

## **Term Information**

Effective Term Spring 2018

## **General Information**

Course Bulletin Listing/Subject Area Political Science  
Fiscal Unit/Academic Org Political Science - D0755  
College/Academic Group Arts and Sciences  
Level/Career Undergraduate  
Course Number/Catalog 4784  
Course Title Complexity Science and the Study of Politics  
Transcript Abbreviation Complexity&Polit  
Course Description Familiarize students with agent-based models and complexity science to better understand political behavior.  
Semester Credit Hours/Units Fixed: 3

## **Offering Information**

Length Of Course 14 Week, 12 Week, 8 Week, 7 Week, 6 Week, 4 Week  
Flexibly Scheduled Course Never  
Does any section of this course have a distance education component? No  
Grading Basis Letter Grade  
Repeatable No  
Course Components Lecture  
Grade Roster Component Lecture  
Credit Available by Exam No  
Admission Condition Course No  
Off Campus Never  
Campus of Offering Columbus

## **Prerequisites and Exclusions**

Prerequisites/Corequisites 3780 or 4781 or permission of instructor  
Exclusions Not open to students with credit for 4784E  
Electronically Enforced Yes

## **Cross-Listings**

Cross-Listings

## **Subject/CIP Code**

Subject/CIP Code 45.1001  
Subsidy Level Baccalaureate Course  
Intended Rank Sophomore, Junior, Senior

## Requirement/Elective Designation

The course is an elective (for this or other units) or is a service course for other units

## Course Details

### Course goals or learning objectives/outcomes

- Introduce students to agent-based models and complexity science
- Students learn how to produce agent-based models in R
- Students develop intuition about what constitutes good modeling
- Expose students to applied literature that uses agent-based models and complexity to understand political behavior

### Content Topic List

- Complexity Science
  - Complex Adaptive Systems
  - Foundational Models
  - Agents and Resources
  - Complexity in Political Science
  - International Conflicts
  - Civil Conflicts
  - Ethnicity and Segregation
  - Identity
  - Discourse and Diffusion
  - Other Political Science Applications
  - Beyond Politics
- No

### Sought Concurrence

## Attachments

- syllabus\_POLS 4784.pdf: syllabus  
*(Syllabus. Owner: Smith, Charles William)*
- Curriculum Maps 23 June 2017.pdf: Curriculum Maps  
*(Other Supporting Documentation. Owner: Smith, Charles William)*

## Comments

## Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Smith, Charles William	06/23/2017 08:31 AM	Submitted for Approval
Approved	Herrmann, Richard Karl	06/23/2017 10:31 AM	Unit Approval
Approved	Haddad, Deborah Moore	06/23/2017 01:54 PM	College Approval
Pending Approval	Nolen, Dawn Vankeerbergen, Bernadette Chantal Hanlin, Deborah Kay Jenkins, Mary Ellen Bigler	06/23/2017 01:54 PM	ASCCAO Approval

# Complexity Science and the Study of Politics

Political Science 4784

## Syllabus

### *Course Information*

Location:

Meeting Time:

### *Instructor Information*

Bear F. Braumoeller

The Ohio State University

Department of Political Science

Office: Derby 2168

Office hours: TBA

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Semester, Year

Syllabus version 0.0

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### Course description

The goals of this course are to introduce you to agent-based models and complexity science; to teach you how to produce agent-based models in R; to help you develop an intuition about what constitutes good modeling; and to expose you to a broad swath of applied literature that uses agent-based models and complexity to understand political behavior.

Complexity science is the science of understanding how complex macro-states evolve from simple micro-conditions. It has been applied to the study of sociology, biology, and a variety of other fields, but despite its applicability to the study of collective human behavior it has seen surprisingly few applications in political science. It represents, in other words, a great opportunity for students of politics.

Agent-based models are the primary methodology utilized in complexity science. By the end of this course you will have both a firm grounding in substantive applications of agent-based models and enough technical skill in creating them that you will be able to design your own for your own purposes.

### Structure of the class

Each week's seminar will examine a wide range of studies on the subject of the week. Without losing your focus on research design and execution, you will discuss how each piece contributes to the larger theoretical dialogue that comprises the literature on the subject at hand.

When you read a piece of research for this class, you should structure your thinking in terms of three overarching questions:

1. What is good about this piece?
2. What is bad about this piece?
3. How might it be improved?

The first half of each class session will be devoted to a discussion of the readings. Discussion will focus on both the substantive application of the reading in question and on the model used to help illuminate it. The second half of each class session will be a programming tutorial that focuses on some aspect of producing agent-based models.

### Requirements

The biggest requirement every week is to do the readings and come to class ready to discuss them. Class participation makes up 30% of the final grade. Students will also use R to program and assess a series of agent-based models; these assignments will make up another 40% of the grade. For the remaining 30% of the grade, students will complete a replication of an applied agent-based model from the political science literature. This model and a writeup of its implications (5-10pp.) will be due at the end of the class.

Students are encouraged to collaborate via Canvas and to share heavily commented code via [Github gists](#). (Note that “secret” gists can be shared; they just won’t show up in a gist search.) At the meetings we will discuss the readings, share our models, and compare notes.

## Books

Four books are required for the class. A variety of articles will be made available via Canvas.

Epstein, Joshua M., and Robert Axtell. *Growing Artificial Societies: Social Science from the Bottom Up*. Complex Adaptive Systems. Washington, D.C: Brookings Institution Press, 1996.

Epstein, Joshua M. *Generative Social Science: Studies in Agent-Based Computational Modeling*. Princeton Studies in Complexity. Princeton: Princeton University Press, 2006.

Holland, John H. *Complexity: A Very Short Introduction*. First edition. Very Short Introductions 392. Oxford, United Kingdom: Oxford University Press, 2014.

Miller, John H., and Scott E. Page. *Complex Adaptive Systems: An Introduction to Computational Models of Social Life*. Princeton Studies in Complexity. Princeton, N.J: Princeton University Press, 2007.

## Academic Misconduct

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term “academic misconduct” includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct (<http://studentconduct.osu.edu>).

All students believe that they know how not to plagiarize. Many of them are wrong. Every year, many of them find that out the hard way. Don’t be one of them.

The short version is that passing off another person’s work or ideas as your own is plagiarism. That includes the unacknowledged word-for-word use or paraphrasing of another person’s work or ideas. It is not enough, for example, simply to copy and paste a passage and then cite the source at the end. If the passage is taken word-for-word, it must be in quotes as well to indicate that fact.

The University’s policies exist to ensure fairness, and violators of University regulations on academic integrity will be dealt with severely.

### Disability Services

The University strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on disability (including mental health, chronic or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: [slds@osu.edu](mailto:slds@osu.edu); 614-292-3307; [slds.osu.edu](http://slds.osu.edu); 098 Baker Hall, 113 W. 12th Avenue.

### Grading Scale

Letter	Percentage	4.0 scale
A	93-100	4
A-	90-92.9	3.7
B+	87-89.9	3.3
B	83-86.9	3
B-	80-82.9	2.7
C+	77-79.9	2.3
C	73-76.9	2
C-	70-72.9	1.7
D+	67-69.9	1.3
D	60-66.9	1
E	0-59	0

### Breakdown of Grades By Assignment

Assignment	Percentage of Final Grade
Participation	30%
Programming assignments	40%
Replication exercise	30%

## Week 1: Complexity Science

Holland, *Complexity*, chs. 1-3.

Axelrod, Robert. (1997) "Advancing the Art of Simulation in the Social Sciences." *Complexity* 3(2): 1622.

*Programming Tutorial*: R basics

## Week 2: Complex Adaptive Systems

Holland, *Complexity*, chs. 4-6.

Miller and Page, *Complex Adaptive Systems*, chs. 1, 2-4.

Epstein, Joshua M. (1999) "Agent-Based Computational Models and Generative Social Science." *Complexity* 4(5): 4160.

*Programming Tutorial*: Creating populating, and displaying an artificial "world"

## Week 3: Foundational Models

Schelling, Thomas (1971). "Dynamic Models of Segregation." *Journal of Mathematical Sociology* 1: 143-186.

Axelrod, Robert (1997). "The Dissemination of Culture: A Model with Local Convergence and Global Polarization." *Journal of Conflict Resolution* 41(2): 203-226.

Miller, John H., and Scott E. Page (2004). "The Standing Ovation Problem." *Complexity* 9(5): 8-16.

*Programming Tutorial*: Teaching agents to "see"

## Week 4: Agents and Resources

Epstein and Axtell, *Growing Artificial Societies*, chs. 1-4, 6.

*Programming Tutorial*: Programming conditional action



## Week 5: Complexity in Political Science

Cederman, Lars-Erik. (2001) "Agent-Based Modeling in Political Science." *The Political Methodologist* 10(1): 16-22.

Lustick, Ian S., and Dan Miodownik. (2009) "Abstractions, Ensembles, and Virtualizations: Simplicity and Complexity in Agent-Based Modeling." *Comparative Politics* 41(2): 223-244.

*Programming Tutorial:* Creating a data dashboard to track changes in quantities of interest

## Week 6: Complexity in Political Science II

de Marchi, Scott, and Scott E. Page. (2014) "Agent-Based Models." *Annual Review of Political Science* 17(1): 1-20.

Janssen, Marko A., and Elinor Ostrom. (2006) "Empirically Based, Agent-Based Models." *Ecology and Society* 11(2): 37. <http://www.ecologyandsociety.org/vol11/iss2/art37/>

*Programming Tutorial:* Re-creating the Schelling "neighborhood model" from week 3

## Week 7: Great Power Politics

Bremer, Stuart, and Michael Mihalka. (1977) "Machiavelli in Machina: Or Politics Among Hexagons." In *Problems of World Modeling: Political and Social Implications*, edited by Karl W. Deutsch, Bruno Fritsch, Helio Jaguaribe, and Andrei S. Markovits. Cambridge: Ballinger Publishing Company.

Cederman, Lars-Erik. (1994) "Emergent Polarity: Analyzing State-Formation and Power Politics." *International Studies Quarterly* 38(4): 501-533.

Jung, Danielle F., and David A. Lake. (2011) "Markets, Hierarchies, and Networks: An Agent-Based Organizational Ecology." *American Journal of Political Science* 55(4): 972-990.

*Programming Tutorial:* Modifying the Schelling "neighborhood model" and assessing the result. Use a wraparound grid that's at least 20x20. Track the average percentage of like neighbors over time as the grid evolves; do this at least 10 times to get a sense of how much random variation there is in the like-neighbors trajectories

## Week 8: War

Cederman, Lars-Erik. (2003) “Modeling the Size of Wars: From Billiard Balls to Sandpiles.” *American Political Science Review* 97(1): 13550.

Johnson, Dominic D. P., Nils B. Weidmann, and Lars-Erik Cederman. (2011) “Fortune Favours the Bold: An Agent-Based Model Reveals Adaptive Advantages of Overconfidence in War.” *PLoS ONE* 6(6): e20851.

*Programming Tutorial:* Re-creating the Axelrod “dissemination of culture” model from week 3

## Week 9: Civil Conflict

Epstein, Joshua M. (2002) “Modeling Civil Violence: An Agent-Based Computational Approach.” *Proceedings of the National Academy of Sciences* 99(3): 7243-50.

Kustov, Alexander. (2015) “How Ethnic Structure Affects Civil Conflict: A Model of Endogenous Grievance.” *Conflict Management and Peace Science*, published online November 25, 2015. doi:10.1177/0738894215613035.

*Programming Tutorial:* Modifying the Axelrod “neighborhood model” and assessing the result.

## Week 10: Ethnicity and Segregation

Epstein, Joshua M. (2002) “Modeling Civil Violence: An Agent-Based Computational Approach.” *Proceedings of the National Academy of Sciences* 99(3): 7243-50.

Kustov, Alexander. (2015) “How Ethnic Structure Affects Civil Conflict: A Model of Endogenous Grievance.” *Conflict Management and Peace Science*, published online November 25, 2015.

*Programming Tutorial:* Re-creating the Miller/Page “standing ovation model” from week 3

## Week 11: Identity

Lustick, Ian S. (2000) “Agent-based modelling of collective identity: testing constructivist theory.” *Journal of Artificial Societies and Social Simulation*

3(1): <http://jasss.soc.surrey.ac.uk/3/1/1.html>

Lustick, Ian S. (2002) “PS-I: A User-Friendly Agent-Based Modeling Platform for Testing Theories of Political Identity and Political Stability.” *Journal of Artificial Societies and Social Simulation* 5(3): <http://jasss.soc.surrey.ac.uk/5/3/7.html>

*Programming Tutorial:* Modifying the Miller/Page “standing ovation model” and assessing the result

## Week 12: Discourse and Diffusion

Leifeld, Philip (2014) “Polarization of Coalitions in an Agent-Based Model of Political Discourse.” *Computational Social Networks* 1(7).

Rousseau, David, and A. Maurits van der Veen. (2005) “The Emergence of a Shared Identity: An Agent-Based Computer Simulation of Idea Diffusion.” *Journal of Conflict Resolution* 49(5): 686712.

*Programming Tutorial:* Re-creating an Epstein/Axtell “sugarscape model” from week 4 and assessing the result

## Week 13: Other Political Science Applications

Fowler, James H., and Oleg Smirnov. (2005) “Dynamic Parties and Social Turnout: An Agent-Based Model.” *American Journal of Sociology* 110(4): 10701094.

Muis, Jasper. (2010) “Simulating Political Stability and Change in the Netherlands (1998-2002): An Agent-Based Model of Party Competition with Media Effects Empirically Tested.” *Journal of Artificial Societies and Social Simulation* 13(2). <http://jasss.soc.surrey.ac.uk/13/2/4.html>

*Programming Tutorial:* Modifying the Epstein/Axtell “sugarscape model” and assessing the result

## Week 14: Beyond Politics

Epstein, *Generative Social Science*, chs. 1, 3, 4, 7, and 8.

Griffin, Arthur F., and Charles Stanish. (2007) “An Agent-Based Model of Pre-historic Settlement Patterns and Political Consolidation in the Lake Titicaca Basin of Peru and Bolivia.” *Structure and Dynamics* 2(2): 147.

*Programming Tutorial: Helping students with their replication assignments*

## **Curriculum Map: BA Political Science**

Political science is the study of public power: its mobilization, exercise, and transformation by governments, political parties, interest groups, and mass behavior. Political scientists examine the causes and effects of political power and institutions in decision-making and governance at various levels, from the local to the global. We employ both scientific and humanistic perspectives and a variety of methodological approaches to analyze political structures and processes in all regions of the world.

### Learning Goals:

1. Acquire basic knowledge across the four major fields of political science--American Politics, Comparative Politics, International Relations, and Political Theory.  
-Students accomplish this goal by taking introductory and "pre-major" classes at the 1000 through 3000 level.
2. Gain deeper knowledge of the scholarly literature in one of the four major fields.  
-Students accomplish this goal primarily in courses at the 4000 and 5000 level, although 2000- and 3000-level courses may also contribute to this knowledge base.
3. Become familiar with debates about theories, research methods, and substantive issues, and learn to engage and assess contributions to the literature.  
-Students accomplish this goal primarily in courses at the 4000 and 5000 level, although 3000-level courses may also contribute to this knowledge base.
4. Develop analytic and critical thinking skills that will enable them to rigorously evaluate competing arguments and to appraise value-based claims.  
-Students accomplish this goal primarily in courses at the 4000 and 5000 level, although 1000-, 2000- and 3000-level courses may also contribute to this knowledge base.

Political science majors will acquire a knowledge foundation and an array of skills enabling them to pursue a wide variety of professional and leadership roles and to become responsible and well-informed citizens. We prepare our students for post-graduate studies in numerous areas including public policy, international affairs, law, business, and political science. Our department's challenging and supportive learning environment gives the students the confidence to assume progressively greater initiative and independence through their undergraduate years and beyond.

### Level Index:

- A = Basic
- B = Higher-level Introductory
- C = Broad-based Advanced
- D = Focused Advanced

### Overview of Program Learning Goals

Course Number	Course	Field	Credit Hours	Learning Goals			
				1	2	3	4
<b>Pre-Major Courses</b>							
1100	Intro to American Politics	American Politics	3	x			x
1200	Intro to Comparative Politics	Comparative Politics	3	x			x
1300	Global Politics	International Relations	3	x			x
2150	Voters & Elections	American Politics	3	x	x		x
2300	American Foreign Policy	International Relations	3	x	x		x
2400	Intro to Political Theory	Political Theory	3	x	x		x
<b>Field Distribution</b>							
				x	x	x	x
<b>Focus Area</b>							
					x	x	x
<b>Course Levels</b>							
	1000(A)			x			x
	2000(B)			x	x		x
	3000(B)			x	x	x	x
	4000(C)				x	x	x
	5000(D)				x	x	x

Program Learning Goals for All Undergraduate Courses

Course Number	Course	Field	Credit Hours	Learning Goals			
				1	2	3	4
<b>Level A</b>							
1100	Intro to American Politics	American Politics	3	x			x
1105	American Political Controversies	American Politics	3	x			x
1165	Intro to Politics	American Politics	3	x			x
1200	Intro to Comparative Politics	Comparative Politics	3	x			x
1300	Global Politics	International Relations	3	x			x
<b>Level B</b>							
2150	Voters & Elections	American Politics	3	x	x		x
2194	Group Studies	American Politics	3	x	x		x
2300	American Foreign Policy	International Relations	3	x	x		x
2367	Contemp Issues in American Politics	American Politics	3	x	x		x
2400	Intro to Political Theory	Political Theory	3	x	x		x
2496	Study at a Domestic Institution	Variable		x	x		x

3100	American Politics & Policy Making	American Politics	3	x	x	x	x
3115	Intro to the Policy Process	American Politics	3	x	x	x	x
3170	Political Psychology	American Politics	3	x	x	x	x
3191	Internship	American Politics	1		x	x	x
3220	Politics of the Developing World	Comparative Politics	3	x	x	x	x
3225	Post-Conflict Reconstruction	Comparative Politics	3	x	x	x	x
3290	Comparative Public Policy	Comparative Politics	3	x	x	x	x
3110(H)	Defense Policy & National Security	International Relations	3	x	x	x	x
3420	Political Theories of Democracy	Political Theory	3	x	x	x	x
3430	Political Theories of Freedom	Political Theory	3	x	x	x	x
3440	Political Theories of Justice	Political Theory	3	x	x	x	x
3450	Ethics and Public Policy	Political Theory	3	x	x	x	x
3460	Global Justice	Political Theory	3	x	x	x	x
3549	Survey Research in Political Science	Political Theory		x	x	x	x
3596.01	Politics of Crime and Punishment	American Politics	3	x	x	x	x
3596.02(H)	Nationalism & Ethnicity	Comparative Politics	3	x	x	x	x
3780	Data Literacy & Data Visualization	Variable	3	x	x	x	x
3905	Political Manipulation	American Politics	3	x	x	x	x
3910	Identity Politics	International Relations	3	x	x	x	x
3912	Political Leadership	American Politics	3	x	x	x	x
<b>Level C</b>							
4110	The American Presidency	American Politics	3		x	x	x
4115	Bureaucracy & Public Policy	American Politics	3		x	x	x
4120	US Congress	American Politics	3		x	x	x
4123	Political Crisis & Reform	American Politics	3		x	x	x
4125	American State Politics	American Politics	3		x	x	x
4126	Ohio Politics	American Politics	3		x	x	x
4127	Governing Urban America	American Politics	3		x	x	x
4127H	Honors City Politics	American Politics	3		x	x	x
4130	Law & Politics	American Politics	3		x	x	x
4132H	Supreme Court Decision Making	American Politics	3		x	x	x
4135	American Constitutional Law	American Politics	3		x	x	x
4136	Civil Liberties	American Politics	3		x	x	x
4137	Politics of Legal Decision Making	American Politics	3		x	x	x

4138	Women & the Law	American Politics	3	x	x	x
4139 (E)	Gun Politics	American Politics	3	x	x	x
4140	Black Politics	American Politics	3	x	x	x
4145	Asian American Politics	American Politics	3	x	x	x
4150	American Political Parties	American Politics	3	x	x	x
4152	Campaign Politics	American Politics	3	x	x	x
4160	Public Opinion	American Politics	3	x	x	x
4162	Religion & American Politics	American Politics	3	x	x	x
4164	Pol Participation & Voting Behavior	American Politics	3	x	x	x
4165	Mass Media & American Politics	American Politics	3	x	x	x
4170	Gender & Politics	American Politics	3	x	x	x
4175	Women, Government & Public Policy	American Politics	3	x	x	x
4190	Pol Decision Making & Public Policy	American Politics	3	x	x	x
4191	Internship	American Politics	3	x	x	x
4192	Policy Analysis	American Politics	3	x	x	x
4193	Individual Studies	American Politics	3	x	x	x
4200	Politics of Modern Democracies	Comparative Politics	3	x	x	x
4210	Politics of European Integration	Comparative Politics	3	x	x	x
4212	Dictatorship to Democracy	Comparative Politics	3	x	x	x
4214	Northern European Politics	Comparative Politics	3	x	x	x
4216	East European Politics	Comparative Politics	3	x	x	x
4218	Russian Politics	Comparative Politics	3	x	x	x
4219	European Political Development	Comparative Politics	3	x	x	x
4225H	Dem in Muslim Majority Countries	Comparative Politics	3	x	x	x
4230	Chinese Political System	Comparative Politics	3	x	x	x
4231	China: State & Society	Comparative Politics	3	x	x	x
4232	Contemporary Politics of South Asia	Comparative Politics	3	x	x	x
4235	Japanese Politics	Comparative Politics	3	x	x	x
4236	Southeast Asian Politics	Comparative Politics	3	x	x	x
4240	Latin American Politics	Comparative Politics	3	x	x	x
4241	Special Topics in Latin American Politics	Comparative Politics	3	x	x	x
4242	Incomplete Democracies	Comparative Politics	3	x	x	x
4245H	Democratic Erosion	Comparative Politics	3	x	x	x
4249	Domestic Politics of Intl Conflict	Comparative Politics	3	x	x	x



4250(H)	African Politics	Comparative Politics	3	x	x	x
4262	The New Religious Politics	Comparative Politics	3	x	x	x
4270	The Canadian Political System	Comparative Politics	3	x	x	x
4280	State & Economy	Comparative Politics	3	x	x	x
4282	Politics of Income Inequality	Comparative Politics	3	x	x	x
4285	Comparative Pol of the Welfare State	Comparative Politics	3	x	x	x
4300	Theories of International Relations	International Relations	3	x	x	x
4305	International Theory	International Relations	3	x	x	x
4310	Security Policy	International Relations	3	x	x	x
4315	International Security & Causes of War	International Relations	3	x	x	x
4318	Politics of International Terrorism	International Relations	3	x	x	x
4320	Strategies for War & Peace	International Relations	3	x	x	x
4326	Russian Foreign Policy	International Relations	3	x	x	x
4327	Politics in the Middle East	International Relations	3	x	x	x
4330	Global Governance	International Relations	3	x	x	x
4331	The United Nations System	International Relations	3	x	x	x
4332	Politics of Globalization	International Relations	3	x	x	x
4335	International Environmental Politics	International Relations	3	x	x	x
4380(H)	Pol Analysis of Intl Econ Relations	International Relations	3	x	x	x
4381	Contemp Intl Political Economy	International Relations	3	x	x	x
4385(E)	Quantitative Studies of International Conflict	International Relations	3	x	x	x
4420H	Debating Democracy	Political Theory	3	x	x	x
4450	Politics & Ethics	Political Theory	3	x	x	x
4455	Human Rights	Political Theory	3	x	x	x
4460	American Political Ideas	Political Theory	3	x	x	x
4465	Feminist Political Theory	Political Theory	3	x	x	x
4553	Game Theory for Political Scientists	Political Theory	3	x	x	x
4591	Seminar in Public Policy	American Politics	3	x	x	x
4597.01	International Cooperation & Conflict	International Relations	3	x	x	x
4597.02	Political Problems of Contemp World	Comparative Politics	3	x	x	x
4597.03	Gender & Democracy in Contemp World	Comparative Politics	3	x	x	x
4780	Thesis Research Colloquium	Variable	3	x	x	x
4781	Data Analysis in Political Science I	Variable	3	x	x	x
4782	Data Analysis in Political Science II	Variable	3	x	x	x

4784( E)	Complexity Science and the Study of Politics	Variable	3	x	x	x
4891	Topics in American Politics	American Politics	3	x	x	x
4892	Topics in Comparative Politics	Comparative Politics	3	x	x	x
4893	Topics in International Relations	International Relations	3	x	x	x
4894	Topics in Political Theory	Political Theory	3	x	x	x
4895	Topics in Public Policy	Public Policy	3	x	x	x
4910(H)	Business-Government Relations	American Politics	3	x	x	x
4920(H)	Politics in Film & Television	American Politics	3	x	x	x
4940	Politics of Immigration	Comparative Politics	3	x	x	x
<b>Level D</b>						
4998	Undergraduate Research	Variable		x	x	x
4999(H)	Thesis Research	Variable		x	x	x
5124	Urban Politics	American Politics		x	x	x
5140	Ethnic Politics in American Cities	American Politics		x	x	x
5411	Ancient & Medieval Political Thought	Political Theory	3	x	x	x
5412	Early Modern Political Thought	Political Theory	3	x	x	x
5413	19th Century Political Thought	Political Theory	3	x	x	x
5414	20th Century Political Thought	Political Theory	3	x	x	x

## Curriculum Map: BA World Politics

### Learning Goals:

1. Students have a fundamental understanding of the theories, research methods, and substantive issues that guide the study of political institutions and processes around the world at the national, cross-national and international levels.
2. Students have basic knowledge in the areas of foreign policy and security, political institutions and processes, political economy and development, and international theory.
3. Students have advanced knowledge of the scholarly literature in one of these areas.
4. Students have the analytic and critical thinking skills that are needed to rigorously evaluate competing arguments and to appraise value-based claims.

### Key to Learning Goal Levels:

F = Foundational

I = Intermediate

A = Advanced

### Prerequisite to the Major (1 Course)

Course Number	Course	Credit Hours	Learning Goals			
			1	2	3	4
1165	Intro to Politics	3	F	F		F
1200	Intro to Comparative Politics	3	F	F		F
1300	Global Politics	3	F	F		F

### Major Requirements:

**Specialization:** 4 Courses from Declared Area of Specialization

**Breadth:** 1 Course from Each of 3 Remaining Areas of Specialization

Course Number	Course	Credit Hours	Learning Goals			
			1	2	3	4
<b>Specialization: Foreign Policy &amp; Security</b>						
2300(H)	American Foreign Policy	3	I	I		I
3310(H)	Defense Policy and National Security	3	I	I	I	I
3596.01	Politics of Crime and Punishment	3	I	I	I	I
4135	American Constitutional Law	3		A	A	A
4249	Domestic Politics of International Conflict	3		A	A	A
4310	Security Policy	3		A	A	A

4315	International Security & Causes of War	3		A	A	A
4318	Politics of International Terrorism	3		A	A	A
4320	Strategies for War & Peace	3		A	A	A
4326	Russian Foreign Policy	3		A	A	A
4330	Global Governance	3		A	A	A
4335	International Environmental Politics	3		A	A	A
4385(E)	Quantitative Studies of International Conflict	3		A	A	A
4597.01	International Cooperation & Conflict	3		A	A	A
4940	Politics of Immigration	3		A	A	A
	<b>Specialization: Political Institutions &amp; Processes</b>					
4110	The American Presidency	3		A	A	A
4200	Politics of Modern Democracies	3		A	A	A
4210	Politics of European Integration	3		A	A	A
4214	Northern European Politics	3		A	A	A
4216	East European Politics	3		A	A	A
4218	Russian Politics	3		A	A	A
4219	European Political Development	3		A	A	A
4225H	Democracy in Muslim Majority Countries	3		A	A	A
4230	Chinese Political System	3		A	A	A
4231	China: State & Society	3		A	A	A
4232	Contemporary Politics of South Asia	3		A	A	A
4235	Japanese Politics	3		A	A	A
4236	Southeast Asian Politics	3		A	A	A
4240	Latin American Politics	3		A	A	A
4242	Incomplete Democracies	3		A	A	A
4262	The New Religious Politics	3		A	A	A
4270	The Canadian Political System	3		A	A	A
4285	The Comparative Politics of the Welfare State	3		A	A	A
4331	The United Nations System	3		A	A	A
	<b>Specialization: Political Economy &amp; Development</b>					
3220	Politics of the Developing World	3	I	I	I	I
3225	Post-conflict Reconstruction	3		A	A	A
3290	Comparative Public Policy	3		A	A	A
4210	Politics of European Integration	3		A	A	A

4216	East European Politics	3		A	A	A
4219	European Political Development	3		A	A	A
4230	Chinese Political System	3		A	A	A
4231	China: State & Society	3		A	A	A
4232	Contemporary Politics of South Asia	3		A	A	A
4236	Southeast Asian Politics	3		A	A	A
4240	Latin American Politics	3		A	A	A
4241	Special Topics in Latin American Politics	3		A	A	A
4242	Incomplete Democracies	3		A	A	A
4245H	Democratic Erosion	3		A	A	A
4250(H)	African Politics	3		A	A	A
4280	State & Economy	3		A	A	A
4282	Politics of Inequality	3		A	A	A
4285	Comparative Politics of the Welfare State	3		A	A	A
4327	Politics in the Middle East	3		A	A	A
4380(H)	Political Analysis of International Economic Relations	3		A	A	A
4381	Comparative International Political Economy	3		A	A	A
4940	The Politics of Immigration	3		A	A	A
<b>Specialization: International Theory</b>						
3420	Political Theories of Democracy	3	I	I	I	I
3430	Political Theories of Freedom	3	I	I	I	I
3460	Global Justice	3	I	I	I	I
3596.02(H)	Nationalism and Ethnicity	3	I	I	I	I
3910	Identity Politics	3	I	I	I	I
3912	Political Leadership	3	I	I	I	I
4300	Theories of International Relations	3		A	A	A
4305	International Theory	3		A	A	A
4330	Global Governance	3		A	A	A
4450H	Politics & Ethics	3		A	A	A
4455	Human Rights	3		A	A	A

## Curriculum Map: BS Political Science

### Learning Goals:

1. Students have a fundamental understanding of the theories, research methods, and substantive issues that guide the study of politics.
2. Students have a basic knowledge across three of the four major fields of Political Science: American Politics, Comparative Politics, International Relations, and Political Theory.
3. Students have advanced knowledge of the methods of research design and data analysis as used in the discipline of Political Science.
4. Students develop analytic and critical thinking skills that will enable them to rigorously evaluate competing arguments and to appraise value-based claims.

### Key to Learning Goal Levels:

F = Foundational

I = Intermediate

A = Advanced

### Prerequisite to the Major (1 Course)

Course Number	Course	Credit Hours	Learning Goals			
			1	2	3	4
1100	Intro to American Politics	3	F		F	F
1200	Intro to Comparative Politics	3	F		F	F
1300	Global Politics	3	F		F	F
1165	Intro to Politics	3	F		F	F
2150	Voters & Elections	3	I		I	I
2300	American Foreign Policy	3	I		I	I
2400	Intro to Political Theory	3	I		I	I

### Core (4 Courses)

Course Number	Course	Credit Hours	Learning Goals			
			1	2	3	4
3780	Data Visualization	3			I	I
4781(H)	Data Analysis in Political Science I	3			A	A
4782	Data Analysis in Political Science II	3			A	A
<b>AND one of the following courses:</b>						
3549	Survey Research in Political Science	3			I	I
<b>OR</b>						
4192	Policy Analysis	3			A	A

**OR**

4553	Game Theory for Political Scientists	3			A	A
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Breadth Requirement (3 Courses): 1 Course from 3 of 4 Subfields

Course Number	Course	Credit Hours	Learning Goals			
			1	2	3	4
<b>American Politics</b>						
2150(H)	Voters & Elections	3				
2194.01	Group Studies	3				
3100	American Politics & Policy Making	3				
3115	Intro to the Policy Process	3				
2367(H)	Contemporary Issues American Politics	3				
3170	Political Psychology	3				
3310(H)	Foreign Policy and National Security	3				
3596.01	Politics of Crime & Punishment	3				
3905	Political Manipulation	3				
3912	Political Leadership	3				
4110	The American Presidency	3		A	A	A
4115	Bureaucracy & Public Policy	3		A	A	A
4120	US Congress	3		A	A	A
4125	American State Politics	3		A	A	A
4126	Ohio Politics	3		A	A	A
4127	Governing Urban America	3		A	A	A
4130	Law & Politics	3		A	A	A
4132H	Supreme Court Decision Making	3		A	A	A
4135	American Constitutional Law	3		A	A	A
4136	Civil Liberties	3		A	A	A
4137	Politics of Legal Decision Making	3		A	A	A
4138	Women & the Law	3		A	A	A
4139(E)	Gun Politics	3		A	A	A
4140	Black Politics	3		A	A	A
4145	Asian American Politics	3		A	A	A
4150	American Political Parties	3		A	A	A
4152	Campaign Politics	3		A	A	A

4160	Public Opinion	3		A	A	A
4162	Religion & American Politics	3		A	A	A
4164	Political Participation & Voting Behavior	3		A	A	A
4165	Mass Media & American Politics	3		A	A	A
4170	Gender & Politics	3		A	A	A
4175	Women, Government & Public Policy	3		A	A	A
4190	Political Decision Making & Public Policy	3		A	A	A
4191	Internship	3		A	A	A
4192	Policy Analysis	3		A	A	A
4193	Individual Studies	3		A	A	A
4891(H)	Topics	3		A	A	A
4910(H)	Business-Government Relations	3		A	A	A
5124	Urban Politics	3		A	A	A
5140	Ethnic Politics in American Cities	3		A	A	A
<b>Comparative Politics</b>						
2194.02	Group Studies	3	I		I	I
3220	Politics of the Developing World	3	I	I	I	I
3225	Post-conflict Reconstruction	3		A	A	A
3290	Comparative Public Policy	3		A	A	A
3596.02	Nationalism and Ethnicity	3		I	I	I
4200	Politics of Modern Democracies	3		A	A	A
4210	Politics of European Integration	3		A	A	A
4212	Dictatorship to Democracy	3		A	A	A
4214	Northern European Politics	3		A	A	A
4216	East European Politics	3		A	A	A
4218	Russian Politics	3		A	A	A
4219	European Political Development	3		A	A	A
4225H	Democracy in Muslim Majority Countries	3		A	A	A
4230	Chinese Political System	3		A	A	A
4231	China: State & Society	3		A	A	A
4232	Contemporary Politics of South Asia	3		A	A	A
4235	Japanese Politics	3		A	A	A
4236	Southeast Asian Politics	3		A	A	A
4240	Latin American Politics	3		A	A	A



4241	Special Topics in Latin American Politics	3		A	A	A
4242	Incomplete Democracies	3		A	A	A
4245	Democratic Erosion	3		A	A	A
4249	Domestic Politics of International Conflict	3		A	A	A
4250	African Politics	3		A	A	A
4262	The New Religious Politics	3		A	A	A
4270	The Canadian Political System	3		A	A	A
4280	State & Economy	3		A	A	A
4282	Politics of Inequality	3		A	A	A
4285	Comparative Politics of the Welfare State	3		A	A	A
4597.02/H/E	Political Problems of the Contemporary World	3		A	A	A
4597.03	Gender & Democracy in the Contemporary World	3		A	A	A
4892(H)	Topics	3		A	A	A
4940	Politics of Immigration	3		A	A	A
<b>International Relations</b>						
2194.03	Group Studies	3	I		I	I
2300(H)	American Foreign Policy	3	I		I	I
3310(H)	Defense Policy and National Security	3	I	I	I	I
3910	Identity Politics	3	I	I	I	I
4300	Theories of International Relations	3		A	A	A
4305	International Theory	3		A	A	A
4310	Security Policy	3		A	A	A
4315	International Security & Causes of War	3		A	A	A
4318	Politics of International Terrorism	3		A	A	A
4320	Strategies for War & Peace	3		A	A	A
4326	Russian Foreign Policy	3		A	A	A
4327	Politics in the Middle East	3		A	A	A
4330	Global Governance	3		A	A	A
4331	The United Nations System	3		A	A	A
4332	Politics of Globalization	3		A	A	A
4335	International Environmental Politics	3		A	A	A
4380(H)	Political Analysis of International Economic Relations	3		A	A	A
4381	Contemporary International Political Economy	3		A	A	A
4385(E)	Quantitative Studies of International Conflict	3		A	A	A

4597.01(H)	International Cooperation & Conflict	3		A	A	A
4893(H)	Topics	3		A	A	A
4784( E)	Complexity Science and the Study of Politics	3		A	A	A
<b>Political Theory</b>						
2194.04	Group Studies	3				
2400(H)	Intro Political Theory	3				
3420	Political Theories of Democracy	3				
3430	Political Theories of Freedom	3				
3440	Political Theories of Justice	3				
3450	Ethics and Public Policy	3				
3460	Global Justice	3				
4420H	Debating Democracy	3		A	A	A
4450	Politics & Ethics	3		A	A	A
4455	Human Rights	3		A	A	A
4460	American Political Ideas	3		A	A	A
4465	Feminist Political Theory	3		A	A	A
4894	Topics	3		A	A	A
5411	Justice, Sin & Virtue: Ancient and Medieval Pol Thought	3		A	A	A
5412	Life, Liberty & Property: Early Modern Pol Thought	3		A	A	A
5413	Democracy, Equality & Revolution: Modern Pol Thought	3		A	A	A
5414	Liberalism, Totalitarianism & Empire: Contemp Pol Thought	3		A	A	A