Supplemental Information (SI) Gender, Race, Age and National Origin Predict Whether Faculty Assign Female-Authored Readings in Graduate Syllabi

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SI: Methods

Data Collection

Our collection of syllabi comes from a broader dataset that we compiled called GRADS (the GRaduate Assignments DataSet). GRADS contains data from of 840 syllabi in Microsoft Word or PDF format. As a multilevel dataset, GRADS includes 137,305 (non-unique) authors, 88,673 (non-unique) readings, 606 (unique) instructors of courses, and 95 US-based political science departments. (As part of another study, we also collected 65 reading lists from APSA and from project affiliates, but these documents are not relevant to this study and therefore we do not analyze or discuss them here.) We employed multiple modes of data collection to assemble a dataset Data collection had five phases:

- 1. In an exploratory phase prior to beginning this project, in the fall of 2015, 29 graduate syllabi were collected through online searches for the top ten graduate programs in political science, as ranked by US News and World Reports.
- 2. Professor David Samuels at the University of Minnesota kindly shared with us a collection of 131 comparative politics syllabi that he collected in the fall of 2016, through web searches.
- 3. In September 2016, we collected 301 syllabi through a national survey of faculty disseminated by the APSA Research and Development Division. Only respondents who submitted syllabi are included in GRADS.
- 4. We invited Ph.D. students from the top 50 political science Ph.D. programs in the U.S. (per US News and World Reports) to serve as project affiliates. With the help of 27 project affiliates, we obtained 450 syllabi.

Duplicate syllabi, as well as older versions of the same course taught by the same professor, were removed from the final dataset. In the following two sections, we discuss the representativeness of the survey respondents (phase 4) and the project affiliates (phase 5).

Table S1 below presents the breakdown of the sample of syllabi by subfield. The subfield of comparative politics is overrepresented due to our collection strategies. Nonetheless, the dataset constitutes the largest collection of graduate syllabi to date.

Table S1. Characteristics of the GRADS Dataset

	N Syllabi
All documents	840
Comparative politics	268
International relations	162
American politics (including judicial/courts)	163
Methods	179
Theory	94
Political economy	60
Public policy/Public administration	15
Political psychology	21
Gender/Identity	22

Note: Counts by subfield sum to more than the total because some syllabi are counted in multiple subfields.

Across the various data collection components, the GRADS sample contains 605 instructors. Table S2 presents their demographic data, compared with other relevant samples (an abbreviated version of this table is presented in the main text). In our full instructor-level data, our missingness rates for instructor demographics are the following: gender 0.8% (n=5 instructors); age 12.1% (n=73); rank 1.5% (n=9); PhD country 2.8% (n=17); country of origin 72.7% (n=440); race 75.7% (n=458).

		APSA	APSA			
		Instructors at	Instructors at Ph D			European Political
	GRADS	Ph.D.	Granting	APSA	APSA	Science
	Sample	Granting	Institutions	Members	Graduate	Association
	2016 Survey	Institutions, 2017-18 ¹	2015 Survey ²	2017 Survey ³	Placement 2016 Survey ⁴	(EPSA) Members 2019 Survey⁵
Gender						
Male	71.7%	71.5%	62.8%	65%	60.2%	56.7%
Female	27.4%	28.5%	37.2%	35%	39.8%	34.7%
Unreported	0.8%	NA	NA	NA	0.7%	8.6%
Age						
<= 34				30.4%		
<= 35	11.7%					
35-44 / 36-45	30.4%			25.9%		
45-54 / 46-55	23.4%			18.51%		
55-64 / 56-65	14.9%			11.84%		
65+ / 66+	8.5%			13.2%		

Table S2: Summary Statistics: GRADS Sample vs. Relevant Populations

	GRADS Sample 2016 Survey	APSA Instructors at 27 Largest Ph.D. Granting Institutions, 2017-18 ¹	APSA Instructors at Ph.D. Granting Institutions 2015 Survey ²	APSA Members 2017 Survey ³	APSA Graduate Placement 2016 Survey ⁴	European Political Science Association (EPSA) Members 2019 Survey ⁵
Unreported	11.0%					
Race/Ethnicity						
Non-Hispanic White	87.3%	82.1%		76%	67.1%	
Latino or Hispanic American	1.9%	3.4%		5.9%	NA	
Black, Afro- Caribbean or African American	1.9%	3.2%		4.3%	5.3%	
Asian (East Asian, Asian-American, or South Asian)	2.5%	4.9% (incl. Arab, Middle Eastern)		9.5%	8.7%	
Middle Eastern or Arab American	1.3%	NA		1.5%	3.5%	
Other	0.6%	0.6%		2.5%	7.2%	
Unreported	4.5%	5.9%				
Rank						
Assistant Professor	20.3%	12.8%				
Associate Professor (Tenured or untenured)	26.5%	15.8%				
Full Professor	50.5%	35.8%				
Emeritus	NA	15.8%				
Non-TT	1.3%	20.5%				
National Origin						
US	87.9%				65.7%	
International	12.1%				26%	

Sources: 1) APSA 2018b; 2) APSA 2016; 3) APSA 2019 4) APSA 2018a: Tables 1 and 2; 5) EPSA 2019

Representativeness of Graduate Student Project Affiliates

In the fall of 2016, we attempted to recruit graduate student project affiliates to contribute their departments' syllabi in the 50 universities ranked in the top 50 programs by US News and World Reports (many universities were tied in ranking). To identify potential project affiliates, we gathered names of students with an interest in gender and politics—or if none were available,

American politics—from department websites. We also contacted department chairs and administrative offices to ask for help in identifying graduate student leaders. We then emailed the students who had been identified. In the end, 27 Project Affiliates from 27 universities provided syllabi. Some potential Project Affiliates responded to initial emails and agreed to participate but did not end up returning syllabi.

Figure S1 below presents the distribution of responses from contacted departments, by rank. A logistic regression model indicates that there are no statistically significant differences between responding and non-responding departments, by rank.



Figure S1. Rank of Responding and Non-Responding Departments

In total, 169 potential project affiliates were contacted, and 27 eventually contributed syllabi: 14 women and 13 men. While female potential project affiliates were slightly less likely to respond to recruitment emails than were male project affiliates, the effect of gender is not statistically significant at p < .10. The difference in response rates might be because student leaders (proportionately more likely to be male) were more likely to respond than were students interested in gender and politics.

Representativeness of Respondents to the APSA Faculty Survey

The APSA faculty survey was sent to 2,640 faculty working in US-based Ph.D. granting institutions, of whom 312 opened the survey. Out of this 312, 6 individuals (1.9%) declined to

give informed consent.¹ Of the 306 individuals who gave informed consent, 91 proceeded to the following page, but subsequently failed to answer any survey questions. Thus, in this section, we report results for the 215 individuals who gave informed consent and for whom we have any demographic data. Out of 215 respondents, 160 uploaded syllabi while 55 did not.

As Figure S2 shows, female respondents were somewhat more likely to upload syllabi than male respondents. While 31.9% of the respondents who uploaded syllabi were female, only 23.6% of those who did not upload syllabi were female. However, in a bivariate logistic regression model, the effect of gender is not statistically significant.



Figure S2. Gender of Survey Respondents, by Whether They Uploaded Syllabi

As Figure S3 shows, those who did not contribute syllabi were substantially younger than those who did contribute syllabi. While nearly half of those aged 20-35 did not upload syllabi, the proportions in other age groups were much smaller. In a bivariate logistic regression model, the effect of age is statistically significant. It seems likely that many respondents aged 20-35 may not have yet taught PhD level courses, leading to their lower rates of uploading syllabi.

¹ Due to a glitch in the survey, people who failed to give informed consent were allowed to enter the survey. Two of the six people who declined actually responded to the survey and uploaded syllabi, but their responses and syllabi are discarded.



Figure S3. Age of Survey Respondents, by Whether They Uploaded Syllabi

There was also some racial imbalance, as seen in Table S3. White respondents constituted 89.4% of those who uploaded syllabi and 70.9% of those who did not upload syllabi. Hispanic/Latino respondents, however, constituted more than 10% of those who did not upload syllabi but only 1.3% of those who did. In a bivariate logistic regression model, the effect of race is statistically significant.

	With Syllabi	Without Syllabi
White	89.4%	70.9%
Hispanic/Latino	1.3%	10.9%
Black	1.9%	1.8%
Asian	2.5%	5.5%
American Indian/Alaskan	0.0%	0.0%
Middle Eastern/North African	0.6%	1.8%
Pacific Islander	0.0%	0.0%
Decline to respond	1.3%	3.6%
Other race	0.6%	0.0%

Table S3. Race of Survey Respondents, by Whether They Uploaded Syllabi

In addition, those who did not contribute syllabi were much less likely to have been raised in the United States. 89.4% of those who uploaded syllabi said that they grew up in the United States while 76.4% of those who did not upload syllabi said the same. In bivariate logistic regression models, the effect of national origin is statistically significant.

As Table S4 shows, those who uploaded syllabi were substantially more senior. Full professors constituted more than half (50.6%) of those that uploaded syllabi, while they constituted less than a quarter of those who did not upload syllabi. Meanwhile, most non-tenure stream respondents failed to upload syllabi, perhaps because they do not teach graduate courses.

Academic Rank	cademic Rank With Syllabus	
Non-tenure Stream	1.9%	27.3%
Assistant Professor	20.6%	16.4%
Associate Professor	26.3%	29.1%
Full Professor	50.6%	23.6%
Decline to respond	0.6%	3.6%

Table S4. Rank of Survey Respondents, by Whether They Uploaded Syllabi

Table S5 presents results of a logistic regression model predicting whether there were systematic differences between those who uploaded syllabi and those who did not. We used dummy variables for female; academic rank; race (white); national origin (US); and country of PhD. Age cohort and year of PhD were omitted because of multicollinearity with academic rank; academic rank more strongly predicts response rate than the other two variables.

Table S5. Determinants of Whether a Respondent Uploaded Syllabi (Logistic Regression Model)

DV = Syllabi	Coefficient	Std. Err.	Р				
Gender (Female)	0.831	0.448	0.063				
Non-Tenure Stream	-3.280	0.769	0.000				
Assistant Professor	-0.541	0.494	0.274				
Associate Professor	-0.783	0.428	0.068				
Race (White)	0.541	0.497	0.276				
National Origin (United States)	0.407	0.544	0.454				
Country of PhD (United States)	0.262	1.030	0.799				
Constant	.522	1.135	0.646				
n=212							
R ² = 0.170							

Note: Omitted category for academic rank corresponds to full professors.

In multivariate analysis, there are two significant determinants of uploading syllabi. By far the most important factor determining whether one contributes syllabi is rank. Non-tenure stream faculty have a predicted probability of .21 of uploading syllabi. By contrast, the predicted probabilities are .77 for assistant professors, .74 for associate professors, and .85 for full professors. In addition, gender is statistically significant at p=.08 once one controls for rank (it is not statistically significant before controlling for rank because women are less likely to be associate or full professors). Controlling for rank, the predicted probability of a female respondent uploading syllabi is .82, while it is .72 for men.

Analysis of National Origin

Table S6 displays the national origin of the instructors in the final sample. Only small proportions of the instructors in the sample were trained outside the US—and entirely in wealthy Western countries. Larger proportions of our instructors were born outside the US, in both developing and developed countries with a wide range of levels of gender inequality.

	Female In	structor(s)	All-Male	Instructor(s)
Country	Ph.D.	Birth	Ph.D.	Birth
USA	230	80	557	195
Canada		3	3	1
Germany			2	5
Ireland			2	2
Israel		2	2	
UK	3		6	1
Italy			1	
Spain	2			
Australia				1
Bulgaria		2		
Colombia				1
India		2		
Japan				1
Nepal				2
Netherlands		3		
Poland				1
Serbia		2		
Sweden				1
Taiwan		1		
Total	235	95	573	211

Table S6. Instructors' National Origin

Note: Birth countries are available only in the survey-sample dataset.

Coding of Author Gender and Instructor Gender and Age

To code authors' gender as male or female, we first created a list of 408 known scholars (that is, combinations of given names + surnames) whose genders proved to be miscoded or uncodable. Remaining names were coded using a list of given (i.e. first) names compiled from US and UK censuses and social media data. We excluded 285 corporate authors (e.g. World Bank) and 54 readings where there was no identified author (e.g. Bible). Gender is missing for only 76 authors (a rate of 0.055%).

Instructors who responded to the survey reported their own demographic information. For instructors who did not respond to the survey, gender was coded based on the aforementioned names list, and, in the case of doubts, online instructor biographies. Instructor age and location of Ph.D. were coded based on online CVs and biographies, assuming that the instructor was 22 years of age at completion of the bachelor's degree.

SI: Results

Subfield-Specific Results

As discussed in the text, Figure S4 shows that representation of female-authored work is low in every major subfield of political science. The only exception is courses on gender and identity. Even in that subfield, however, the proportion of assigned readings authored by women is lower than the proportion of faculty who are women.



Figure S4. The Percentage of Readings with Single and Mixed Gender Authorship, by Subfield within Political Science

Full Multivariate Results

Table S7 presents the full results for the analysis presented in text. In addition to the independent variables discussed in the text, the models control for the year of the syllabus, and the subfield. Because a single syllabus can be coded in multiple subfields, there is no excluded category.

	Entire Sample				Survey Subsample			
	All faculty	Male-Only Instructor(s)	Female Instructor(s)	All faculty	Male-Only Instructor(s)	Female Instructor(s)		
Female Gender	0.607**			0.780**				
	(0.066)			(0.113)				
Age	0.029	-0.017	0.113**	0.098	-0.068	0.289**		
	(0.028)	(0.030)	(0.057)	(0.064)	(0.065)	(0.119)		
Non-US PhD	-0.670**	-0.567**	-0.584**	-1.336**	0.000	-0.905**		
	(0.199)	(0.286)	(0.206)	(0.616)		(0.455)		
Gender Ineq. Index of Birth Country				-3.376**	-2.192	-2.625		
				(1.584)	(1.632)	(2.306)		
Non-White Race/Ethnicity				0.367	0.617**	-0.068		
				(0.290)	(0.284)	(0.360)		
Year of Syllabus	0.022	0.043**	-0.014	0.022	0.055*	0.032		
	(0.017)	(0.020)	(0.030)	(0.037)	(0.033)	(0.067)		
Comparative Politics	0.201**	0.321**	0.028	0.191	0.329*	0.149		
	(0.086)	(0.098)	(0.142)	(0.156)	(0.193)	(0.220)		
International Relations	0.302**	0.369**	0.247*	0.416**	0.549**	0.352		
	(0.088)	(0.103)	(0.140)	(0.134)	0.151	(0.219)		
American Politics	-0.041	-0.056	0.034	-0.216	-0.227	-0.141		
	(0.093)	(0.110)	(0.158)	(0.154)	(0.205)	(0.206)		
Methodology	-0.304**	-0.310**	-0.247	-0.352*	-0.514**	-0.082		
	(0.106)	(0.120)	(0.201)	(0.191)	(0.244)	(0.302)		
Political Theory	0.531**	0.330**	0.842**	0.764**	0.264	1.450**		
	(0.142)	(0.156)	(0.270)	(0.215)	(0.251)	(0.341)		
Political Economy	-0.150	-0.067	-0.309	-0.260**	-0.199	-0.089		
	(0.096)	(0.100)	(0.189)	(0.119)	(0.175)	(0.211)		
Gender/Identity	1.769**	1.680**	1.788**	1.524**	2.646**	1.261**		

Table S7. Instructor and Syllabus Characteristics as Determinants of Proportion of Readings on Syllabus with Female First or Only Authors (Full Models Corresponding to Table 1)

		Entire Sample			Survey Subsample		
	All faculty	Male-Only Instructor(s)	Female Instructor(s)	All faculty	Male-Only Instructor(s)	Female Instructor(s)	
	(0.246)	(0.450)	(0.281)	(0.501)	(0.240)	(0.479)	
Constant	-47.076	-88.743**	26.577	-45.682	-112.380*	-65.238	
	(34.990)	(39.756)	(60.545)	(74.107)	(67.042)	(135.791)	
Number of Observations	684	494	190	234	152	81	

Note: Results from fractional logistic regression models with robust standard errors. Models also control for year and subfield/topic of syllabus. The syllabus is the unit of analysis. Coefficients are statistically significant at p < .10 or p < .05.

Multivariate Results Coding Courses with Both Male and Female Instructors as Being Taught by Men

Table S8 presents the full results for the analysis presented in text. In addition to the independent variables discussed in the text, the models control for the year of the syllabus, and the subfield. Because a single syllabus can be coded in multiple subfields, there is no excluded category.

	Entire Sample			Subsample with Survey Data		
	All Instructors	Male-Only Instructor(s)	Female Instructor(s)	All Instructors	Male-Only Instructor(s)	Female Instructor(s)
Gender: Any Male Instructor	-0.595*			-0.699*		
	(0.068)			(0.115)		
Age	0.035	-0.023	0.162*	0.087	-0.107	0.312*
	(0.028)	(0.030)	(0.060)	(0.066)	(0.066)	(0.116)
Non-US PhD	-0.597*	-0.525*	-0.522	-1.296*	-	-
	(0.200)	(0.234)	(0.299)	(0.626)	-	-
Gender Ineq. Index of Birth Country				-3.374*	-1.782	-2.493
				(1.607)	(1.821)	(2.431)
Non-White Race/Ethnicity				0.336	0.585*	-0.126
				(0.289)	(0.289)	(0.370)
Number of Observations	684	508	176	234	155	77

Table S8. Instructor Characteristics as Determinants of Proportion of Readings with Female First or Only Author(s), Coding Courses with Any Male Instructor as Being Taught by Men

Notes: Results from fractional logistic regression models. Unit of analysis is the syllabus. Robust standard errors reported in parentheses. Models also control for year of course and subfield/topic of syllabus. Coefficients are statistically significant at * p < .10 or ** p < .05.

Self-Citation Results

As discussed in the text, male instructors are slightly but statistically significantly more likely to assign their own work. See Figure S5.



Figure S5. Rates of Self-Citation are Slightly Lower in Courses with Female Instructors.

Notes: Whiskers represent 95% confidence intervals.

Analysis by Publication Year

As Figure S6 demonstrates, the size of the gender gap in assigning works authored by women varies by publication year. We find evidence that more recently published syllabi have greater representation of women's scholarship than those published decades prior.



Figure S6. Gender Representation, by Publication Year and Instructor Gender.

Notes: Whiskers represent 95% confidence intervals. In co-taught courses, instructor is coded as female if either instructor is female.

Analysis of Instructor Rank

Figure S7 presents analysis by instructor rank, as discussed in the text. Rank is associated with female instructors' rates of assigning work authored by women, but not that of male instructors. Among women, assistant professors assign fewer works authored by women than do associate or full professors.



Figure S7. Percentage of Readings with Female First Author, by Faculty Gender and Rank.

Notes: Whiskers represent 95% confidence intervals. In co-taught courses, instructor is coded as female if either instructor is female.

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See a searchable, user-friendly version of the GRADS data here: http://gradtraining.socsci.uci.edu/. The full dataset can be downloaded here: https://doi.org/10.7910/DVN/UNWIHE

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