Section 8 : List of Social Science Training Clusters for Focus B students 23
Section 9: Appendices 29

Section 1: General Information

Name of proposed major: **Computational Social Science**
Degree students completing the major will receive: **Bachelor of Science (BS)**
Proposed implementation date: **Autumn 2027**
Academic units responsible for administrating the major program: **College of Arts and Sciences**
Delivery: **In Person (P)**

Section 2: Rationale

Overview

The Computational Social Science (CSS) Bachelor of Science program trains future transdisciplinary scientists and policymakers to integrate social theory with computational and quantitative expertise. Students will learn to address complex issues in areas such as climate change, sustainability, ethical AI, social networks, cybersecurity, and political complexity. The program combines computational modeling and theory-guided data science to develop practical solutions for contemporary social problems. Leveraging the intellectual breadth of The Ohio State University, the program offers diverse curricular pathways tailored to students' interests while providing consistent training in core CSS skills, tools, and theory.

Narrative

What justifies a new Computational Social Science major at Ohio State? There are a few answers.[1]

[1] We acknowledge Professor Bear Braumoeller's foundational vision and leadership developing this CSS major proposal. Bear was the Baronov and Timashev Chair in Data Analytics in the Department of Political Science at OSU prior to his untimely passing on May 3rd, 2023, in Oslo, Norway.

Intellectual Justification

Computer science has revolutionized fields from linguistics to biology, but its impact throughout most of the social sciences has been modest, mostly due to lack of integration and organization.[2] Social scientists use available machine-learning and NLP methods to process data largely in isolation from the computer science community. At the same time, computer and data scientists focus on a narrow range of social science questions, such as election prediction, ideology classification, and analysis of digital trace data, often without grounded hypotheses or clear explanations. In other words, these two communities have largely stood apart from one another, with CS researchers sometimes unaware of interesting applications in the social sciences, and social scientists not applying cutting-edge computational methods to their problems.[3]

Part of the reason for the disconnect is that social science domain expertise has not traditionally been easy to connect to computational methods. That difficulty is rapidly disappearing. A renewed emphasis on computational modeling in the social sciences, combined with a focus on theory-guided data science in computation, has laid the groundwork for a deeper, richer, and more fruitful engagement between computational methods and the social sciences, which in turn will lead to better social science domain knowledge and practical applications that will contribute to contemporary society. An indication of the growth of interest in computational social science is shown in Figure 1.

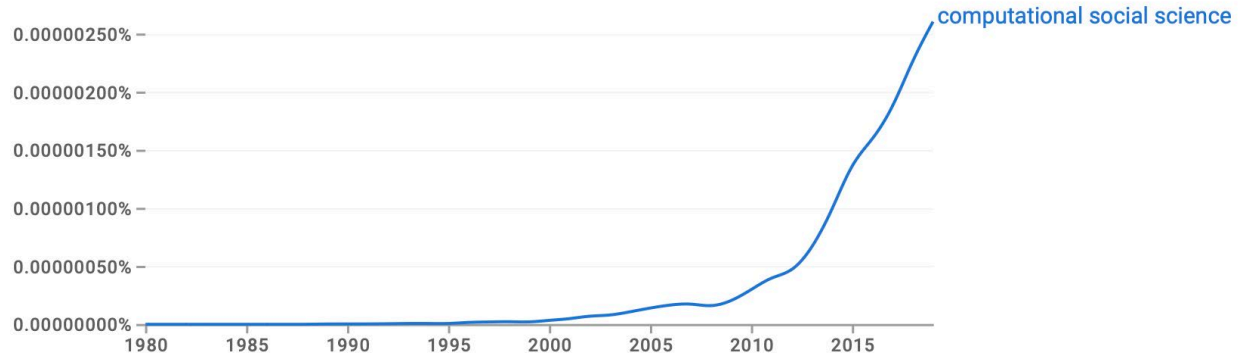


Figure 1:
Growth of the use of the term "computational social science" in Google's corpus of books (1980-2020).

Pedagogical Justification

Ohio State's size, and the ease with which undergraduate students can integrate hands-on research with their program of study, is fertile ground for the growth of team science in the social sciences. Social science research labs, once rare, are now present in most SBS departments. While some undergraduate researchers perform advanced research tasks, most undergraduates lack the combination of substantive knowledge and data-analytics skills that would allow them to investigate modern computational social science research questions. A computational social science program at OSU would greatly expand

[2] See David M. Lazer et al. (2020), "Computational Social science: obstacles and opportunities." *Science*, 369,6507:1060-1062.
[3] For an accessible discussion, see John L. Anderson, "Why Social Science? Because engineering is intended to benefit society." Consortium of Social Science Associations, March 23, 2021.

collaborative research and training opportunities for Ohio State undergraduates and give them a leg up in graduate school admissions and in the job market.

Vocational Justification and Workforce Contributions

In the process of planning a Computational Social Science degree program, we assembled a steering committee comprising faculty from various departments as well as representatives from industry, including Jason Morgan, Vice President for Behavioral Intelligence, Aware; Benjamin Campbell, data scientist at Cover My Meds; Adam Lauretig, Vice President at Barclay's Investment Bank; and Michael McCaslin, Director of Data Science at Nationwide Insurance.

The latter group helped us to articulate a list of specific skills and qualities for the sort of employee that they most hoped to attract and retain, which we then developed into our present curriculum proposal. The ideal employee combines the following in equal measures: (1) real-world knowledge of society and business, (2) basic and advanced quantitative research skills in statistics, machine learning, and research design, (3) and programming skills in modern and traditional software platforms and languages. The combination of these characteristics is captured most elegantly in a slide from a recruitment presentation by Nationwide's Center for Advanced Customer Insights, which regularly hires graduates from across the social and behavioral sciences (Figure 2).

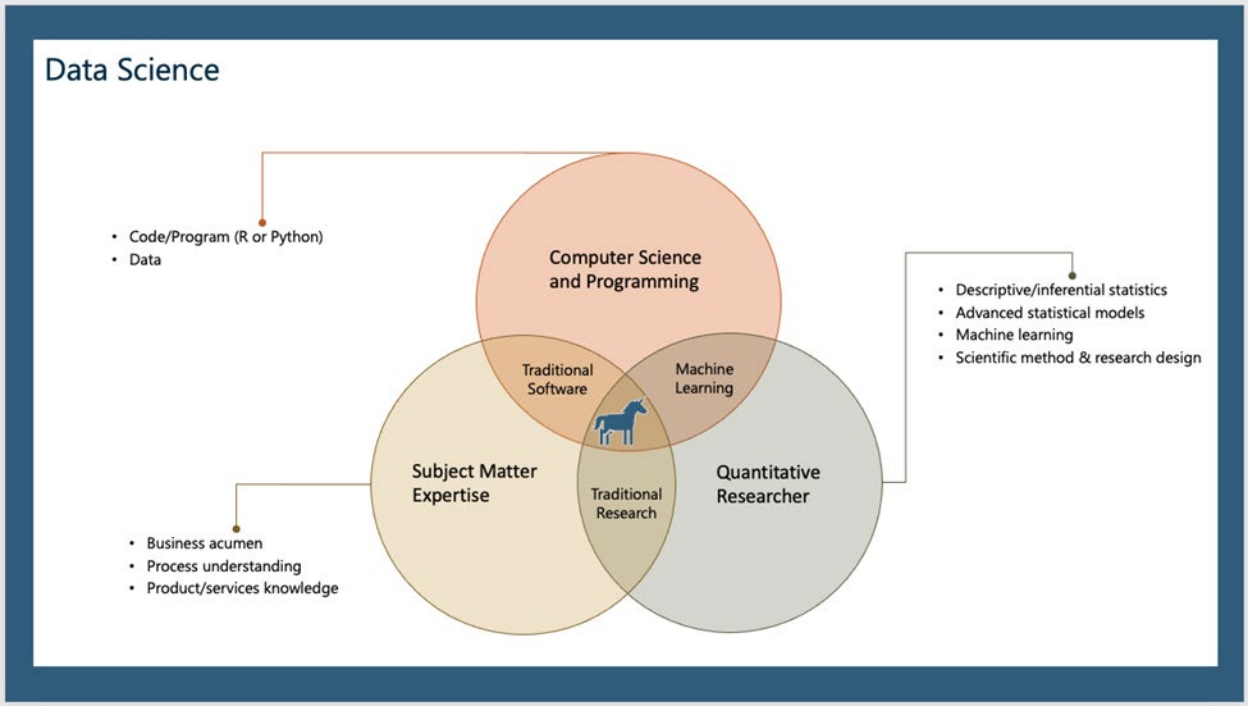


Figure 2:
Nationwide Insurance recruitment slide outlining need for employees with transdisciplinary computational social science training including domain expertise, programming, and quantitative data analysis.

The diagram captures a knowledge gap, not just at Nationwide, but in a broad swath of businesses and government agencies (e.g., U.S. Department of Defense) that seek to understand and predict human behavior using advanced computational methods, including Amazon, Disney, Microsoft, and Facebook, among others. They intentionally place a fictitious *unicorn* at the center of the diagram to hint at the recruiters' frustrations and lack of success in finding candidates with this combination of skills. The CSS

curriculum we developed will position OSU as a national and global leader in training students to fill this proficiency gap in business and industry and thereby help address the challenges of contemporary society.

Section 3: Goals, Learning Outcomes & Evaluation of Program

Goals & Learning Outcomes

Upon completion of the BS degree in Computational Social Science, students should demonstrate proficiency in the following skills and abilities (goals and learning outcomes listed below; corresponding courses are listed in Section 7 of this document):

Goal 1: Social Theory. Students will learn about theoretical camps in the social sciences. Students will apply social theory to interpret and explain patterns in social science data and to generate testable hypotheses that can be supported or falsified.

a) **Critical theorizing.** Describe and critique social science theory as presented in published studies and/or lectures.
b) **Theory development.** Adapt existing social theories or frameworks to address new cases, contexts, or ideas while maintaining their overall coherence and logic.
c) **Theory building.** Explain how algorithmic or mathematical models complement, extend, or enhance existing or new theoretical social-science theories, frameworks, or approaches.
d) **Theory modeling.** Create or apply computational approaches to represent and test theoretical relationships.

Goal 2: Computational Modeling and Analysis: Students will learn about the data generation process and acquire skills for developing mathematical and algorithmic expressions of social theory. Students will learn how to analyze data using computational methods.

a) **Computational platforms.** Conduct statistical and computational analyses by using current tools and technologies for data generation, collection, and processing.
b) **Software proficiency.** Demonstrate proficiency in relevant statistical and computational environments.
c) **Comprehension of computational approaches.** Understand and be able to reproduce computational models and analyses described in published work.
d) **Model testing**. Use comparative model testing strategies and theory-guided data science techniques to compare the explanatory power of models when applied to data.
e) **Communicating computational methods**. Best practices for coding, describing analyses, and disseminating work to enable replication and evaluation.

Goal 3: Research Design: Students will learn to develop analytic strategies for answering social science questions using computational methods. This entails knowledge of data collection, cleaning, testing, and inference.

a) **Distinguishing methodologies.** Explain the pros and cons of various computational approaches when addressing specific research questions in the social sciences.

b) **Experimental modeling**. Create experiments that generate data suitable for computational analyses that inform research questions in the social sciences.
c) **Questions from data**. Use exploratory qualitative and inferential methods to generate research questions and hypotheses.
d) **Interpreting findings**. Explain the significance of findings discovered through computational methods, including proper inferences and limitations of the data.
e) **Research ethics**. Design computational social science research projects and methodologies that are compatible with ethical standards of research.

Goal 4: Interdisciplinary Collaboration: Student will work effectively as part of a team and understand disciplinary and transdisciplinary approaches to social science research.

a) **Data visualization.** Communicate social science data and results of statistical analyses by presenting them in accessible forms to a variety of audiences.
b) **Technical communication.** Communicate scientific findings to professional and public stakeholders, including academics, policymakers, and public audiences.
c) **Professional engagement.** Gain familiarity with the CSS job market and best practices for networking and displaying professionalism.
d) **Collaborative research design.** Co-create computational models by collaborating with teams with diverse disciplinary interests.
e) **Translational ethics.** Demonstrate knowledge of ethics and shared values as related to CSS, particularly when working in industry or with industry partners.

Assessment Plan

The abovementioned goals and learning outcomes are assessed throughout the curriculum. The assessment plan calls for direct assessment of 6-7 outcomes each year, such that all outcomes will be assessed every 3 years in accordance with the Office of Academic Affairs' assessment requirements. In addition, programmatic assessment will be embedded in the capstone course. Assessment will be completed by designing questions on exams and rubrics for writing assignments that map onto the learning outcome associated with each goal.

Criteria to Evaluate Successful Student Learning

Our metric of success for CSS students will be that ≥75% of students will achieve a four out of five, or "above average," per learning outcome assessed. Rubrics will be developed by the faculty advisory committee in consultation with initial course instructors.

A sample assessment plan is provided below (Table 1) in which learning outcomes embedded in three of the four goals were assessed across three CSS core courses. Please see Section 7 for the complete set of goals, outcomes, and courses.

Table 1: Example from one year assessment plan

Goals and Outcome Assessed	Assessment Location	Assessment Tool	Criteria
Goal **1, outcome C:** Theory building. Explain how algorithmic or mathematical models complement, extend, or enhance existing or new	CSS 3100	Homework activity #3. Students represent a theory mathematically on assignment.	≥75% of students will achieve a 4 out of 5 in demonstrating this learning outcome.

theoretical social-science theories, frameworks, or approaches.			
Goal 2, outcome B: Demonstrate proficiency in relevant statistical and computational environments.	CSS 3500	Coding appendix on final data analysis project for CSS 3500.	≥75% of students will achieve a 4 out of 5 in demonstrating this learning outcome.
Goal 3, outcome B: Create experiments that generate data suitable for computational analyses that inform research questions in the social sciences.	CSS 4901	Capstone project in CSS 4901 that requires a formal presentation to a mock group of stakeholders (e.g., business, government).	≥75% of students will achieve a 4 out of 5 in demonstrating this learning outcome.

Timeline for Implementation of Assessment Plan

In August of each academic year, the faculty advisory committee will select learning outcomes to be assessed over the course of the year. The committee will work directly with instructors of courses mapped to selected learning outcomes to request data collection by the conclusion of each semester. In May, the faculty director will review, consolidate, and summarize this data. The resulting report will be shared with the faculty advisory committee for further discussion and uploaded to the University's assessment results platform (Nuventive). Reports will be discussed the following August and used to guide the selection of learning outcomes in coming assessment cycles.

Section 4: Relationship to Other Programs & Benchmarking

Market demand

We have identified a small number of CSS programs at the undergraduate level (BS) across the country that are offered out of, or in collaboration with, Colleges of Arts and Sciences. The most comparable programs we have identified thus far are the BS in Computational Social Sciences at the University of Pittsburgh, and the BS in Quantitative Theory and Methods at Emory. Numerous CSS programs exist at the graduate level, as well as undergraduate certificates and minors (e.g., https://www.sjsu.edu/acbss/).

- University of Pittsburgh BS in CSS (https://www.sci.pitt.edu/academics/undergraduate-majors/computational-social-science)
    - The Computational Social Science major educates students to build, compute, and improve theoretically informed models of social processes, bridging domain and technical expertise.
- Emory University Arts and Sciences: Quantitative Science (QSS) BS (https://quantitative.emory.edu/academics/bachelors/index.html)
    - QSS goes beyond data science degrees available elsewhere by teaching disciplinary theory and context alongside data science methods. "We are the integration of Liberal Arts and Data Science."
- University of Tennessee BS in CSS (https://artsci.utk.edu/academics/programs/cosci/css/)
    - CSS program equips students with the skills to analyze human social and behavioral data, uncover patterns, and address contemporary challenges in public policy, business, and society.

In addition, several undergraduate programs in Data Analytics with concentrations in social sciences are operated out of some departments of computer science, such as the X+CS initiative at UIUC.

- University of Illinois Urbana Champaign CS+X BS[4] (https://cs.illinois.edu/academics/undergraduate/degree-program-options/cs-x-degree-programs)
    - The University of Illinois has designed an innovative blended degree option called CS + X that allows students to pursue a flexible program of study incorporating a solid grounding in computer science with technical or professional training in the arts and sciences.
    - In 2023, the UIUC CS+X program has a total enrollment of 1,224 students across 14 majors: CS + Animal Science (6), CS + Anthropology (26), CS + Astronomy (47), CS + Chemistry (24), CS + Linguistics (100), CS + Advertising (71), CS + Economics (200), CS + Education (21), CS + Geography and GIS (16), CS + Philosophy (87), CS + Music (30), CS + Crop Sciences (22), CS + Math (270), CS + Statistics (304).
    - OSU has 22,000 more students than UIUC, indicating possible untapped demand at OSU.

At OSU, the most comparable program is the Data Analytics BS operated out of Statistics and CSE (https://data-analytics.osu.edu).

- This rapidly growing field needs practitioners with expertise that cuts across core disciplines of computer science, mathematics and statistics, and highly developed critical thinking, problem-solving and communication skills.
- As of October 2023: 155 single majors, 18 double majors, and 221 enrolled in the pre-major (Total: 394) across five specializations **Social Science Analytics (6)**, Business Analytics (58), Biomedical and Public Health Analytics (13), Computational Analytics (68), Visualization (26).

We note that the OSU Data Analytics (DA) Social Science Analytics specialization has relatively low enrollment. We do not interpret this as evidence of low demand for CSS at OSU. Rather, we think it is due to the lack of bespoke training in computational social science theory and methods. Enrollment levels are higher in related OSU DA specializations such as business and public health, and there are significant social sciences enrollments in the CS+X program at UIUC, despite being a smaller institution. In 2023, OSU ASC had over 7,000 students declared as a major or minor in SBS disciplines (please refer to Table 2 for a breakdown of enrollments in collaborating departments). Our steering committee also reinforced the growing demand for professionals with computational skills, domain knowledge, and training in the social sciences, and we expect robust student interest for this program and employer interest in its graduates. The ASC CSS major is differentiated from the CSE DA-Social Science Specialization by providing students with structured disciplinary coursework in the social sciences and bespoke training in computational social science methods.

[4] Information about UIUC obtained from CSE School for Computing Town Hall presentation, Dec. 2023

Section 5: Student Enrollment & Program Structure

Projected Enrollments

Based on the information above, we tentatively estimate stable enrollment of 200 majors by Y4 of the program. The initial cohort will be capped at 25 students in Y1, expanding to 50 in Y2, 100 in Y3, and uncapped in Y4, contingent on course availability and teaching capacity.

Staffing

Faculty Director

The staffing structure will use the existing and successful interdisciplinary major in Philosophy, Politics and Economics (PPE) as a guide. The CSS program will require a faculty director serving a 3-year term and receiving one course release per year to provide time for CSS administrative and advising duties. The director will be required to teach one course in the CSS curriculum per year during their term. To ensure that adequate teaching coverage is available in departments, the specific term of the CSS faculty director, including ASC course buyouts, will be negotiated between the TIU Chair and the appropriate ASC Dean in advance of the director's term.

CSS core faculty

Faculty recruitment

To sustainably staff courses over the long-term, and assuming full enrollment by Y4, the program will require the equivalent of two new CSS Core faculty hires. We envision these as positions with a 2-1 load, with half of the teaching responsibilities to the CSS Major Core classes, and 1 course per year in their TIU. Due to the phased rollout of the program, full staffing will not be needed in Y1.

One of these hires already joined OSU this autumn 2024, and another search is currently underway so that the new CSS Core faculty can be online to teach their first CSS classes in 2027.

Program Coordinator

The program coordinator will be responsible for fiscal and business operations, course scheduling, website maintenance, and curriculum management. FTE will be determined by demand. The structure of staffing will be modeled after recent interdisciplinary programs in the college, namely the successful Politics, Philosophy and Economics (PPE) major.

Academic Advisor

There will be a dedicated CSS professional academic advisor located in the ASC Advising office. The advisor will coordinate with students, the program director, affiliated faculty, and advisors in participating departments to guide student coursework and minors to ensure that they are aligned with the CSS Core framework and student goals. The CSS Advisor will work closely with departmental advisors to ensure that students fulfill the disciplinary requirements for earning a minor degree, while also selecting disciplinary classes that fulfill the necessary transdisciplinary training in social science and computational methods.

Program Organization

The Program will include an Advisory Committee, Collaborating Departments, and Affiliated faculty.

Advisory Committee

The advisory committee consists of affiliated faculty from departments and colleges across campus with expertise in teaching CSS theory or methods. The advisory committee will have a minimum of four members, including the director, with priority given to participating departments. The director will be selected from a participating unit by the SBS Divisional Dean. The Chair of Statistics (or their designee) is an ex officio member.

Affiliated Faculty

The program will maintain a list of affiliated faculty members, who will teach courses that are part of the CSS curriculum. Affiliated faculty can also provide input to the core CSS curriculum as needed. Courses may be cross-listed with departments or affiliated faculty may negotiate course-buyouts from TIU to teach Core CSS classes.

Collaborating Departments

CSS will work with collaborating departments to cross-train students in computational methods, social science theory, and domain knowledge. The undergraduate curriculum committee in each collaborating department will provide a list of courses for CSS students and approve department-specific CSS advising sheets. The departmental undergraduate advisor(s) will coordinate with the CSS advisor to help students select suitable transdisciplinary coursework when selecting courses for required minors. There are nine collaborating departments at the initiation of the program (Table 2), and additional collaborations may be established in the future. Letters of support are attached to this proposal. Departments have the option of determining which of their Minor offerings are aligned with the CSS curriculum described in this proposal.

Table 2: Collaborating units and disciplinary foci

Collaborating Unit	SP 2024 enrollment (all majors & minors)	Disciplinary foci
1. Anthropology (ASC)	365	Human biology, behavior, and culture, past and present
2. Geography (ASC)	214	Urban growth/decline, regional population shifts, societal change, spatial patterns of human activity, spatial models and mapping
3. Linguistics (ASC)	126	Computational linguistics, historical linguistics, morphology, phonetics, syntax
4. Political Science (ASC)	725	Political psychology, political economy, formal theory and political theory, race, ethnicity, and gender.
5. Psychology (ASC)	2,298	Neuroscience and imaging, Social processes in human interaction, psychopathology, decision psychology
6. School of Communication (ASC)	1,487	Interpersonal and mass communication in marketing, business, and society.
7. Sociology (ASC)	987	Criminology, criminal justice, stratification and inequality, social networks
8. Statistics (ASC)	653	Bayesian statistics, spatiotemporal statistics, statistical learning and biostatistics
9. Economics (ASC)	1122	Behavioral economics, macroeconomics, labor economics, econometrics, economic theory, monetary economics, industrial organization, and economic history.
TOTAL:	**7,977**	

CSS Operating Budget

An operating budget is necessary for the ongoing success of the program. An allocation for student recruitment will be particularly important to promote the B.S. because Computational Social Science is a relatively new transdisciplinary specialization without the name recognition of traditional disciplines.

We estimate the full budget in Y4 (AY2030-31) assuming full enrollment. Budgetary requirements for Years 1, 2 and 3 will be lower by using shared ASC resources, and faculty from existing departments who can teach core CSS classes.

- Salary & benefits (assuming full enrollment by Y4)
    - 1 Student Advisor (100% FTE or in-kind from ASC Advising)
    - 1 faculty director
- Operating Budget
    - Student recruitment ($10,000/year in Y1 and Y2, $5,000/yr. thereafter) for advertising on campus and nationally using online and traditional media.
    - Annual student welcome reception and commencement ceremony ($2,000).
    - Faculty affiliates event ($1,000/year) – Annual 1-day CSS curriculum coordination and development workshop for affiliated faculty and collaborating departments.

Section 6: Curricular Requirements

The major requires 35 credit hours with a required minor of 12-15 credit hours for a grand total of 47-50 credit hours for the Computational Social Science Bachelor of Science (with minor). See Figure 3. There is no stand-alone CSS minor available at this time.

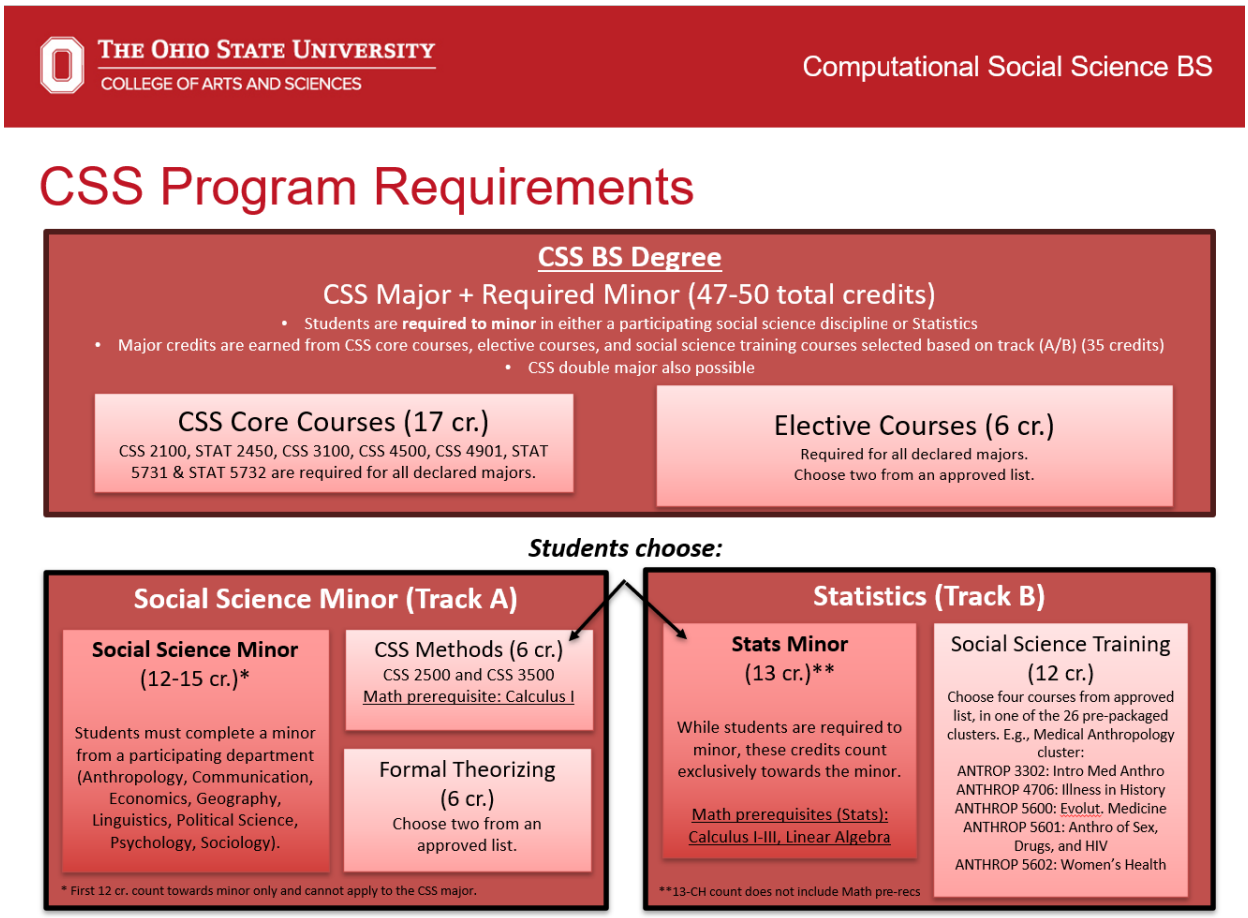


Figure 3:
Diagram of CSS Bachelor of Science Curricular Requirements

CSS Prerequisite Classes

While there are no prerequisite courses for the major, STAT 2450 requires MATH 1151 or equivalent and Focus B students have additional prerequisites to complete the Statistics minor. Students may take other courses in the major before taking MATH 1151.

CSS Major Core Classes

All students will take **17 credit hours of core CSS coursework** (CSS 2100: Core Concepts in CSS; STAT 2450: Intro to Statistical Analysis I; CSS 3100: Social Theory-Guided CSS; CSS 4500: Advanced Computational Social Science Toolbox; CSS 4901: CSS Capstone; STAT 5731 & STAT 5732: Introduction to R for Data Science I & II). These 17 credit hours will comprise the core classes that will ensure that all students receive training in foundational skills and theory in the transdisciplinary field of computational social science.

CSS Elective Classes

An **additional 6 credit hours are required from a list of approved electives**, choosing two courses from the following:

- COMM 2540: Introduction to Communication Technology

- INTSTDS 3702: Herding Cyber Cats- Information Security Management
- PHILOS 2332.01: Engineering Ethics for a Diverse and Just World
- SOCIOL 3302: Technology and Global Society

The above courses are designed to introduce students to social science and philosophical approaches to technology and society and/or engaging with complex multidisciplinary problems.

Transdisciplinary CSS education Focus

The CSS Major provides transdisciplinary training for students with different skills, backgrounds, and interests. In addition to the CSS Major Core Classes listed above, students will follow one of two foci through the program to fulfill major requirements, guided by student interests and in consultation with a CSS advisor. Students will be expected to meet all department level rules and regulations of the department governing their minor, including prerequisites, enrollment constraints and course scheduling priorities.

Focus A: Social Science Minor

Requires students to take an approved social science minor, a sequence of transdisciplinary CSS methods training, and two theory courses.

Social science minor options (12-15 credit hours)

Current participating departments for the minor include Anthropology, Economics, Geography, Political Science, Psychology, Sociology, Communication, and Linguistics. Additional minors may be approved in the future with the approval of the faculty advisory committee.

Per University policy, the first 12 credit hours of any minor must count exclusively towards the minor and any credit hours exceeding these 12 may overlap with the major. Students who pursue a minor option that requires over 12 credit hours are encouraged to consult with the CSS academic advisor to identify which, if any, courses might be overlapped with the CSS major.

Theory and Methods CSS sequence (6 credit hours)

Focus A students must take the following sequence of CSS methods classes. See below for fuller course descriptions.

1. CSS 2500: Methods and Theory in Computational Social Science I
2. CSS 3500: Methods and Theory in Computational Social Science II

Formal theorizing courses (6 credit hours)

Students must take 6 credit hours of coursework that covers formal theorizing. Formal theorizing courses teach students to make connections between abstract theoretical models (frameworks, heuristic models, etc.) and data. Examples include formal mathematical models, econometric approaches, social networks, game theory, and agent-based models, among others. Students should be able to explain how such models link data to theory, and how they are used to test, reject, validate and improve theory in the social sciences.

The following courses meet the criteria for formal theorizing and have been discussed with the relevant directors of undergraduate studies:

- ANTHROP 3623: Environmental Anthropology
- ANTHROP/EEOB/FABENG 5505: Wicked Science
- COMM 4665: Human Communication in Social Networks
- ECON 2202.01: Principles of Macroeconomics
- ECON 2001.01: Principles of Microeconomics
- ECON 4001.01: Intermediate Microeconomics
- GEOG 2200: Spatial Literacy: Visualizing our World through Mapping Space & Place
- GEOG 5210: Fundamentals of GIS
- POLITSC 4553: Game Theory for Political Scientists
- POLITSC 3500: Political Games: Rational Choice Theory and the Study of Politics
- SOCIOL 4650: Social Networks
- SOCIOL 5463: Advanced Social Stratification

Focus B: Statistics

Focus B students minor in Statistics and then take four courses in a designated cluster of social science training courses (see below and Section 8 for listing).

Statistics minor (13 credit hours)

The Statistics minor encompasses 13 credit hours. Prerequisites for the minor total a minimum of 17 additional credit hours, provided students do not have prior credit for any of the Math Calculus sequence.

Per University policy, the first 12 credit hours of any minor must count exclusively towards the minor and any credit hours exceeding these 12 may overlap with the major. However, credit hours cannot be split off courses to count as overlapping towards the major. As a result, the 13 credit hours of the Statistics minor may only be counted towards the minor.

Required courses (10 credit hours):

- STAT 3201: Introduction to Probability for Data Analytics (3 credit hours)
    - Prerequisites:
        - MATH 1151 – Calculus I (5 credit hours)
        - MATH 1152 - Calculus II (5 credit hours)
- STAT 3202: Introduction to Statistical Inference for Data Analytics (4 credit hours)
    - Prerequisite:
        - STAT 3201
- STAT 3301: Statistical Modeling for Discovery I (3 credit hours)
    - Prerequisites:
        - STAT 3202; or STAT 4202 and STAT 5730
    - Prerequisites or Corequisite:
        - MATH 2568 - Linear Algebra (3 credit hours)
            - MATH 2568 has an additional prerequisite of MATH 2153 – Calculus III (4 credit hours)

Elective courses (3 credit hours; choose 1):

- STAT 3302: Statistical Modeling for Discovery II (3 credit hours)

    - Prerequisites:
        - STAT 3301 and MATH 2568
- STAT 3303: Bayesian Analysis and Statistical Decision Making (3 credit hours)
    - Prerequisites:
        - STAT 3301 or
        - STAT 4202 and STAT 5731 and STAT 5732
- STAT 3410: Principles of Data Collection and Analysis (3 credit hours)
    - Prerequisites:
        - STAT 3200 or
        - STAT 4202 and STAT 5731 and STAT 5732
- STAT 5510: Statistical Foundations of Survey Research (3 credit hours)
    - Prerequisite:
        - GE Data Analysis course

Social Science Training Clusters (12 credit hours)

Students are required to select four courses for a minimum of 12 credit hours from a list of classes that have been curated by faculty affiliates in participating units to complement the core CSS course sequence. Each unit developed a list of courses around one or more subareas of their discipline (see Section 8 for full list). The cluster of classes is designed to provide intermediate and advanced coursework in a thematic area. Students will acquire some expertise in a subfield (e.g., spatial data analysis) and, if they choose, integrate that knowledge with CSS methods in their capstone seminar (CSS 4901).

For example, a student interested in political science with a focus on American politics and law would choose four courses from the following list:

- POLITSC 2150: Voters and Elections
- POLITSC 3115: Introduction to the Policy Process
- POLITSC 4110: American Presidency
- POLITSC 4115: Bureaucracy and Public Policy
- POLITSC 4120: U.S. Congress
- POLITSC 4130: Law and Politics
- POLITSC 4135: American Constitutional Law

Each of the cluster areas has a similar list, which has been reviewed by the relevant Director of Undergraduate Studies (see Section 8).

If a selected cluster cannot be completed in a reasonable timeframe due to fluctuations in individual departmental course offerings, students may work with their academic and faculty advisors to select alternative courses. Additionally, if a student has compelling interest in selecting approved courses outside a predetermined cluster, they may work with their academic and faculty advisors to select alternative courses.

Double Majoring in CSS

Students wishing to pursue a double major with one of the collaborating departments may do so in lieu of pursuing the required minor. Students pursuing a double major outside of the partnering departments will not be permitted to waive the minor requirement. Per University policy, 18 credit hours must be unique to each major. CSS double majors are required to count the following courses exclusively towards the CSS major:

- CSS 2100
- CSS 3100
- CSS 4901
- Focus A students:
    - CSS 2500
    - CSS 3500
    - One 3 credit hour formal theorizing course; **OR** one 3 credit hour elective course
- Focus B students:
    - Three 3 credit hour social science training courses; **OR** three 3 credit hour elective courses; **OR** a combination thereof

Research Distinction in CSS

Students pursuing an undergraduate research distinction may take 4 credit hours of 4999: Undergraduate Research in a participating CSS unit where the research distinction faculty advisor holds an appointment (for example, SOCIOL 4999 or STAT 4999). It is recommended that students build off the project they complete in CSS 4901: CSS Capstone as the base for their research distinction thesis.

CSS New Course Offerings

Six new courses will be developed. Computational social science courses will use the "CSS" course prefix. Complete syllabi are included for review in Section 9 of this proposal.

CSS 2100: Core Concepts in CSS – This course provides students with an introduction to the transdisciplinary field of computational social science using a textbook and readings, engaging case studies that draw on real-world examples, and hands-on laboratory exercises designed to provide a gentle entrée into the emergent field of computational social science research and practice.

CSS 2500: Methods and Theory in Computational Social Science I – The goal of this course is to introduce students to key formalisms and applied computational, mathematical, and statistical tools used in the field of computational social science, with particular emphasis on how they relate to "big questions" and theory in the social sciences. Students will be introduced to the scientific method, research design, structured and unstructured data, programming, statistics, and algorithms to gain insights about the world. Case studies draw on data from the social and behavioral sciences. Students will begin to learn how to translate social norms, practices, and theory into "data generation processes" using simple models and simulations. This is the first course in a 2-course core sequence in CSS methods. (Required for Focus A; optional for Focus B)

CSS 3100: Social Theory-Guided Computational Social Science – This intermediate-level course is designed to provide students theoretical and methodological training combining social science theory with data science methods and conducting research. It will provide students with the opportunity to

generate hypotheses based on theories from the social sciences and to then analyze and test them with computational tools, and translating and interpreting these results to broaden the impact of CSS methods in social theory development and social applications in policy and industry. Particular attention is paid to research design, identifying and addressing biases in data and algorithms, and application to the development of theory and practice in the computational social sciences.

CSS 3500: Methods and Theory in Computational Social Science II – The goal of this course is to develop students' ability to apply formalisms and applied computational, mathematical, and statistical tools to "big questions" and theory in the social sciences. This is the second course in a 2-course core Methods and Theory sequence which includes applications of limited responses, multi-level models, modeling and simulating social and behavioral data generation processes, intermediate visualization, and introductory causal inference. (Required for Focus A; optional for Focus B)

CSS 4500: Advanced Computational Social Science Toolbox – This course will teach students how to use advanced computation, simulation, and analytics with emphasis on applications to theory and data in the computational social sciences. A key learning outcome is to provide students with context and intuition with advanced methods to foster interdisciplinary collaboration with technical experts (e.g., in machine learning) and social theorists (e.g., in political science). Students will explore practical ways to create data mining and machine learning workflows suitable for social science data and for modeling and simulating more complex social theory and behavioral data generation processes. (Prerequisites: Stats 3301 or CSS 3500, Stats 5731, & Stats 5732 (5732 can be taken concurrently).)

CSS 4901: Computational Social Science Capstone – This course will teach students to apply advanced computational methods to a contemporary social problem while grounding their analysis in social science theory. Working independently and sometimes in teams, students will design a theory-guided computational workflow (e.g., network/diffusion modeling, spatial analysis, simulation/ABM, NLP, or ML for social data), build and document a reproducible pipeline, evaluate findings against theory, and deliver a journal-style article or think-tank style report. During the semester, students move from problem formulation and principles of collaborative science to applied analysis, drafting, revision, and final presentation. This course also includes training in professional development. (Prerequisites: CSS 4500)**.**

AI Fluency

Ohio State's AI Fluency initiative requires that undergraduates understand the application of AI to their field of study, and that six learning objectives be embedded in the student's journey in their major. CSS is well positioned to meet these objectives. For students with a minor in Statistics (Focus B), five of the six objectives are included in STATS 3301, as described in the Statistics Department AI Fluency Roadmap. CSS majors, regardless of focus, will also cover five of the six learning objectives in CSS required and elective courses. For instance, foundational concepts are covered in CSS 3100. Learning objectives related to "inputs/outputs" and "usage" are covered in CSS 4500; and the learning objective related to "implications" is covered in the elective courses: COMM 2540, INSTDS 3702, PHILOS 2332.01, and SOCIOL 3302.

Example student pathways

This section demonstrates examples of the courses and timing that a representative student might take through the curriculum to achieve a major in CSS.

Sample Student Pathway - Social Science Minor (Focus A)

CSS-BS Sample 4-Year Plan (Focus A)

CSS Major with Minor in Sociology

Note: major coursework can be completed in 3 years for students who add the major in year 2

Year One

AU			SP		
Course	**Hours**	**Rationale**	**Course**	**Hours**	**Rationale**
MATH 1151: Calc I	5	Pre-Req/GE Foundation*	STAT 2450: Intro to Statistical Analysis I	3	Core + Data Analysis Embedded Literacy
ASC 1100.XX: Survey	1	College Requirement	GENED 1201: GE Launch Seminar	1	GE Bookend
CSS 2100: Core concepts in CSS	3	Core	CSS 2500: Data Science for CSS I	3	Track A (CSS Skillset)
SOCIOL 1101: Introduction to Sociology	3	Pre-Req/GE Foundation*	World Language 1101	4	College Requirement
Writing & Information Literacy GE	3	GE Foundation	Natural Science GE	4	GE Foundation
Total CH per semester	**15**		**Total CH per semester**	**15**	

*Cannot demand students take this for GE Foundation, but this course may be used to fulfill this requirement

Year Two

AU			SP		
Course	**Hours**	**Rationale**	**Course**	**Hours**	**Rationale**
Phil 2332.01: Engineering Ethics for a Diverse and Just World	3	CSS Elective + GE Theme	STAT 5731	1	Core
CSS 3100: Social Theory Guided Data Science	3	Core	CSS 3500: Data Science for CSS II	3	Track A (CSS Skillset)
World Language 1102	4	College Requirement	World Language 1103	4	College Requirement
Race, Ethnicity & Gender Diversity GE	3	GE Foundation	SOCIOL 3488: Introduction to Sociological Theory	3	Track A (SBS Minor)
SOCIOL 3487: Research Methods in Sociology	3	Track A (SBS Minor)	Literary, Visual & Performing Arts GE	3	GE Foundation
Total CH per semester	**16**		**Total CH per semester**	**14**	

**STAT 5731 & 5732 are each 7-week session courses at 1-CH per course

Year Three

AU			SP		
Course	**Hours**	**Rationale**	**Course**	**Hours**	**Rationale**
GEOG 2200: Spatial Literacy	3	Track A (CSS formal theorizing)	ANTH 5505: Wicked Science	3	Track A (CSS formal theorizing)
SOCIOL 2309: Introduction to Law & Society	3	Track A (SBS Minor)	CSS 4500: Advanced CSS Toolbox	3	Core
STAT 5732	1	Core	Theme GE	3	GE Theme
SOCIOL 2202: Social Problems & Public Policy	3	Track A (SBS Minor)	Citizenship for a Diverse & Just World GE	3	GE Theme
Historical & Cultural Studies GE	3	GE Foundation	Elective	3	
SOCIOL 3302 Technology and Global Society	3	CSS Elective + Track A (SBS Minor) + Technology Embedded Literacy			
Total CH per semester	**16**		**Total CH per semester**	**15**	

Year Four

AU			SP		
Course	**Hours**	**Rationale**	**Course**	**Hours**	**Rationale**
CSS 4901: CSS Capstone	3	Core + Advanced Writing Embedded Literacy	Theme GE	3	GE Theme
Elective	3		GENED 4001: Reflection Seminar	1	GE Bookend
Elective	3		Elective	3	
Elective	3		Elective	3	
Elective	3		Elective	3	
			Elective	2	
Total CH per semester	**15**		**Total CH per semester**	**15**	

Figure 4:
CSS-BS Sample 4-year plan for Focus A students

Sample Student Pathway- Statistics Minor (Focus B)

CSS-BS Sample 4-Year Plan (Focus B)

CSS Major with Minor in Statistics & Cluster in Media & Society

Note: major coursework can be completed in 3 years for students who add the major in year 2

Year One

AU			SP		
Course	**Hours**	**Rationale**	**Course**	**Hours**	**Rationale**
MATH 1151: Calc I	5	Pre-Req/GE Foundation*	MATH 1152: Calc II	5	Track B/Stats Minor Pre-Req
ASC 1100.XX: Survey	1	College Requirement	GENED 1201: GE Launch Seminar	1	GE Bookend
CSS 2100: Core concepts in CSS	3	Core	STAT 2450: Intro to Statistical Analysis I	3	Core + Data Analysis Embedded Literacy
SBS GE	3	GE Foundation	World Language 1101	4	College Requirement
Writing & Information Literacy GE	3	GE Foundation	Race, Ethnicity & Gender Diversity GE	3	GE Foundation
Total CH per semester	**15**		**Total CH per semester**	**16**	

Year Two

AU			SP		
Course	**Hours**	**Rationale**	**Course**	**Hours**	**Rationale**
STAT 5731	1	Core	STAT 5732	1	Core
STAT 3201: Introduction to Probability for Data Analytics	3	Track B Stats Minor	Phil 2332.01: Engineering Ethics for a Diverse and Just World	3	CSS Elective + GE Theme
MATH 2153: Calc III	4	Track B/ Stats Minor Pre-Rec	MATH 2568: Linear Algebra	3	Track B Stats Minor Pre-Req
World Language 1102	4	College Requirement	World Language 1103	4	College Requirement
CSS 3100: Social Theory Guided Data Science	3	Core	STAT 3202	4	Track B Stats Minor
Total CH per semester	**15**		**Total CH per semester**	**15**	

*** STAT 5731 & 5732 are each 7-week session courses at 1-CH per course*

Year Three

AU			SP		
Course	**Hours**	**Rationale**	**Course**	**Hours**	**Rationale**
STAT 3301: Statistical Modeling for Discovery I	3	Track B Stats Minor	Other Statistics course (choose from 5 courses)	3	Track B Stats Minor
COMM 3440: Mass Communication & Society	3	Track B Social Science Cluster	CSS 4500: Advanced CSS Toolbox	3	Core
COMM 3404: Media Law & Ethics	3	Track B Social Science Cluster	COMM 4820: Public Opinion & Communication	3	Track B Social Science Cluster
COMM 4240: Science Communication	3	Track B Social Science Cluster	Citizenship for a Diverse & Just World GE	3	GE Theme
Historical & Cultural Studies GE	3	GE Foundation	Literary, Visual & Performing Arts GE	3	GE Foundation
Total CH per semester	**15**		**Total CH per semester**	**15**	

Year Four

AU			SP		
Course	**Hours**	**Rationale**	**Course**	**Hours**	**Rationale**
CSS 4901: CSS Capstone	3	Core & Advanced Writing Embedded Literacy	IntStds 3702: Herding Cyber Cats: Information Security Management	3	CSS Elective & Technology Embedded Literacy
Theme GE	3	GE Theme	Theme GE	3	GE Theme
Natural Science GE	4	GE Foundation	GENED 4001: Reflection Seminar	1	GE Bookend
Elective	3		Elective	3	
Elective	2		Elective	3	
			Elective	2	
Total CH per semester	**15**		**Total CH per semester**	**15**	

Additional Notes: all MATH courses are offered in SU terms as well
STAT 3201, 3202 are offered AU&SP only
STAT 3301 is AU only
STAT 3302 is SP only

Figure 5:
CSS-BS Sample 4-year plan for Focus B students

Section 7: Goals and Learning Outcomes

Table 3: Summary of Goals, Learning Outcomes, and Assessment

Goal	Outcome	Relevant course(s)	Assessment course(s)
Goal 1: Social Theory. Students will learn about theoretical camps in the social sciences. Students will apply social theory to interpret and explain patterns in social science data and to generate testable hypotheses that can be supported or falsified.			
a)	**Critical theorizing**. Describe and critique social science theory as presented in published studies and/or lectures.	CSS 2500, CSS 3500	CSS 3500
b)	**Theory development**. Adapt existing social theories or frameworks to address new cases, contexts, or ideas while maintaining their overall coherence and logic.	Minor or Social Science Training Courses	Minor program
c)	**Theory building**. Explain how algorithmic or mathematical models complement, extend, or enhance existing or new theoretical social-science theories, frameworks, or approaches.	Electives (Social theory, Advanced methods), CSS 3100, CSS 4901	CSS 3100 CSS 4901
d)	**Theory modeling**. Create or apply computational approaches to represent and test theoretical relationships.	CSS 4500 and Advanced Methods Electives	CSS 4500
		Relevant course(s)	**Assessment course(s)**
Goal 2: Computational Modeling and Analysis: Students will learn about the data generation process and acquire skills for developing mathematical and algorithmic expressions of social theory. Students will learn how to analyze data using computational methods.			
a)	**Computational platforms.** Conduct statistical and computational analyses by using current tools and technologies for data generation, collection, and processing.	CSS 2500, CSS 3100, CSS 3500	CSS 3500
b)	**Software proficiency.** Demonstrate proficiency in relevant statistical and computational environments.	CSS 3500, CSS 4500, Advanced methods electives	CSS 3500 CSS 4500

c)	**Comprehension of computational approaches.** Understand and be able to reproduce computational models and analyses described in published work.	CSS 3500, CSS 4500 and Advanced Methods Electives	CSS 3500 CSS 4500
d)	**Model testing**. Use comparative model testing strategies and theory-guided data science techniques to compare the explanatory power of models when applied to data.	CSS 2500 CSS 3500 CSS 4901	CSS 2500 CSS 3500
e)	**Communicating computational methods**. Best practices for coding, describing analyses, and disseminating work to enables replication and evaluation.	CSS 4901 CSS 4500	CSS 4901
		Relevant course(s)	**Assessment course(s)**
Goal 3: Research Design: Students will learn to develop analytic strategies for answering social science questions using computational methods. This entails knowledge of data collection, cleaning, testing, and inference.			
a)	**Distinguishing methodologies.** Explain the pros and cons of various computational approaches when addressing specific research questions in the social sciences.	CSS 4500, CSS 4901 (capstone)	CSS 4500 CSS 4901
b)	**Experimental modeling**. Create experiments that generate data suitable for computational analyses that inform research questions in the social sciences.	CSS 2100, CSS 2500, CSS 3100, CSS 4901, Minor or Social Science Training Courses	CSS 3100 CSS 4901
c)	**Questions from data**. Use exploratory qualitative and inferential methods to generate research questions and hypotheses.	CSS 3100, CSS 4500	CSS 4500
d)	**Interpreting findings**. Explain the significance of findings discovered through computational methods, including proper inferences and limitations of the data.	CSS 2500, CSS 3500	CSS 3500
e)	**Research ethics**. Design computational social science research projects and methodologies that are compatible with ethical standards of research.	CSS 2100, CSS 3100	CSS 3100

		Relevant course(s)	Assessment course(s)
Goal 4: Interdisciplinary Collaboration: Student will work effectively as part of a team and understand disciplinary and transdisciplinary approaches to social science research.			
a)	**Data visualization.** Communicate social science data and results of statistical analyses by presenting them in accessible forms to a variety of audiences.	CSS 3500, CSS 4500, Advanced methods electives	CSS 3500 CSS 4500
b)	**Technical communication.** Communicate scientific findings to professional and public stakeholders, including academics, policymakers, and public audiences.	CSS 3100, CSS 4901, CSS 3100	CSS 4901
c)	**Professional engagement.** Gain familiarity with the CSS job market and best practices for networking and displaying professionalism.	CSS 4901	CSS 4901
d)	**Collaborative research design.** Co-create computational models by collaborating with teams with diverse disciplinary interests.	CSS 4901	CSS 4901
e)	**Translational ethics.** Demonstrate knowledge of ethics and shared values as related to CSS, particularly when working in industry or with industry partners.	CSS 2100, Minor or Social Science Training Courses, CSS 3100, CSS 4901	CSS 2100 CSS 4901

Section 8: List of Social Science Training Clusters for Focus B Students

Sociocultural anthropology

- ANTHROP 2202(H): Introduction to Cultural Anthropology
- ANTHROP 3027: Disasters and Health
- ANTHROP 4525: History of Anthropological Theory
- ANTHROP 5626: More: Culture and Economic Life
- ANTHROP 5627: Migrants and Refugees
- ANTHROP 5650: Research Design and Ethnographic Methods

Medical anthropology

- ANTROP 3302: Introduction to Medical Anthropology
- ANTHROP/HISTORY 4706: Chronic Illness, Injury, and Disability in Modern History
- ANTHROP 5600: Evolutionary Medicine
- ANTHROP 5601: The Anthropology of Sex, Drugs, and HIV
- ANTHROP 5602: Women's Health in Global Perspective

Socio-ecological systems

- ANTHROP 3050: Social and Ecological Systems: From Problems to Prospects
- ANTHROP 3411: Human Ecological Adaptations
- ANTHROP 3604: Introduction to the Methods of Archaeological Science
- ANTHROP 3623: Environmental Anthropology
- ANTHROP/EEOB/FABENG 5505: Wicked Science
- ANTHROP 5610: Ethnobotany
- ANTHROP 5620: Hunters and Gatherers

Archaeology

- ANTHROP 2201(H): Introduction to Archaeology
- ANTHROP 3401: Fundamentals of Archaeology
- ANTHROP 4597.03H: Models of Sustainability and Resilience: Lessons from the Past
- ANTHROP 5603: Strategy of Archaeological Field Research
- ANTHROP 5604: Archaeology Lab Methods
- ANTHROP 5651: Spatial Analysis for Anthropologists

Biological and forensic anthropology

- ANTHROP 2200(H): Introduction to Biological Anthropology
- ANTHROP 2210: Race, Ethnicity, Gender Diversity, and Human Biology
- ANTHROP 3300: Human Origins
- ANTHROP 3301: Human Biological Diversity and Health
- ANTHROP 3305: Introduction to Forensic Anthropology
- ANTHROP 5642: Growth and Development
- ANTHROP 5641: Primate Behavior
- ANTHROP 5645: Life History Evolution, Aging, and Senescence

General Psychology

Note: select only one course from each bullet, up to 12 credit hours total

- PSYCH 3313: Behavioral Neuroscience ***or*** PSYCH 3513: Cognitive Neuroscience
- PSYCH 3310: Sensation & Perception ***or*** PSYCH 3312: Learning & Memory
- PSYCH 3331: Abnormal Psychology ***or*** PSYCH 3335: Psychology of Adjustment
- PSYCH 3340: Lifespan Development ***or*** PSYCH 3550: Psychology of Childhood ***or*** 3551: Psychology of Adolescence
- PSYCH 3325: Social Psychology ***or*** PSYCH 3375: Stereotyping & Prejudice

Clinical Psychology

- PSYCH 2303: Positive Psychology
- PSYCH 2333: Human Sexuality
- PSYCH 2376: Interpersonal Relationships
- PSYCH 3331: Abnormal Psychology
- PSYCH 3530: Psychology of Personality
- PSYCH 3335: Psychology of Adjustment

Developmental Psychology

- PSYCH 2303: Positive Psychology
- PSYCH 2333: Human Sexuality
- PSYCH 3335: Psychology of Adjustment
- PSYCH 3340: Lifespan Development
- PSYCH 3530: Psychology of Personality
- PSYCH 3550: Psychology of Childhood
- PSYCH 3551: Psychology of Adolescence

Organization & Performance Psychology

- PSYCH 2311: Psychology of Motivation
- PSYCH 2420: Psychology Applied to Sport
- PSYCH 2462: Psychology of Creativity
- PSYCH 3325: Introduction to Social Psychology
- PSYCH 3522: Organizational Psychology

Social & Personality Psychology

- PSYCH 2376: Interpersonal Relationships
- PSYCH 3325: Introduction to Social Psychology
- PSYCH 3375: Stereotyping & Prejudice
- PSYCH 3530: Psychology of Personality
- PSYCH 3900: A Practical Guide to Ruling the World

Note on Economics clusters: ECON 2001.01 is a pre-requisite for all 4000-level ECON courses. It may be waived by instructors for CSS students.

Empirical methods in economics

- ECON 2001.01: Principles of Microeconomics
- ECON 2002.01: Principles of Macroeconomics
- ECON 4001.02: Intermediate Microeconomics

- ECON 4410: Data Management and Econometric Analysis
- ECON 5410: Econometrics I
- ECON 5420: Econometrics II
- ECON 4002.02: Intermediate Macroeconomic Theory

Applied microeconomics

Required courses in this cluster:

- ECON 2001.01: Principles of Microeconomics
- ECON 4001.02 Intermediate Microeconomic Theory

Choose two from:

- ECON 5700 Industrial Organization
- ECON 5860 Health Economics
- ECON 5850 Labor Economics
- ECON 5001 Game Theory

Macroeconomics

- ECON 4001.02 Intermediate Microeconomic Theory
- ECON 4002.02 Intermediate Macroeconomic Theory
- ECON 4200 Money and Banking
- ECON 5660 Financial Aspects of International Trade

Criminology and criminal law

- SOCIOL 2209: Introduction to Criminal Justice
- SOCIOL 2309: Introduction to Law & Society
- SOCIOL 3410: Criminology
- SOCIOL 4462: Advanced Social Stratification
- SOCIOL 4507: The Criminal Justice System
- SOCIOL 4509: Sociology of Law
- SOCIOL 4511: Juvenile Delinquency
- SOCIOL 4611: Jails, Prisons, and Community Corrections
- SOCIOL 5525: Global Criminology

Social Inequality

- SOCIOL 2320: Sociology of Education
- SOCIOL 2367.01H: The Political Elite and Interest Groups
- SOCIOL 2367.02: Urban Social Problems
- SOCIOL 3200: Sociology of Immigration
- SOCIOL 3306: Sociology of Poverty
- SOCIOL 3380: Race and Ethnic Relations in America
- SOCIOL 3464: Work, Employment & Society
- SOCIOL 4462: Advanced Social Stratification
- SOCIOL 4635: Gender and Society
- SOCIOL 4655: Sociology of Sport
- SOCIOL 5605: Sociology of Sexuality

Population dynamics and wellness

- SOCIOL 2202: Social Problems
- SOCIOL 2290: Sociology of Death & Dying
- SOCIOL 3200: Sociology of Immigration
- SOCIOL 3630: Medical Sociology
- SOCIOL 4462: Advanced Social Stratification
- SOCIOL 4629: Health Disparities in Social Context
- SOCIOL 5450: The Sociology of Global Health & Illness

American Democracy and Law

- POLITSC 2150: Voters and Elections
- POLITSC 3115: Introduction to the Policy Process
- POLITSC 4110: American Presidency
- POLITSC 4115: Bureaucracy and Public Policy
- POLITSC 4120: U.S. Congress
- POLITSC 4130: Law and Politics
- POLITSC 4135: American Constitutional Law

International Conflict and Cooperation

- POLITSC 2300: American Foreign Policy
- POLITSC 3240: Political Violence
- POLITSC 4300: Theories of International Relations
- POLITSC 4310: Security Policy
- POLITSC 4315: International Security and the Causes of War
- POLITSC 4320: Strategies for War and Peace
- POLITSC 4330: Global Governance
- POLITSC 4318: United Nations System

Political Economy and Development

- POLITSC 3220: Politics of the Developing World
- POLITSC 3280: Politics of Markets
- POLITSC 3460: Global Justice
- POLITSC/AFAMAST 4250(H): African Politics
- POLITSC 4282: Politics of Income Inequality
- POLITSC 4332: Politics of Globalization
- POLITSC 4940: Politics of Immigration

Computational Spatial Data Analytics in Geography

- GEOG 2200: Spatial Literacy: Visualizing our World through Mapping Space & Place
- GEOG 4103: Introductory Spatial Data Analysis (Prerec: MATH 1116; 1151 accepted for CSS students)
- GEOG 5103: Intermediate Spatial Data Analysis (Prerec: GEOG 4103)
- GEOG 5200: Cartography and Map Design
- GEOG 5201: GeoVisualization (Prerec: GEOG 5200)
- GEOG 5210: Fundamentals of Geographic Information Systems
- GEOG 5212: Geospatial Databases for GIS (Prerec: GEOG 5210)

Human Connections

- GEOG 2100: Human Geography
- GEOG 2400.01 ***or*** GEOG 2400.02: Economic and Social Geography
- GEOG 2500: Cities and their Global Spaces
- GEOG 3597.01: World Urbanization
- GEOG 3600: Space, Power and Political Geography
- GEOG 3701: The Making of the Modern World
- GEOG 3801: Political Ecology

Earth, Environment, and Sustainability

- GEOG 2800: Our global environment
- GEOG/ENGLISH 3597.03: Environmental Citizenship
- GEOG 3800: Geographical Perspectives on Environment and Society
- GEOG 3900: Global Climate Change: Causes and Consequences
- ENR 2000: Natural Resources Data Analysis
- ENR 2100: Introduction to Environmental Sciences
- ENR/AEDECON 2501: Introduction to Sustainability
- ENR 3400: Psychology of Environmental Problems

Communication Technology

- COMM 2540: Introduction to Communication Technology
- COMM 2511: Visual Communication Design
- COMM 3165: Evaluation and Usability Testing
- COMM 3545: Human Computer Interaction & User Experience
- COMM 3554: Social Implications of Communication Technology
- COMM 3558: Social Media
- COMM 4511: User-Centered Communication Design
- COMM 4555: Computer Interface and Human Identity
- COMM 4556: Information Tech and Organizational
- COMM 4557: Communication Network Infrastructure
- COMM 4738: Health Communication and New Media

Health, Environment, Risk, and Science Communication

- COMM 2596: An Introduction to Health, Environment, Risk, & Science Communication
- COMM 3340: Principles of Environmental Campaigns
- COMM 4240: Science Communication
- COMM 3332: Risk Communication
- COMM 3333: Crisis Communication
- COMM 4736: Health Communication in Interpersonal Contexts
- COMM 4737: Health Communication in Mass Mediated Contexts
- COMM 4738: Health Communication and New Media

Media and Society

- COMM 3440: Mass Communication and Society
- COMM 3402: Crime and the News Media
- COMM 3404(H): Media Law & Ethics

- COMM 3413: Media Entertainment
- COMM 3414: Sports Media Relations
- COMM 3466: Communication and Popular Culture
- COMM 4240: Science Communication
- COMM 4401: Mass Communication and Youth
- COMM 4814: Political Communication
- COMM 4820: Public Opinion and Communication

Organizational Communication

- COMM 3325: Introduction to Organizational Communication
- COMM 3330: Communication and Conflict Management
- COMM 3331: Communication and Decision Making
- COMM 3628: Contemporary Persuasion Theory
- COMM 3668: Intercultural Communication
- COMM 4556: Information Technology and Organizational Communication
- COMM 4557: Communication Network Infrastructure
- COMM 4635: Communication Dynamics in Groups
- COMM 4665: Human Communication in Social Networks

Media Production and Analysis

- COMM 2223: Lantern Practicum
- COMM 2321: Writing for Strategic Communication
- COMM 3403: Sports Journalism
- COMM 3405: Introduction to Lantern TV
- COMM 3413: Media Entertainment
- COMM 3414: Sports Media Relations
- COMM 3554: Social Implications of Communication Technology

Psycholinguistics

- LING 2000(H): Introduction to Linguistics
- LING/PSYCH 3701(H): Language and the Mind
- LING 5701: Psycholinguistics I
- LING 5702: Cognitive Models of Language
- LING/PSYCH 5612/PHILOS 5830/CSE 5531: Introduction to Cognitive Science

Sociolinguistics

- LING 2000(H): Introduction to Linguistics
- LING 3601: Language, Race, and Ethnicity in the U.S.
- LING 3605: Language and Social Justice
- LING 3606: Language, Gender, and Sexuality
- LING 4602: Language and Belonging in the U.S. (4 credit)
- LING 5601: Introduction to Sociolinguistics
- LING 5602: Quantitative Sociolinguistics

Section 9: Appendices

This section contains appendices for this proposal:

1. Letters of support
2. Letter of programmatic concurrence
3. CSS Advising Sheet for Focus A
4. CSS Advising Sheet for Focus B
5. CSS Sample Plan for Focus A
6. CSS Sample Plan for Focus B
7. Diagram of CSS Program Requirements
8. Curriculum map

THE OHIO STATE UNIVERSITY

College of Arts and Sciences

186 University Hall
230 North Oval Mall
Columbus, Ohio 43210

8 May 2024

RE: Proposal for new Computational Social Science degree

Dear Colleagues and Curricular Committee Members,

On behalf of the College of Arts and Sciences, I am pleased to present a proposal for an undergraduate major in Computational Social Science. The major, leading to a Bachelor of Science, will provide students with a transdisciplinary curriculum that encourages theory-driven problem-solving, creative thinking, and team science. The program leverages existing courses and curricular structures already present at OSU and prepares students for jobs that require a combination of theoretical and domain knowledge in the social sciences, quantitative research and analytics, and up-to-date computational skills.

The demand for professionals with transdisciplinary training in computational social science has never been greater. Industry, Government, the non-profit sector, and the Academy alike all demand computationally literate professionals. Undergraduate majors in Computational Social Science are rare nationally, and we believe it is an area of growth for the College and for the University. We hope you agree that the program we constructed will expand the career prospects of our undergraduates, strengthen the overall quality of the College of Arts and Sciences, and enhance the reputation of OSU. Thank you for your consideration.

Sincerely,



Sean S. Downey, ASC-CSS Committee Chair

Members of the ASC-CSS Committee (SU 2023 – SP 2024)
Sean S. Downey (Associate Professor, Department of Anthropology)
Rob Bond (Associate Professor, School of Communication)
David Melamed (Professor, Department of Sociology)
Tom Metzger (Assistant Professor of Teaching Practice, Department of Statistics)
Jackson Stotlar (Business Operations Consultant, College of Arts and Sciences)

THE OHIO STATE UNIVERSITY

Office of Undergraduate Education

385 Student Academic Services Building
281 W. Lane Avenue
Columbus, OH 43210

614-292-2872 Phone
614-292-5587 Fax

sae.osu.edu

May 5, 2024

Dr. Sean S. Downey
Department of Anthropology
The Ohio State University
4034 Smith Laboratory
174 W. 18th Avenue
Columbus OH, 43210-1106

Dear Dr. Downey,

The Office of Undergraduate Education is pleased to support the proposed Computational Social Science B.S. in the College of Arts and Sciences at Ohio State. Currently, student demand for majors that focus on computational thinking significantly exceeds the capacity of our existing degree programs. This imbalance between demand and supply is a contributing factor in increasing time to degree as well as student debt for some undergraduates. Nationwide trends suggest that student demand for degrees in computational thinking will continue to increase. Given these factors, the Office of Undergraduate Education strongly supports the expansion of degree pathways in computational thinking at Ohio State.

Sincerely,

Norman W. Jones
Vice Provost and Dean for Undergraduate Education

THE OHIO STATE UNIVERSITY

College of Arts and Sciences
Department of Political Science

2140 Derby Hall
154 North Oval Mall
Columbus, OH 43210

614-292-1146 Phone
Caldeira.1@osu.edu

April 29th, 2024

Sean S. Downey
Department of Anthropology
The Ohio State University
4034 Smith Laboratory
174 W. 18th Avenue
Columbus OH, 43210-1106

Dear Professor Downey:

My colleagues and I in the Department of Political Science whole heartedly support your proposal for a B.S. in Computational Social Science in the College of Arts and Sciences. This new major will make Ohio State one of the national leaders in integrating the methods, models, and analytics of computational science to the social sciences (with University of North Carolina, University of California Davis, and the University of Illinois). We are committed to providing classes in this curriculum and we see the holder of the Timashev Chair, for which we are currently recruiting, as a mainstay in the new major. I am very happy to report that nearly a third of my colleagues have expressed interest in the Computational Science B.S.

Sincerely yours,

Gregory Caldeira

GREGORY A. CALDEIRA
Chair
Distinguished University Professor,
Dreher Chair in Political Communication and Policy Thinking,
Professor of Law

THE OHIO STATE UNIVERSITY

Department of Geography
College of Arts and Sciences

1036 Derby Hall
154 North Oval Mall
Columbus, Ohio 43210
www.geography.osu.edu

Dr. Sean S. Downey
Department of Anthropology
The Ohio State University
4034 Smith Laboratory
174 W. 18th Avenue
Columbus OH, 43210-1106

April 11, 2024

Dear Dr. Downey,

The Department of Geography is very pleased to support the proposed Computational Social Science B.S. in the College of Arts and Sciences at Ohio State. From our perspective, this proposed degree promises a transformative shift in how students study and understand social phenomena, integrating computational methods, models, and data analytics with established social science practices. We expect students in this degree to have an enhanced understanding of complex social systems, the methodological 'chops' to process and analyze large-scale social science-relevant data, as well as cutting edge predictive skills with respect to social trends and human behavior.

We are happy to be involved in terms of contributing classes and, if needed, instructional support.

Sincerely,



Mat Coleman

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

THE OHIO STATE UNIVERSITY

College of Arts and Sciences

Department of Anthropology
4034 Smith Laboratory
174 West 18th Ave.
Columbus, OH 43210-1106

614-292-4149 Phone
614-292-4155 Fax

anthropology.osu.edu

April 12, 2024

Members of the Curriculum Committee:

The Department of Anthropology's Undergraduate Studies Committee is pleased to provide concurrence for Professor Sean Downey's proposal for a new B.S. in Computational Social Science. We are enthusiastic about the proposal and look forward to our Department's participation in this new interdisciplinary major.

Sincerely,

Debbie Guatelli-Steinberg, Ph.D.
Professor and Chair of the Undergraduate Studies Committee

W. Scott McGraw, Ph.D.
Professor and Chair, Department of Anthropology

THE OHIO STATE UNIVERSITY

Duane T. Wegener, Ph.D.

College of Arts and Sciences Distinguished Professor of Psychology
Chair, Department of Psychology
225A Psychology Building
1835 Neil Avenue
Columbus, OH 43210

Phone: 614- 292-3038
E-mail: wegener.1@osu.edu

May 1, 2024

To whom it may concern,

On behalf of the Department of Psychology at Ohio State University I am writing to support the proposed Computational Social Science (CSS) major.

In the department, we look forward to contributing to the major in various ways. We have faculty who could potentially offer core courses in such a major. We also have a number of psychology courses that include computational aspects, such that they would be of interest to potential students who might want to focus on the computational aspects of psychology. This could either take the form of CSS electives or as a minor in Psychology as part of Track A in the proposed CSS major.

We eagerly anticipate the launch of the CSS major. We are confident that this cross-campus collaboration would benefit students and facilitate their career development.

I hope you will view the proposal favorably. If you have any questions or I could provide any additional information, please feel free to email me at wegener.1@osu.edu.

Sincerely,

Duane T. Wegener, Ph.D.
College of Arts and Sciences Distinguished Professor of Psychology
Chair, Department of Psychology
Ohio State University

Department of Sociology

College of Social and Behavioral Sciences
238 Townshend Hall
1885 Neil Ave. Mall
Columbus, OH 43210

Phone (614) 292-6681
Fax (614) 292-6687
http://sociology.osu.edu

April 12, 2024

Curriculum committee,

The department of sociology offers concurrence for the proposed Computational Science Degree.

The program is well-positioned to leverage new and exciting data as a way of understanding human behavior.

Sincerely,

Douglas B. Downey
Professor of Sociology

THE OHIO STATE UNIVERSITY

School of Communication

Derby Hall
154 North Oval Mall
Columbus, OH 43210
614-292-3400 Phone
www.comm.ohio-state.edu

Dr. Sean S. Downey
Department of Anthropology
The Ohio State University
4034 Smith Laboratory
174 W. 18th Avenue
Columbus OH, 43210-1106

May 1, 2024

Dear Dr. Downey,

The School of Communication enthusiastically endorses the proposed Computational Social Science B.S. program within the College of Arts and Sciences at Ohio State University. The program aims to equip students with the capacity to seamlessly integrate computational methods, models, and data analytics into established social science theory and practices. Graduates of this program will have a distinctive skill set and valuable perspectives that can enhance both their future academic pursuits and their professional careers.

We are happy to have our some of courses included in the social science sequences and to have our communication technology and media and society minors listed as options within the program.

Sincerely,



R. Kelly Garrett
Professor and Director
School of Communication

THE OHIO STATE UNIVERSITY

College of Arts and Sciences

Department of Linguistics

100 Oxley Hall
1712 Neil Avenue
Columbus, OH 43210

614-292-4052 Phone
614-292-8833 Fax

linguistics.osu.edu

April 26, 2024

Prof. Sean S. Downey
Department of Anthropology
The Ohio State University
4034 Smith Laboratory
174 W. 18th Avenue
CAMPUS

Dear Prof. Downey,

The Linguistics Undergraduate Curriculum Committee has reviewed the concurrence request for the proposed major in Computational Social Science. Linguistics is happy to support this CSS major. In our assessement, this new major will provide valuable and forward-looking training that is not currently available at OSU. The new major will also complement the strengths of the Linguistics program. Linguistics expects to be a collaborating department in the CSS major in the ways outlined in the proposal.

We wish the CSS program much success with this new major.

Sincerely,



William Schuler
Professor and Interim Chair
Department of Linguistics
The Ohio State University
schuler@ling.osu.edu

THE OHIO STATE UNIVERSITY

College of Arts and Sciences

Department of Economics

410 Arps Hall
1945 North High Street
Columbus, OH 43210-1172

614-292-6701 Phone
614-292-3906 Fax

Economics.osu.edu

April 24, 2024

Dr. Sean S. Downey
Department of Anthropology
The Ohio State University
4034 Smith Laboratory
174 W. 18th Avenue
Columbus OH, 43210-1106

Dear Dr. Downey,

The Department of Economics is very pleased to support the proposed Computational Social Science B.S. in the College of Arts and Sciences at Ohio State. From our perspective, this proposed degree promises a transformative shift in how students study and understand social phenomena, integrating computational methods, models, and data analytics with established social science practices. We expect students in this degree to have an enhanced understanding of complex social systems, the tools to process and analyze large-scale social science-relevant data, as well as cutting edge predictive skills with respect to social trends and human behavior. We are happy to be involved in terms of contributing classes.

Sincerely,



Huanxing Yang
Professor and Chair
Department of Economics

THE OHIO STATE UNIVERSITY

College of Arts and Sciences

Department of Statistics

404B Cockins Hall
1958 Neil Ave.
Columbus, OH 43201

614-247-2585 Phone

kaizar.1@osu.edu
stat.osu.edu

April 11, 2025

Computational Social Sciences (CSS) major committee:

On behalf of the Department of Statistics, we thank the Computational Social Sciences (CSS) major committee for sharing their thoughtful and detailed proposal for the new major. We found the major proposal overall to be an interesting idea and structure, and see value and potential in the proposed CSS major. We are glad to see that the major includes a foundational course in Statistics. The Department of Statistics has a strong track-record of curricular collaboration both by providing specialized coursework (as in our collaborations with undergraduate majors related to the biological sciences, engineering, and business) and by partnering in other programs (as in our work with the data analytics undergraduate major, the Masters of Translational Data Analytics [MTDA] and Certificate in Practice of Data Analytics [CPDA]).

As your CSS proposal suggests, and as discussed previously with Divisional Dean Ryan King, the Department of Statistics will participate in the program as a Collaborating Unit. We also appreciate that interested Statistics faculty can participate in the program as co-directors, affiliated faculty, and CSS course instructors. The Department welcomes the opportunity to partner with other collaborating units in faculty searches that could potentially include joint appointments.

We find that the learning objectives and schedule of topics for the newly proposed courses CSS 2500, CSS 3100, CSS 3500 and CSS 4500 include substantial core statistical content that align with the expertise of our faculty. As such, the Department of Statistics reserves the right to develop courses that focus on these topics but have a target audience that is different from or broader than computational social sciences.

With this condition of potential similar course development, the Department of Statistics is pleased to grant concurrence for the CSS BS proposal. We again would like to emphasize that we see value and potential in the proposed CSS major. We appreciate the opportunity to engage with students across

disciplines, and hope that we can also enrich the proposed CSS program and help to guarantee its long-term success.

Sincerely,



Eloise E. Kaizar
Professor and Chair
Department of Statistics

The following is the email correspondence requested on April 11, 2024, to Computer Science & Engineering for concurrence on the CSS program. Computer Science & Engineering did not respond to the request for concurrence, therefore concurrence was assumed.

Tuesday, April 29, 2025 at 8:37:42 AM Eastern Daylight Time

Subject: Computational Social Science major proposal (concurrence review)
Date: Thursday, April 11, 2024 at 12:51:25 PM Eastern Daylight Time
From: Downey, Sean
To: Arora, Anish
Attachments: image001.png, ASC-ComputationalSocialScienceBS-proprosal.10Apr2024-CIRCULATE.pdf

Dear Anish,

I am writing to share with you our proposal for a new major in Computational Social Science and to ask for concurrence review and a letter of support from the Department of Computer Science and Engineering. I realize that we did not get a chance to discuss CSS this semester, but I am confident that this new curriculum aligns well with the CS curriculum based on my previous work with Eric during the reverse course-design process. Given his earlier input and your note regarding CSS during your SOC town hall in January, we incorporated the CS minor as an option for CSS students. I am happy to pick up this thread whenever it is convenient. We have a longstanding goal of submitting to the ASC curriculum committee in early May, so in the interim, I would be grateful if you could provide us with a brief letter of support by Friday, 26 April. I realize that it is a very busy moment at the end of the semester, so please keep me apprised if you need more time and we can plan accordingly.

Please feel free to reach out if you have any questions.

Sincerely,

Sean Downey
ASC-CSS Program Chair

THE OHIO STATE UNIVERSITY

Sean S. Downey | He/Him/His/Dr.
Associate Professor, Department of Anthropology
Core Faculty, Sustainability Institute
Leadership Team, Translational Data Analytics
Review Editor, Human Ecology (Springer)
The Ohio State University
4034 Smith Laboratory
174 W. 18th Avenue
Columbus OH, 43210-1106

Recent paper: **An intermediate level of disturbance with customary agricultural practices increases species diversity in Maya community forests in Belize** in *Communications Earth and Environment*.

Website: https://u.osu.edu/
HEALMOD: http://healmod.osu.edu
Office: 614-688-3904
Mobile: 240-392-0220
Zoom: http://go.osu.edu/zoom-downey

Computational Social Science Major Advising Sheet: Focus A

35 credit hours for major + 12-15 for required minor

Student Information

Name: _____ Name.#: _____ OSU ID:_____

Prerequisite – *1 course, 5 credit hours* **Notes: not counted towards major hours. This is the prerequisite for STAT 2450. Other CSS major courses may be taken before MATH 1151.**

Course	Term	Credit Hours	Notes
MATH 1151: Calculus I		5	

Core Courses – *7 courses, 17 credit hours*

Course	Term	Credit Hours	Notes
CSS 2100: Core Concepts in CSS		3	
STAT 2450: Intro to Statistical Analysis I		3	Fulfills Data Analysis Embedded Literacy
CSS 3100: Social Theory-Guided CSS		3	
CSS 4500: Advanced Computational Social Science Toolbox		3	
CSS 4901: CSS Capstone		3	Fulfills Advanced Writing Embedded Literacy
STAT 5731: Introduction to R for Data Science I		1	
STAT 5732: Introduction to R for Data Science II		1	

Electives – *2 courses, 6 credit hours*

Course	Term	Credit Hours	Notes

Choose 2 From Approved List (any of these fulfill Technology Embedded Literacy)**:**

- COMM 2540: Introduction to Communication Technology
- INTSTDS 3702: Herding Cyber Cats - Information Security Management
- PHILOS 2332.01: Engineering Ethics for a Diverse and Just World
- SOCIOL 3302: Technology and Global Society

CSS Methods – *2 courses, 6 credit hours*

Course	Term	Credit Hours	Notes
CSS 2550: Methods and Theory in Computational Social Science I		3	
CSS 3500: Methods and Theory in Computational Social Science II		3	

Formalizing Theory – *2 courses, 6 credit hours*

Course	Term	Credit Hours	Notes

Choose 2 From Approved List:

- ANTHROP 3623: Environmental Anthropology
- ANTHROP/EEOB/FABENG 5505: Wicked Science
- COMM 4665: Human Communication in Social Networks
- ECON 2202.01: Principles of Macroeconomics
- ECON 2001.01: Principles of Microeconomics
- ECON 4001.01: Intermediate Microeconomics
- GEOG 2200: Spatial Literacy: Visualizing our World through Mapping Space & Place
- GEOG 5210: Fundamentals of GIS
- POLITSC 4553: Game Theory for Political Scientists
- POLITSC 3500: Political Games - Rational Choice Theory and the Study of Politics
- SOCIOL 4650: Social Networks
- SOCIOL 5463: Advanced Social Stratification

Required Social Science Minor – *4-6 courses, 12-15 credit hours* **Note: first 12 credit hours cannot be counted towards major hours. If selecting a minor requiring 15 credit hours, work with academic advisor for potential use of 3 credit overlap with major**

Course	Term	Credit Hours	Notes

Students must complete a minor from a participating department. Choose from the Approved Social Science Minor List:

- Anthropology
- Economics
- Geography
- Political Science
- Psychology
- Sociology
- Communication
- Linguistics

Computational Social Science Major Advising Sheet: Focus B

35 credit hours for major + 13 for required minor

Student Information

Name: _____ Name.#: _____ OSU ID:_____

Prerequisites – *4 courses, 17 credit hours* ***Notes: not counted towards major hours. These are the Math prerequisites for STAT courses required for the CSS major and Statistics minor. Other CSS courses may be taken before the following prerequisites.***

Course	Term	Credit Hours	Notes
MATH 1151: Calculus I		5	*Pre-rec for STAT 2450 & 3201*
MATH 1152: Calculus II		5	*Pre-rec for STAT 3201*
MATH 2153: Calculus III		4	*Pre-rec for MATH 2568*
MATH 2568: Linear Algebra		3	*Pre/co-rec for STAT 3301*

Core Courses – *7 courses, 17 credit hours*

Course	Term	Credit Hours	Notes
CSS 2100: Core Concepts in CSS		3	
STAT 2450: Intro to Statistical Analysis I		3	Fulfills Data Analysis Embedded Literacy
CSS 3100: Social Theory-Guided CSS		3	
CSS 4500: Advanced Computational Social Science Toolbox		3	
CSS 4901: CSS Capstone		3	Fulfills Advanced Writing Embedded Literacy
STAT 5731: Introduction to R for Data Science I		1	
STAT 5732: Introduction to R for Data Science II		1	

Electives – *2 courses, 6 credit hours*

Course	Term	Credit Hours	Notes

Choose 2 From Approved List (any of these fulfill Technology Embedded Literacy)**:**

- COMM 2540: Introduction to Communication Technology
- INTSTDS 3702: Herding Cyber Cats: Information Security Management

- PHILOS 2332.01: Engineering Ethics for a Diverse and Just World
- SOCIOL 3302: Technology and Global Society

Required Statistics Minor – *4 courses, 13 credit hours* ***Note: not counted towards major hours***

Course	Term	Credit Hours	Notes
STAT 3201: Introduction to Probability for Data Analytics		3	
STAT 3202: Introduction to Statistical Inference for Data Analytics		4	
STAT 3301: Statistical Modeling for Discovery I		3	
STAT		3	

Students must complete a minor in Statistics:

The Statistics minor encompasses 13 credit hours. Pre-requisites for the minor total a minimum of 17 additional credit hours, provided students do not have prior credit for any of the Math Calculus sequence.

Required courses (10 credit hours):

- STAT 3201: Introduction to Probability for Data Analytics (3 credit hours)
  - Prerequisites:
    - MATH 1151: Calculus I (5 credit hours)
    - MATH 1152: Calculus II (5 credit hours)
- STAT 3202: Introduction to Statistical Inference for Data Analytics (4 credit hours)
  - Prerequisite:
    - STAT 3201
- STAT 3301: Statistical Modeling for Discovery I (3 credit hours)
  - Prerequisites:
    - STAT 3202; or STAT 4202 and STAT 5730
  - Prerequisites or Corequisite:
    - MATH 2568 - Linear Algebra (3 credit hours)
      - MATH 2568 has an additional prerequisite of MATH 2153 – Calculus III (4 credit hours)

Elective courses (3 credit hours; choose 1):

- STAT 3302: Statistical Modeling for Discovery II (3 credit hours)
  - Prerequisites:
    - STAT 3301 and MATH 2568
- STAT 3303: Bayesian Analysis and Statistical Decision Making (3 credit hours)
  - Prerequisites:
    - STAT 3301 or
    - STAT 4202 and STAT 5731 and STAT 5732
- STAT 3410: Principles of Data Collection and Analysis (3 credit hours)
  - Prerequisites:
    - STAT 3200 or
    - STAT 4202 and STAT 5731 and STAT 5732
- STAT 5510: Statistical Foundations of Survey Research
  - Prerequisites:
    - GE Data Analysis course

Social Science Cluster Sequence – *4 courses, minimum 12 credit hours*

Course	Term	Credit Hours	Notes

Choose at least 4 courses, worth a minimum of 12 credit hours, from a single selected cluster. All courses are 3 credit hours unless designated otherwise:

Sociocultural anthropology

- ANTHROP 2202(H): Introduction to Cultural Anthropology
- ANTHROP 3027: Disasters and Health
- ANTHROP 4525: History of Anthropological Theory
- ANTHROP 5626: More: Culture and Economic Life
- ANTHROP 5627: Migrants and Refugees
- ANTHROP 5650: Research Design and Ethnographic Methods

Medical anthropology

- ANTROP 3302: Introduction to Medical Anthropology
- ANTHROP/HISTORY 4706: Chronic Illness, Injury, and Disability in Modern History
- ANTHROP 5600: Evolutionary Medicine
- ANTHROP 5601: The Anthropology of Sex, Drugs, and HIV
- ANTHROP 5602: Women's Health in Global Perspective

Socio-ecological systems

- ANTHROP 3050: Social and Ecological Systems: From Problems to Prospects
- ANTHROP 3411: Human Ecological Adaptations
- ANTHROP 3604: Introduction to the Methods of Archaeological Science
- ANTHROP 3623: Environmental Anthropology
- ANTHROP/EEOB/FABENG 5505: Wicked Science
- ANTHROP 5610: Ethnobotany
- ANTHROP 5620: Hunters and Gatherers

Archaeology

- ANTHROP 2201(H): Introduction to Archaeology
- ANTHROP 3401: Fundamentals of Archaeology
- ANTHROP 4597.03H: Models of Sustainability and Resilience: Lessons from the Past
- ANTHROP 5603: Strategy of Archaeological Field Research
- ANTHROP 5604: Archaeology Lab Methods
- ANTHROP 5651: Spatial Analysis for Anthropologists

Biological and forensic anthropology

- ANTHROP 2200(H): Introduction to Biological Anthropology
- ANTHROP 2210: Race, Ethnicity, Gender Diversity, and Human Biology
- ANTHROP 3300: Human Origins
- ANTHROP 3301: Human Biological Diversity and Health

- ANTHROP 3305: Introduction to Forensic Anthropology
- ANTHROP 5642: Growth and Development
- ANTHROP 5641: Primate Behavior
- ANTHROP 5645: Life History Evolution, Aging, and Senescence

General Psychology

Note: select only one course from each bullet, up to 12 credit hours total

- PSYCH 3313: Behavioral Neuroscience ***or*** PSYCH 3513: Cognitive Neuroscience
- PSYCH 3310: Sensation & Perception ***or*** PSYCH 3312: Learning & Memory
- PSYCH 3331: Abnormal Psychology ***or*** PSYCH 3335: Psychology of Adjustment
- PSYCH 3340: Lifespan Development ***or*** PSYCH 3550: Psychology of Childhood ***or*** 3551: Psychology of Adolescence
- PSYCH 3325: Social Psychology ***or*** PSYCH 3375: Stereotyping & Prejudice

Clinical Psychology

- PSYCH 2303: Positive Psychology
- PSYCH 2333: Human Sexuality
- PSYCH 2376: Interpersonal Relationships
- PSYCH 3331: Abnormal Psychology
- PSYCH 3530: Psychology of Personality
- PSYCH 3335: Psychology of Adjustment

Developmental Psychology

- PSYCH 2303: Positive Psychology
- PSYCH 2333: Human Sexuality
- PSYCH 3335: Psychology of Adjustment
- PSYCH 3340: Lifespan Development
- PSYCH 3530: Psychology of Personality
- PSYCH 3550: Psychology of Childhood
- PSYCH 3551: Psychology of Adolescence

Organization & Performance Psychology

- PSYCH 2311: Psychology of Motivation
- PSYCH 2420: Psychology Applied to Sport
- PSYCH 2462: Psychology of Creativity
- PSYCH 3325: Introduction to Social Psychology
- PSYCH 3522: Organizational Psychology

Social & Personality Psychology

- PSYCH 2376: Interpersonal Relationships
- PSYCH 3325: Introduction to Social Psychology
- PSYCH 3375: Stereotyping & Prejudice
- PSYCH 3530: Psychology of Personality
- PSYCH 3900: A Practical Guide to Ruling the World

Note on Economics clusters: ECON 2001.01 is a pre-requisite for all 4000-level ECON courses. It may be waived by instructors for CSS students.

Empirical methods in economics

- ECON 2001.01: Principles of Microeconomics
- ECON 2002.01: Principles of Macroeconomics
- ECON 4001.02: Intermediate Microeconomics

- ECON 4410: Data Management and Econometric Analysis
- ECON 5410: Econometrics I
- ECON 5420: Econometrics II
- ECON 4002.02: Intermediate Macroeconomic Theory

Applied microeconomics

Required courses in this cluster:

- ECON 2001.01: Principles of Microeconomics
- ECON 4001.02 Intermediate Microeconomic Theory

Choose two from:

- ECON 5700 Industrial Organization
- ECON 5860 Health Economics
- ECON 5850 Labor Economics
- ECON 5001 Game Theory

Macroeconomics

- ECON 4001.02 Intermediate Microeconomic Theory
- ECON 4002.02 Intermediate Macroeconomic Theory
- ECON 4200 Money and Banking
- ECON 5660 Financial Aspects of International Trade

Criminology and criminal law

- SOCIOL 2209: Introduction to Criminal Justice
- SOCIOL 2309: Introduction to Law & Society
- SOCIOL 3410: Criminology
- SOCIOL 4462: Advanced Social Stratification
- SOCIOL 4507: The Criminal Justice System
- SOCIOL 4509: Sociology of Law
- SOCIOL 4511: Juvenile Delinquency
- SOCIOL 4611: Jails, Prisons, and Community Corrections
- SOCIOL 5525: Global Criminology

Social Inequality

- SOCIOL 2320: Sociology of Education
- SOCIOL 2367.01H: The Political Elite and Interest Groups
- SOCIOL 2367.02: Urban Social Problems
- SOCIOL 3200: Sociology of Immigration
- SOCIOL 3306: Sociology of Poverty
- SOCIOL 3380: Race and Ethnic Relations in America
- SOCIOL 3464: Work, Employment & Society
- SOCIOL 4462: Advanced Social Stratification
- SOCIOL 4635: Gender and Society
- SOCIOL 4655: Sociology of Sport
- SOCIOL 5605: Sociology of Sexuality

Population dynamics and wellness

- SOCIOL 2202: Social Problems
- SOCIOL 2290: Sociology of Death & Dying
- SOCIOL 3200: Sociology of Immigration
- SOCIOL 3630: Medical Sociology
- SOCIOL 4462: Advanced Social Stratification

- SOCIOL 4629: Health Disparities in Social Context
- SOCIOL 5450: The Sociology of Global Health & Illness

American Democracy and Law
- POLITSC 2150: Voters and Elections
- POLITSC 3115: Introduction to the Policy Process
- POLITSC 4110: American Presidency
- POLITSC 4115: Bureaucracy and Public Policy
- POLITSC 4120: U.S. Congress
- POLITSC 4130: Law and Politics
- POLITSC 4135: American Constitutional Law

International Conflict and Cooperation
- POLITSC 2300: American Foreign Policy
- POLITSC 3240: Political Violence
- POLITSC 4300: Theories of International Relations
- POLITSC 4310: Security Policy
- POLITSC 4315: International Security and the Causes of War
- POLITSC 4320: Strategies for War and Peace
- POLITSC 4330: Global Governance
- POLITSC 4318: United Nations System

Political Economy and Development
- POLITSC 3220: Politics of the Developing World
- POLITSC 3280: Politics of Markets
- POLITSC 3460: Global Justice
- POLITSC/AFAMAST 4250(H): African Politics
- POLITSC 4282: Politics of Income Inequality
- POLITSC 4332: Politics of Globalization
- POLITSC 4940: Politics of Immigration

Computational Spatial Data Analytics in Geography
- GEOG 2200: Spatial Literacy: Visualizing our World through Mapping Space & Place
- GEOG 4103: Introductory Spatial Data Analysis (Prerec: MATH 1116; 1151 accepted for CSS students)
- GEOG 5103: Intermediate Spatial Data Analysis (Prerec: GEOG 4103)
- GEOG 5200: Cartography and Map Design
- GEOG 5201: GeoVisualization (Prerec: GEOG 5200)
- GEOG 5210: Fundamentals of Geographic Information Systems
- GEOG 5212: Geospatial Databases for GIS (Prerec: GEOG 5210)

Human Connections
- GEOG 2100: Human Geography
- GEOG 2400.01 ***or*** GEOG 2400.02: Economic and Social Geography
- GEOG 2500: Cities and their Global Spaces
- GEOG 3597.01: World Urbanization
- GEOG 3600: Space, Power and Political Geography
- GEOG 3701: The Making of the Modern World
- GEOG 3801: Political Ecology

Earth, Environment, and Sustainability
- GEOG 2800: Our global environment

- GEOG 3597.03: Environmental Citizenship
- GEOG 3800: Geographical Perspectives on Environment and Society
- GEOG 3900: Global Climate Change: Causes and Consequences
- ENR 2000: Natural Resources Data Analysis
- ENR 2100: Introduction to Environmental Sciences
- ENR/AEDECON 2501: Introduction to Sustainability
- ENR 3400: Psychology of Environmental Problems

Communication Technology

- COMM 2540: Introduction to Communication Technology
- COMM 2511: Visual Communication Design
- COMM 3165: Evaluation and Usability Testing
- COMM 3545: Human Computer Interaction & User Experience
- COMM 3554: Social Implications of Communication Technology
- COMM 3558: Social Media
- COMM 4511: User-Centered Communication Design
- COMM 4555: Computer Interface and Human Identity
- COMM 4556: Information Tech and Organizational
- COMM 4557: Communication Network Infrastructure
- COMM 4738: Health Communication and New Media

Health, Environment, Risk, and Science Communication

- COMM 2596: An Introduction to Health, Environment, Risk, & Science Communication
- COMM 3340: Principles of Environmental Campaigns
- COMM 4240: Science Communication
- COMM 3332: Risk Communication
- COMM 3333: Crisis Communication
- COMM 4736: Health Communication in Interpersonal Contexts
- COMM 4737: Health Communication in Mass Mediated Contexts
- COMM 4738: Health Communication and New Media

Media and Society

- COMM 3440: Mass Communication and Society
- COMM 3402: Crime and the News Media
- COMM 3404: Media Law & Ethics
- COMM 3413: Media Entertainment
- COMM 3414: Sports Media Relations
- COMM 3466: Communication and Popular Culture
- COMM 4240: Science Communication
- COMM 4401: Mass Communication and Youth
- COMM 4814: Political Communication
- COMM 4820: Public Opinion and Communication

Organizational Communication

- COMM 3325: Introduction to Organizational Communication
- COMM 3330: Communication and Conflict Management
- COMM 3331: Communication and Decision Making
- COMM 3628: Contemporary Persuasion Theory
- COMM 3668: Intercultural Communication
- COMM 4556: Information Technology and Organizational Communication
- COMM 4557: Communication Network Infrastructure

- COMM 4635: Communication Dynamics in Groups
- COMM 4665: Human Communication in Social Networks

Media Production and Analysis
- COMM 2223: Lantern Practicum
- COMM 2321: Writing for Strategic Communication
- COMM 3403: Sports Journalism
- COMM 3405: Introduction to Lantern TV
- COMM 3413: Media Entertainment
- COMM 3414: Sports Media Relations
- COMM 3554: Social Implications of Communication Technology

Psycholinguistics
- LING 2000(H): Introduction to Linguistics
- LING 3701(H)/PSYCH 3371(H): Language and the Mind
- LING 5701: Psycholinguistics I
- LING 5702: Cognitive Models of Language
- LING/PSYCH 5612/PHILOS 5830/CSE 5531: Introduction to Cognitive Science

Sociolinguistics
- LING 2000(H): Introduction to Linguistics
- LING 3601: Language, Race, and Ethnicity in the U.S.
- LING 3605: Language and Social Justice
- LING 3606: Language, Gender, and Sexuality
- LING 4602: Language and Belonging in the U.S. (4 credit)
- LING 5601: Introduction to Sociolinguistics
- LING 5602: Quantitative Sociolinguistics

***Note**: If a selected cluster cannot be completed in a reasonable timeframe due to fluctuations in individual departmental course offerings, students may work with their academic and faculty advisors to select alternative courses. Additionally, if a student has compelling interest in selecting approved courses outside a predetermined cluster, they may work with their academic and faculty advisors to select alternative courses.**

CSS-BS Sample 4-Year Plan (Focus A)

CSS Major with Minor in Sociology

Note: major coursework can be completed in 3 years for students who add the major in year 2

Year One

AU			SP		
Course	**Hours**	**Rationale**	**Course**	**Hours**	**Rationale**
MATH 1151: Calc I	5	Pre-Req/GE Foundation*	STAT 2450: Intro to Statistical Analysis I	3	Core + Data Analysis Embedded Literacy
ASC 1100.XX: Survey	1	College Requirement	GENED 1201: GE Launch Seminar	1	GE Bookend
CSS 2100: Core concepts in CSS	3	Core	CSS 2500: Data Science for CSS I	3	Track A (CSS Skillset)
SOCIOL 1101: Introduction to Sociology	3	Pre-Req/GE Foundation*	World Language 1101	4	College Requirement
Writing & Information Literacy GE	3	GE Foundation	Natural Science GE	4	GE Foundation
Total CH per semester	**15**		**Total CH per semester**	**15**	

*Cannot demand students take this for GE Foundation, but this course may be used to fulfill this requirement

Year Two

AU			SP		
Course	**Hours**	**Rationale**	**Course**	**Hours**	**Rationale**
Phil 2332.01: Engineering Ethics for a Diverse and Just World	3	CSS Elective + GE Theme	STAT 5731	1	Core
CSS 3100: Social Theory Guided Data Science	3	Core	CSS 3500: Data Science for CSS II	3	Track A (CSS Skillset)
World Language 1102	4	College Requirement	World Language 1103	4	College Requirement
Race, Ethnicity & Gender Diversity GE	3	GE Foundation	SOCIOL 3488: Introduction to Sociological Theory	3	Track A (SBS Minor)
SOCIOL 3487: Research Methods in Sociology	3	Track A (SBS Minor)	Literary, Visual & Performing Arts GE	3	GE Foundation
Total CH per semester	**16**		**Total CH per semester**	**14**	

**STAT 5731 & 5732 are each 7-week session courses at 1-CH per course

Year Three

AU			SP		
Course	**Hours**	**Rationale**	**Course**	**Hours**	**Rationale**
GEOG 2200: Spatial Literacy	3	Track A (CSS formal theorizing)	ANTH 5505: Wicked Science	3	Track A (CSS formal theorizing)
SOCIOL 2309: Introduction to Law & Society	3	Track A (SBS Minor)	CSS 4500: Advanced CSS Toolbox	3	Core
STAT 5732	1	Core	Theme GE	3	GE Theme
SOCIOL 2202: Social Problems & Public Policy	3	Track A (SBS Minor)	Citizenship for a Diverse & Just World GE	3	GE Theme
Historical & Cultural Studies GE	3	GE Foundation	Elective	3	
SOCIOL 3302 Technology and Global Society	3	CSS Elective + Track A (SBS Minor) + Technology Embedded Literacy			
Total CH per semester	**16**		**Total CH per semester**	**15**	

Year Four

AU			SP		
Course	**Hours**	**Rationale**	**Course**	**Hours**	**Rationale**
CSS 4901: CSS Capstone	3	Core + Advanced Writing Embedded Literacy	Theme GE	3	GE Theme
Elective	3		GENED 4001: Reflection Seminar	1	GE Bookend
Elective	3		Elective	3	
Elective	3		Elective	3	
Elective	3		Elective	3	
			Elective	2	
Total CH per semester	**15**		**Total CH per semester**	**15**	

CSS-BS Sample 4-Year Plan (Focus B)

CSS Major with Minor in Statistics & Cluster in Media & Society

Note: major coursework can be completed in 3 years for students who add the major in year 2

Year One

AU			SP		
Course	**Hours**	**Rationale**	**Course**	**Hours**	**Rationale**
MATH 1151: Calc I	5	Pre-Req/GE Foundation*	MATH 1152: Calc II	5	Track B/Stats Minor Pre-Req
ASC 1100.XX: Survey	1	College Requirement	GENED 1201: GE Launch Seminar	1	GE Bookend
CSS 2100: Core concepts in CSS	3	Core	STAT 2450: Intro to Statistical Analysis I	3	Core + Data Analysis Embedded Literacy
SBS GE	3	GE Foundation	World Language 1101	4	College Requirement
Writing & Information Literacy GE	3	GE Foundation	Race, Ethnicity & Gender Diversity GE	3	GE Foundation
Total CH per semester	**15**		**Total CH per semester**	**16**	

Year Two

AU			SP		
Course	**Hours**	**Rationale**	**Course**	**Hours**	**Rationale**
STAT 5731	1	Core	STAT 5732	1	Core
STAT 3201: Introduction to Probability for Data Analytics	3	Track B Stats Minor	Phil 2332.01: Engineering Ethics for a Diverse and Just World	3	CSS Elective + GE Theme
MATH 2153: Calc III	4	Track B/ Stats Minor Pre-Rec	MATH 2568: Linear Algebra	3	Track B Stats Minor Pre-Req
World Language 1102	4	College Requirement	World Language 1103	4	College Requirement
CSS 3100: Social Theory Guided Data Science	3	Core	STAT 3202	4	Track B Stats Minor
Total CH per semester	**15**		**Total CH per semester**	**15**	

*** STAT 5731 & 5732 are each 7-week session courses at 1-CH per course*

Year Three

AU			SP		
Course	**Hours**	**Rationale**	**Course**	**Hours**	**Rationale**
STAT 3301: Statistical Modeling for Discovery I	3	Track B Stats Minor	Other Statistics course (choose from 5 courses)	3	Track B Stats Minor
COMM 3440: Mass Communication & Society	3	Track B Social Science Cluster	CSS 4500: Advanced CSS Toolbox	3	Core
COMM 3404: Media Law & Ethics	3	Track B Social Science Cluster	COMM 4820: Public Opinion & Communication	3	Track B Social Science Cluster
COMM 4240: Science Communication	3	Track B Social Science Cluster	Citizenship for a Diverse & Just World GE	3	GE Theme
Historical & Cultural Studies GE	3	GE Foundation	Literary, Visual & Performing Arts GE	3	GE Foundation
Total CH per semester	**15**		**Total CH per semester**	**15**	

Year Four

AU			SP		
Course	**Hours**	**Rationale**	**Course**	**Hours**	**Rationale**
CSS 4901: CSS Capstone	3	Core & Advanced Writing Embedded Literacy	IntStds 3702: Herding Cyber Cats: Information Security Management	3	CSS Elective & Technology Embedded Literacy
Theme GE	3	GE Theme	Theme GE	3	GE Theme
Natural Science GE	4	GE Foundation	GENED 4001: Reflection Seminar	1	GE Bookend
Elective	3		Elective	3	
Elective	2		Elective	3	
			Elective	2	
Total CH per semester	**15**		**Total CH per semester**	**15**	

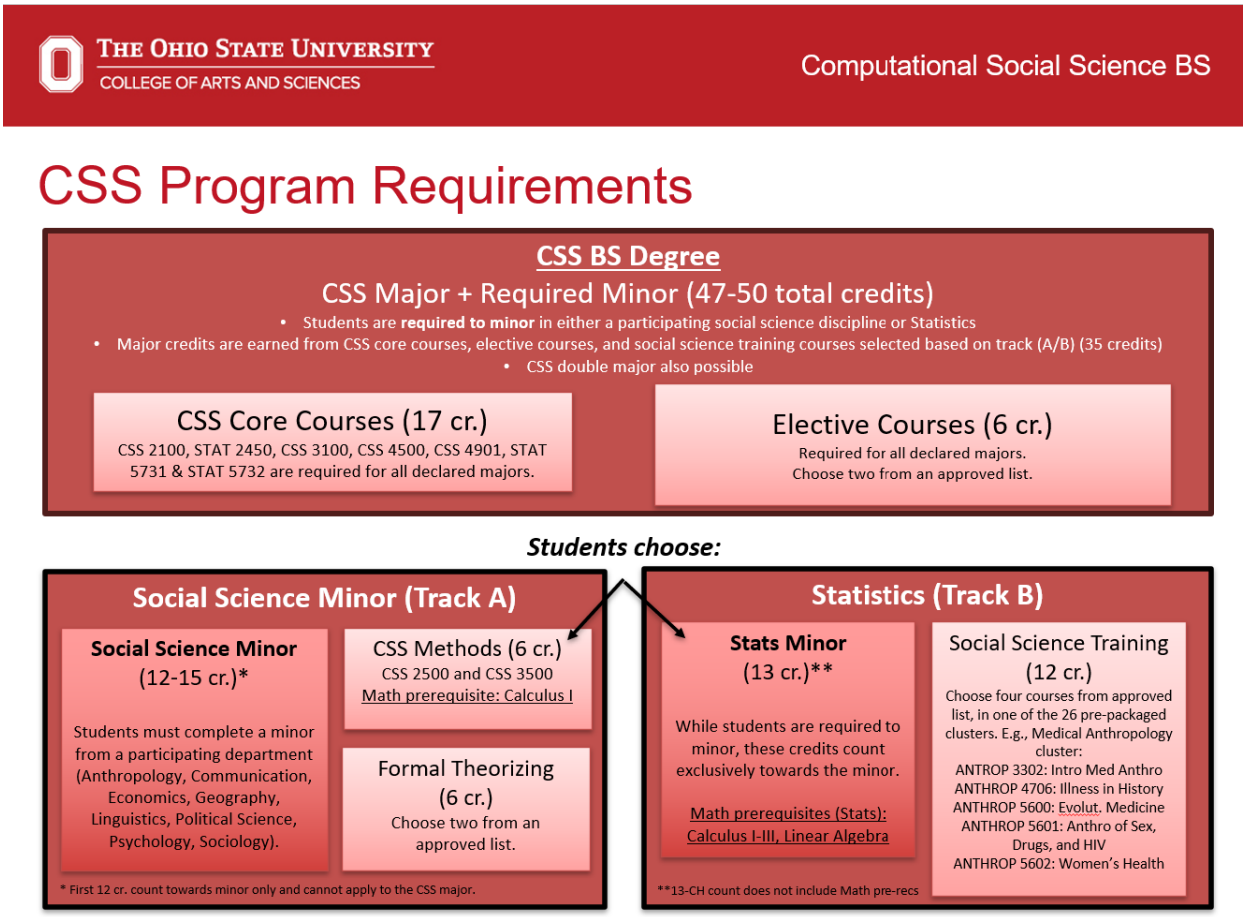
Additional Notes: all MATH courses are offered in SU terms as well

STAT 3201, 3202 are offered AU&SP only

STAT 3301 is AU only

STAT 3302 is SP only

Diagram of CSS Program Requirements



Computatonal Social Science B.S. Curriculum Map

Curricular Component	Courses	Goal 1) Social Theory: Students will learn about theoretical camps in the social sciences. Students will apply social theory to interpret & explain patterns in social science data & to generate testable hypotheses that can be supported or falsified.	Goal 2) Computational Modeling & Analysis: Students will learn about the data generation process & aquire skills for developing mathematical & algorithmic expressions of social theory. Students will learn how to analyze data using computational methods.	Goal 3) Research Design: Students will learn to develop analytic strategies for answering social science questions using computational methods. This entails knowledge of data collection, cleaning, testing, & inference.	Goal 4) Interdisciplinary Collaboration: Students will work effectively as part of a team & underst& disciplinary & transdisciplinary approaches to social science research.
Key: B=Beginner; I=Intermediate; A=Advanced					
1. Core	CSS 2100: Core Concepts in CSS	☐	☐	☐	B
1. Core	CSS 3100: Social Theory-Guided CSS	I	I	I	☐
1. Core	CSS 4500: Advanced Computational Social Science Toolbox	I	A	A	I
1. Core	CSS 4901: CSS Capstone	A	A	A	A
1. Core	STAT 2450: Intro to Statistical Analysis I	☐	B	☐	☐
1. Core	STAT 5731: Introduction to R for Data Science I	☐	B	☐	☐
1. Core	STAT 5732: Introduction to R for Data Science II	☐	I	☐	☐
2. Elective	COMM 2540: Introduction to Communication Technology	☐	☐	☐	B
2. Elective	INTSTDS 3702: Herding Cyber Cats- Information Security Management	☐	☐	☐	I
2. Elective	PHILOS 2332.01: Engineering Ethics for a Diverse & Just World	☐	☐	☐	B
2. Elective	SOCIOL 3302: Technology & Global Society	☐	☐	☐	I
3. Social Science Minor (Track A)					
4. CSS Methods (Track A)	CSS 2500: Methods & Theory in Computational Social Science I	☐	I	☐	☐
4. CSS Methods (Track A)	CSS 3500: Methods & Theory in Computational Social Science II	I	A	I	B
5. Formal Theorizing (Track A)	ANTHROP 3623: Environmental Anthropology	I	☐	☐	☐
5. Formal Theorizing (Track A)	ANTHROP/EEOB/FABENG 5505: Wicked Science	A	☐	☐	☐
5. Formal Theorizing (Track A)	COMM 4665: Human Communication in Social Networks	A	☐	☐	☐
5. Formal Theorizing (Track A)	ECON 2202.01: Principles of Macroeconomics	I	☐	☐	☐
5. Formal Theorizing (Track A)	ECON 2001.01: Principles of Microeconomics	I	☐	☐	☐
5. Formal Theorizing (Track A)	ECON 4001.01: Intermediate Microeconomics	A	☐	☐	☐
5. Formal Theorizing (Track A)	GEOG 2200: Spatial Literacy	B	☐	☐	☐
5. Formal Theorizing (Track A)	GEOG 5210: Fundamentals of GIS	I	A	☐	☐
5. Formal Theorizing (Track A)	POLITSC 4553: Game Theory for Political Scientists	A	☐	☐	☐
5. Formal Theorizing (Track A)	POLITSC 3500: Political Games: Rational Choice Theory & the Study of Politics	I	☐	☐	☐
5. Formal Theorizing (Track A)	SOCIOL 4650: Social Networks	A	☐	☐	☐
5. Formal Theorizing (Track A)	SOCIOL 5463: Advanced Social Stratification	A	☐	☐	☐
6. Statistics Minor (Track B)					
7. Social Science Training Cluster (Track B)	ANTHROP 2202(H): Introduction to Cultural Anthropology	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	ANTHROP 3027: Disasters & Health	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	ANTHROP 4525: History of Anthropological Theory	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	ANTHROP 5626: More: Culture & Economic Life	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	ANTHROP 5627: Migrants & Refugees	☐	☐	☐	☐
7. Social Science Training Cluster (Track B)	ANTHROP 5650: Research Design & Ethnographic Methods	A	☐	A	☐
7. Social Science Training Cluster (Track B)	ANTROP 3302: Introduction to Medical Anthropology	☐	☐	☐	☐

7. Social Science Training Cluster (Track B)	ANTHROP/HISTORY 4706: Chronic Illness, Injury, & Disability in Modern History	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	ANTHROP 5600: Evolutionary Medicine	A	☐	☐	I
7. Social Science Training Cluster (Track B)	ANTHROP 5601: The Anthropology of Sex, Drugs, & HIV	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	ANTHROP 5602: Women's Health in Global Perspective	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	ANTHROP 3050: Social & Ecological Systems: From Problems to Prospects	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	ANTHROP 3411: Human Ecological Adaptations	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	ANTHROP 3604: Introduction to the Methods of Archaeological Science	I	☐	I	☐
7. Social Science Training Cluster (Track B)	ANTHROP 3623: Environmental Anthropology	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	ANTHROP/EEOB/FABENG 5505: Wicked Science	I	☐	☐	A
7. Social Science Training Cluster (Track B)	ANTHROP 5610: Ethnobotany	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	ANTHROP 5620: Hunters & Gatherers	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	ANTHROP 2201(H): Introduction to Archaeology	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	ANTHROP 3401: Fundamentals of Archaeology	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	ANTHROP 4597.03H: Models of Sustainability & Resilience: Lessons from the Past	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	ANTHROP 5603: Strategy of Archaeological Field Research	A	☐	A	☐
7. Social Science Training Cluster (Track B)	ANTHROP 5604: Archaeology Lab Methods	☐	☐	A	☐
7. Social Science Training Cluster (Track B)	ANTHROP 5651: Spatial Analysis for Anthropologists	☐	☐	A	☐
7. Social Science Training Cluster (Track B)	ANTHROP 2200(H): Introduction to Biological Anthropology	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	ANTHROP 2210: Race, Ethnicity, Gender Diversity, & Human Biology	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	ANTHROP 3300: Human Origins	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	ANTHROP 3301: Human Biological Diversity & Health	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	ANTHROP 3305: Introduction to Forensic Anthropology	I	☐	☐	I
7. Social Science Training Cluster (Track B)	ANTHROP 5642: Growth & Development	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	ANTHROP 5641: Primate Behavior	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	ANTHROP 5645: Life History Evolution, Aging, & Senescence	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 3313: Behavioral Neuroscience	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 3513: Cognitive Neuroscience	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 3310: Sensation & Perception	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 3312: Learning & Memory	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 3331: Abnormal Psychology	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 3335: Psychology of Adjustment	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 3340: Lifespan Development	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 3550: Psychology of Childhood	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	3551: Psychology of Adolescence	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 3325: Social Psychology	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 3375: Stereotyping & Prejudice	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 2303: Positive Psychology	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 2333: Human Sexuality	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 2376: Interpersonal Relationships	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 3331: Abnormal Psychology	I	☐	☐	☐

7. Social Science Training Cluster (Track B)	PSYCH 3530: Psychology of Personality	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 3335: Psychology of Adjustment	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 2303: Positive Psychology	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 2333: Human Sexuality	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 3335: Psychology of Adjustment	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 3340: Lifespan Development	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 3530: Psychology of Personality	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 3550: Psychology of Childhood	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 3551: Psychology of Adolescence	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 2311: Psychology of Motivation	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 2420: Psychology Applied to Sport	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 2462: Psychology of Creativity	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 3325: Introduction to Social Psychology	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 3522: Organizational Psychology	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 2376: Interpersonal Relationships	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 3325: Introduction to Social Psychology	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 3375: Stereotyping & Prejudice	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 3530: Psychology of Personality	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	PSYCH 3900: A Practical Guide to Ruling the World	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	ECON 2001.01: Principles of Microeconomics	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	ECON 2002.01: Principles of Macroeconomics	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	ECON 4001.02: Intermediate Microeconomics	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	ECON 4410: Data Management & Econometric Analysis	☐	☐	A	☐
7. Social Science Training Cluster (Track B)	ECON 5410: Econometrics I	☐	A	A	☐
7. Social Science Training Cluster (Track B)	ECON 5420: Econometrics II	☐	A	A	☐
7. Social Science Training Cluster (Track B)	ECON 4002.02: Intermediate Macroeconomic Theory	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	ECON 2001.01: Principles of Microeconomics	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	ECON 4001.02 Intermediate Microeconomic Theory	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	ECON 5700 Industrial Organization	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	ECON 5860 Health Economics	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	ECON 5850 Labor Economics	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	ECON 5001 Game Theory	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	ECON 4001.02 Intermediate Microeconomic Theory	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	ECON 4002.02 Intermediate Macroeconomic Theory	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	ECON 4200 Money & Banking	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	ECON 5660 Financial Aspects of International Trade	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	SOCIOL 2209: Introduction to Criminal Justice	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	SOCIOL 2309: Introduction to Law & Society	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	SOCIOL 3410: Criminology	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	SOCIOL 4462: Advanced Social Stratification	A	☐	☐	☐

7. Social Science Training Cluster (Track B)	SOCIOL 4507: The Criminal Justice System	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	SOCIOL 4509: Sociology of Law	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	SOCIOL 4511: Juvenile Delinquency	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	SOCIOL 4611: Jails, Prisons, & Community Corrections	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	SOCIOL 5525: Global Criminology	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	SOCIOL 2320: Sociology of Education	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	SOCIOL 2367.01H: The Political Elite & Interest Groups	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	SOCIOL 2367.02: Urban Social Problems	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	SOCIOL 3200: Sociology of Immigration	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	SOCIOL 3306: Sociology of Poverty	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	SOCIOL 3380: Race & Ethnic Relations in America	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	SOCIOL 3464: Work, Employment & Society	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	SOCIOL 4462: Advanced Social Stratification	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	SOCIOL 4635: Gender & Society	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	SOCIOL 4655: Sociology of Sport	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	SOCIOL 5605: Sociology of Sexuality	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	SOCIOL 2202: Social Problems	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	SOCIOL 2290: Sociology of Death & Dying	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	SOCIOL 3200: Sociology of Immigration	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	SOCIOL 3630: Medical Sociology	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	SOCIOL 4462: Advanced Social Stratification	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	SOCIOL 4629: Health Disparities in Social Context	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	SOCIOL 5450: The Sociology of Global Health & Illness	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	POLITSC 2150: Voters & Elections	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	POLITSC 3115: Introduction to the Policy Process	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	POLITSC 4110: American Presidency	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	POLITSC 4115: Bureaucracy & Public Policy	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	POLITSC 4120: U.S. Congress	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	POLITSC 4130: Law & Politics	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	POLITSC 4135: American Constitutional Law	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	POLITSC 2300: American Foreign Policy	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	POLITSC 3240: Political Violence	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	POLITSC 4300: Theories of International Relations	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	POLITSC 4310: Security Policy	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	POLITSC 4315: International Security & the Causes of War	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	POLITSC 4320: Strategies for War & Peace	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	POLITSC 4330: Global Governance	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	POLITSC 4318: United Nations System	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	POLITSC 3220: Politics of the Developing World	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	POLITSC 3280: Politics of Markets	I	☐	☐	☐

7. Social Science Training Cluster (Track B)	POLITSC 3460: Global Justice	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	POLITSC/AFAMAST 4250(H): African Politics	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	POLITSC 4282: Politics of Income Inequality	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	POLITSC 4332: Politics of Globalization	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	POLITSC 4940: Politics of Immigration	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	GEOG 2200: Spatial Literacy	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	GEOG 4103: Introductory Spatial Data Analysis (Prerec: MATH 1116; 1151 accepted for CSS students)	A	A	☐	☐
7. Social Science Training Cluster (Track B)	GEOG 5103: Intermediate Spatial Data Analysis (Prerec: GEOG 4103)	☐	A	☐	☐
7. Social Science Training Cluster (Track B)	GEOG 5200: Cartography & Map Design	☐	A	A	☐
7. Social Science Training Cluster (Track B)	GEOG 5201: GeoVisualization (Prerec: GEOG 5200)	☐	A	☐	☐
7. Social Science Training Cluster (Track B)	GEOG 5210: Fundamentals of Geographic Information Systems	☐	A	☐	☐
7. Social Science Training Cluster (Track B)	GEOG 5212: Geospatial Databases for GIS (Prerec: GEOG 5210)	☐	A	A	☐
7. Social Science Training Cluster (Track B)	GEOG 2100: Human Geography	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	GEOG 2400.01 or GEOG 2400.02: Economic & Social Geography	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	GEOG 2500: Cities & their Global Spaces	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	GEOG 3597.01: World Urbanization	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	GEOG 3600: Space, Power & Political Geography	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	GEOG 3701: The Making of the Modern World	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	GEOG 3801: Political Ecology	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	GEOG 2800: Our global environment	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	GEOG/ENGLISH 3597.03: Environmental Citizenship	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	GEOG 3800: Geographical Perspectives on Environment & Society	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	GEOG 3900: Global Climate Change: Causes & Consequences	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	ENR 2000: Natural Resources Data Analysis	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	ENR 2100: Introduction to Environmental Sciences	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	ENR/AEDECON 2501: Introduction to Sustainability	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	ENR 3400: Psychology of Environmental Problems	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 2540: Introduction to Communication Technology	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 2511: Visual Communication Design	B			B
7. Social Science Training Cluster (Track B)	COMM 3165: Evaluation & Usability Testing	I		I	
7. Social Science Training Cluster (Track B)	COMM 3545: Human Computer Interaction & User Experience	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 3554: Social Implications of Communication Technology	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 3558: Social Media	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 4511: User-Centered Communication Design	A		A	
7. Social Science Training Cluster (Track B)	COMM 4555: Computer Interface & Human Identity	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 4556: Information Tech & Organizational	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 4557: Communication Network Infrastructure	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 4738: Health Communication & New Media	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 2596: An Introduction to Health, Environment, Risk, & Science Communication	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 3340: Principles of Environmental Campaigns	I	☐	☐	☐

7. Social Science Training Cluster (Track B)	COMM 4240: Science Communication	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 3332: Risk Communication	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 3333: Crisis Communication	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 4736: Health Communication in Interpersonal Contexts	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 4737: Health Communication in Mass Mediated Contexts	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 4738: Health Communication & New Media	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 3440: Mass Communication & Society	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 3402: Crime & the News Media	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 3404(H): Media Law & Ethics	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 3413: Media Entertainment	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 3414: Sports Media Relations	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 3466: Communication & Popular Culture	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 4240: Science Communication	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 4401: Mass Communication & Youth	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 4814: Political Communication	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 4820: Public Opinion & Communication	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 3325: Introduction to Organizational Communication	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 3330: Communication & Conflict Management	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 3331: Communication & Decision Making	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 3628: Contemporary Persuasion Theory	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 3668: Intercultural Communication	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 4556: Information Technology & Organizational Communication	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 4557: Communication Network Infrastructure	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 4635: Communication Dynamics in Groups	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 4665: Human Communication in Social Networks	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 2223: Lantern Practicum	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 2321: Writing for Strategic Communication	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 3403: Sports Journalism	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 3405: Introduction to Lantern TV	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 3413: Media Entertainment	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 3414: Sports Media Relations	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	COMM 3554: Social Implications of Communication Technology	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	LING 2000(H): Introduction to Linguistics	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	LING/PSYCH 3701(H): Language & the Mind	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	LING 5701: Psycholinguistics I	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	LING 5702: Cognitive Models of Language	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	LING/PSYCH 5612/PHILOS 5830/CSE 5531: Introduction to Cognitive Science	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	LING 2000(H): Introduction to Linguistics	B	☐	☐	☐
7. Social Science Training Cluster (Track B)	LING 3601: Language, Race, & Ethnicity in the U.S.	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	LING 3605: Language & Social Justice	I	☐	☐	☐

7. Social Science Training Cluster (Track B)	LING 3606: Language, Gender, & Sexuality	I	☐	☐	☐
7. Social Science Training Cluster (Track B)	LING 4602: Language & Belonging in the U.S. (4 credit)	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	LING 5601: Introduction to Sociolinguistics	A	☐	☐	☐
7. Social Science Training Cluster (Track B)	LING 5602: Quantitative Sociolinguistics	☐	A	☐	☐

Fiscal Unit/Academic Org	Political Science - D0755
Administering College/Academic Group	Arts and Sciences
Co-adminstering College/Academic Group	
Semester Conversion Designation	New Program/Plan
Proposed Program/Plan Name	Computational Social Science
Type of Program/Plan	Undergraduate bachelors degree program or major
Program/Plan Code Abbreviation	CSS-BS
Proposed Degree Title	Computational Social Science

Credit Hour Explanation

Program credit hour requirements		A) Number of credit hours in current program (Quarter credit hours)	B) Calculated result for 2/3rds of current (Semester credit hours)	C) Number of credit hours required for proposed program (Semester credit hours)	D) Change in credit hours
Total minimum credit hours required for completion of program				35	
Required credit hours offered by the unit	Minimum			18	
	Maximum				
Required credit hours offered outside of the unit	Minimum			5	
	Maximum				
Required prerequisite credit hours not included above	Minimum				
	Maximum				

Program Learning Goals

Note: these are required for all undergraduate degree programs and majors now, and will be required for all graduate and professional degree programs in 2012. Nonetheless, all programs are encouraged to complete these now.

Program Learning Goals

- Social Theory. Students will learn about theoretical camps in the social sciences. Students will apply social theory to interpret and explain patterns in social science data and to generate testable hypotheses that can be supported or falsified.
- Computational Modeling and Analysis: Students will learn the data generation process and acquire skills for developing mathematical and algorithmic expressions of social theory. Students will learn how to analyze data using computational method.
- Research Design: Students will learn to develop analytic strategies for answering social science questions using computational methods. This entails knowledge of data collection, cleaning, testing, and inference.
- Interdisciplinary Collaboration: Student will work effectively as part of a team and understand disciplinary and transdisciplinary approaches to social science research.

Assessment

Assessment plan includes student learning goals, how those goals are evaluated, and how the information collected is used to improve student learning. An assessment plan is required for undergraduate majors and degrees. Graduate and professional degree programs are encouraged to complete this now, but will not be required to do so until 2012.

Is this a degree program (undergraduate, graduate, or professional) or major proposal? Yes

Does the degree program or major have an assessment plan on file with the university Office of Academic Affairs? No

DIRECT MEASURES (means of assessment that measure performance directly, are authentic and minimize mitigating or intervening factors)

Classroom assignments

- Embedded testing (i.e. specific questions in homework or exams that allow faculty to assess students' attainments of a specific learning goal)
- Other classroom assessment methods (e.g., writing assignments, oral presentations, oral exams)

Evaluation of a body of work produced by the student

- Practicum, internship or research evaluation of student work
- Capstone course reports, papers, or presentations

INDIRECT MEASURES (means of assessment that are related to direct measures but are steps removed from those measures)

Additional types of indirect evidence

- Grade review

USE OF DATA (how the program uses or will use the evaluation data to make evidence-based improvements to the program periodically)

- Meet with students directly to discuss their performance
- Analyze and discuss trends with the unit's faculty
- Analyze and report to college/school
- Make improvements in curricular requirements (e.g., add, subtract courses)
- Make improvements in course delivery and learning activities within courses
- Periodically confirm that current curriculum and courses are facilitating student attainment of program goals

Program Specializations/Sub-Plans

If you do not specify a program specialization/sub-plan it will be assumed you are submitting this program for all program specializations/sub-plans.

Pre-Major

Does this Program have a Pre-Major? No

Attachments

- Final Combined Letters of Support for CSS-1.pdf: Revised letters of support

  (Support/Concurrence Letters. Owner: Smith,Charles William)
- Advising Sheets tracks A and B final.doc: Advising sheets tracks A & B

  (Semester Advising Sheet(s). Owner: Smith,Charles William)
- CSS major proposal.docx: major proposal

  (Program Proposal. Owner: Smith,Charles William)
- CSS-BS curriculum map.xlsx: BS curriculum map

  (Curricular Map(s). Owner: Smith,Charles William)
- CSS-BS Sample 4 Year Plans.xlsx: Sample 4 year plan

  (Other Supporting Documentation. Owner: Smith,Charles William)
- CSS BS final proposal for ASCC and CAA.pdf: Final proposal (use this document)

  (Program Proposal. Owner: Vankeerbergen,Bernadette Chantal)
- New Bachelor of Science Computational Social Sciences Letter of Motion.docx: SBS Subcommittee letter to ASCC

  (Other Supporting Documentation. Owner: Vankeerbergen,Bernadette Chantal)

Comments

- revisions per 5/27/25 feedback email

  Revisions per Dean King 3/10/26 *(by Smith,Charles William on 03/10/2026 04:07 PM)*

- Please see feedback email sent to department 10-24-2025 RLS *(by Steele,Rachel Lea on 10/24/2025 06:24 PM)*
- Please see Subcommittee feedback email sent 5/27/25. *(by Neff,Jennifer on 05/27/2025 09:27 AM)*

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Smith,Charles William	04/30/2025 03:23 PM	Submitted for Approval
Approved	Kurtz,Marcus Jurgen	04/30/2025 03:38 PM	Unit Approval
Approved	Vankeerbergen,Bernadette Chantal	05/06/2025 11:12 AM	College Approval
Revision Requested	Neff,Jennifer	05/27/2025 09:27 AM	ASCCAO Approval
Submitted	Smith,Charles William	09/02/2025 12:53 PM	Submitted for Approval
Approved	Kurtz,Marcus Jurgen	09/02/2025 12:57 PM	Unit Approval
Approved	Vankeerbergen,Bernadette Chantal	09/06/2025 03:08 PM	College Approval
Revision Requested	Steele,Rachel Lea	10/24/2025 06:24 PM	ASCCAO Approval
Submitted	Smith,Charles William	03/10/2026 04:07 PM	Submitted for Approval
Approved	Kurtz,Marcus Jurgen	03/10/2026 05:37 PM	Unit Approval
Approved	Vankeerbergen,Bernadette Chantal	03/11/2026 12:20 PM	College Approval
Approved	Vankeerbergen,Bernadette Chantal	04/12/2026 01:24 PM	ASCCAO Approval
Approved	Martin,Andrew William	04/12/2026 03:08 PM	ASC Approval
Pending Approval	Reed,Kathryn Marie Johnson,Jay Vinton Griffiths,Robert Peter	04/12/2026 03:08 PM	CAA Approval