
TO: The Columbia University Senate
DATE: September 26, 2025
RE: 2025 Quinquennial Reapportionment Report

EXECUTIVE SUMMARY

Section 21 of the Statutes as amended requires the Senate to reapportion eighty-five of its 111 seats every five years among the faculties of the Columbia Corporation and its affiliated institutions.¹ Seats subject to reapportionment are 43 for tenured officers of instruction, 17 for non-tenured officers of instruction, and 25 for students.

The Elections Code provides that the Elections Commission shall “advise the Senate” on the quinquennial reapportionment of seats.² This report responds to this charge by presenting (1) populations of each constituency to be reapportioned, (2) their changes since the last reapportionment, and (3) the Commission’s recommendations for reapportionment of seats. Based upon its analysis of the population data and application of relevant provisions of the amended Statutes (“the Statutes”) and Elections Code, the Commission recommends no changes in the apportionment of seats. This recommendation is the result of calculations described herein that could have resulted in changes

Reapportionment last occurred in 2020 and was effective for the Senate’s fall 2020 elections. The present reapportionment will be effective until the next scheduled reapportionment in 2030.

This report proceeds with an overview of reapportionment followed by a description of the Commission’s process, analysis, and specific recommendations. Detailed population data are presented as appendices.

OVERVIEW OF SENATE REAPPORTIONMENT

Because the University Senate was founded as a representative assembly within a dynamic institution, the need for its periodic reapportionment is clear. Inevitable change in the relative size of the University’s faculties and schools requires occasional checking and possible reallocation of seats to ensure the proportion of representation among the Senate’s constituencies remains stable over time.

In approaching its advisory role, the Commission was aided tremendously by Senate staff, especially Geraldine McAllister. Additionally, staff in the Provost’s Office of Planning and Institutional Research (OPIR)—particularly Cynthia Langin—and Office of Academic Appointments—particularly Zeid Sitnica—provided high-quality population data for the Senate’s various constituencies, as well as

¹ Statutes, §§ 21(a)(1), (a)(2) and (b), *available at* http://secretary.columbia.edu/files/secretary/university_charters_and_statutes/University%20Charters%20and%20Statutes_June%202013.pdf. We assume that the amendments to establish the Climate School have been adopted.

² *Id.* § 6.

guidance on how to interpret the data. The Commission is grateful to these individuals for their assistance.

PROCESS, ANALYSIS, AND RECOMMENDATIONS

The Statutes provide for periodic reapportionment of only three of the Senate’s eleven constituencies: (I) tenured officers of instruction, (II) non-tenured officers of instruction (“TTOT”) and (III) students. In each case, the apportionment language varies; so in each case, the Commission adjusted its methodology accordingly, as described below.

I. TENURED OFFICERS OF INSTRUCTION

The relevant language of the Statutes reads as follows:

The forty-two memberships for officers of instruction having an appointment without stated term [i.e., tenured] as professor or associate professor . . . shall be apportioned by the University Senate every five years among the Faculties of the Columbia Corporation in proportion to the number of such officers of instruction; provided, however, that each such faculty, other than the Faculties of Arts and Sciences and Health Sciences, which shall not be entitled to elect any members, shall be entitled to elect at least one member; and for the purposes of this paragraph (1), apportionment and election of members from the Faculties of the College, General Studies and the Graduate School of Arts and Sciences, treated as one group, shall be among the three disciplines of the Social Sciences, Humanities, and Pure Sciences, respectively [Section 21(a)(1)]

In December 2020, and in October 2021 the University Senate approved the following revised version of this section:

1. The forty-three memberships for officers of instruction having an appointment without stated term as professor or associate professor as defined in Sections 60 or 61 shall be apportioned by the University Senate every five years among the Faculties of the Columbia Corporation in proportion to the number of such officers of instruction. Each Faculty shall be entitled to elect at least one member, except for the Faculties of Columbia College, General Studies, the Graduate School of Arts and Sciences, the Arts, Professional Studies, and Health Sciences, which shall not be entitled to elect any members, except as specified below. For the purposes of this paragraph (1), and paragraph (2) below, for the apportionment and election of members from the Faculty of Arts and Sciences, each division of the Faculty of Arts and Sciences shall be treated as a separate Faculty.

The five divisions of the Faculty of Arts and Sciences are as follows:

- i. The Division of the Humanities shall consist of the following departments: Art History and Archaeology; Classics; East Asian Languages and Cultures; English and Comparative Literature; French and Romance Philology; Germanic Languages; Italian; Latin American and Iberian Cultures; Middle Eastern, South Asian, and African Studies; Music; Philosophy; Religion; and Slavic Languages.
- ii. The Division of Social Sciences shall consist of the following departments: African American and African Diaspora Studies, Anthropology, Economics, History, Political Science, and Sociology.
- iii. The Division of Natural Sciences shall consist of the following departments: Astronomy; Biological Sciences; Chemistry; Earth and Environmental Sciences; Ecology, Evolution, and Environmental Biology; Mathematics; Physics; Psychology; and Statistics.
- iv. The School of the Arts.
- v. The School of Professional Studies.

The chief discrepancies are the treatment of the Climate School, and the description of the Faculty of Arts and Sciences. The Climate School question is simple: did the addition of the Climate School and the Senate proposed revision of the Statutes increase the number of tenured Senators from 42 to 43? The Faculty of Arts and Sciences is a more complicated issue that we discuss in a special section below.

Population data. Population data for this constituency were provided by OAA. These data are current as of July 10, 2025 and are summarized in Appendix A.1.

Because the Statutes specify officers of instruction having an appointment “without stated term,” included in this constituency are both traditionally tenured officers and those with “tenure of title.”³ The Senate Bylaws also specify that officers with “tenure of title” should be considered in the count of tenured faculty.

³ This treatment is consistent with past practice. Additionally, *see* Columbia University Faculty Handbook (2008), <http://www.columbia.edu/cu/vpaa/handbook/instruction.html#tenureoftitle> (“Certain full-time officers of instruction in the Faculties of Dental Medicine, Medicine, Nursing, and Public Health who are not eligible for tenure may nonetheless receive tenure of title. While *those appointments are without stated term*, they do not provide a guarantee of salary from the University.”) (emphasis added).

Apportionment methodology. Due to the specific numbers of tenured officers in each faculty, and the fixed number of tenured officer seats, the ideal number of seats for each constituency is fractional and simple rounding awards does not guarantee the right total number of seats will be awarded. Therefore, it is necessary to use a more sophisticated apportionment method that ensures both proportional representation and assignment of the correct number of seats as designated by statute.

The mathematical problem of assigning seats subject to an integer constraint has been well studied and several different methods have been used or proposed. The Balinski-Young theorem (1982)⁴ shows that only “divisor methods” can simultaneously satisfy two highly desirable properties: population monotonicity (an increase in the population of school A with school B’s population unchanged will not cause a seat to be transferred from A to B) and house monotonicity (if the total number of seats increases, no school gets fewer seats). Divisor methods have 4 steps:

1. Choosing a trial ideal district size—“the divisor.”
2. For each school, dividing its population by the divisor to find a quotient—the number of seats it would have if the divisor were used. The quotient will almost never be an integer.
3. Rounding the quotient to an integer to get an integral number of seats for each school. More about this step later.
4. Adding up the rounded number of seats. If the sum of seats is 43, stop—the job is done. If the sum is less than 43, reduce the divisor and try again. If the sum is greater than 43, increase the divisor and try again.

Because divisor methods guarantee both population and house monotonicity, we will confine attention to these.

(Balinski and Young (1982) also prove that any method that satisfies population monotonicity violates the quota rule. The quota rule is that quotient always be rounded to either the smallest integer greater than itself or the largest integer smaller than itself. Divisor method cannot guarantee that the quota rule is never violated. In practice, however, violations of the quota rule are extremely rare. In the Elections Commissions experience in both 2020 and 2025, the quota rule has never been violated.)

Divisor methods differ in how they round quotients to integers—step 3. The two most popular divisor methods are called Hill’s method and Webster’s method. Webster’s method uses the method of rounding most of us learned in elementary school: round up to the next integer if the fractional part of the quotient is greater than a half; round down if it is less than a half. Hill’s method rounds up when the fractional part is greater than the geometric mean of the smaller integer and the larger integer; rounds down when it is less than the geometric mean.

Hill’s method has been used by the US House of Representatives since 1950 and by University Senate since at least 2010. Before we saw any data, we determined that we would continue that tradition. For purposes of illustration, we also continue the practice of using Webster’s method as well.

Table 1.a in the appendix shows the application of Hill’s method to the 2025 data, and Table 1.b shows the application of Webster’s method. For Hill’s we use a divisor of 31 and for Webster’s method we use a divisor of 30.9, but for each of the other methods there is a range of possible divisors around the value we used in these tables that will produce the same allocation.

⁴ Michael Balinski and H. Peyton Young, 1982, *Fair Representation: Meeting the Ideal of One Person, One Vote*, Yale University Press.

Our application of Webster's method has one deviation from the simple version. Because of the statutory requirement that each school with at least one tenured faculty member have at least one seat, any value of the divisor less than 1.5 and greater than zero is rounded to one. Because the geometric mean of 0 and 1 is 0, Hill's method automatically satisfies the statutory rule. Because the School of Professional Studies has zero tenured faculty, it is assigned zero seats.

Recommendations. Based upon its analysis of the population data, application of relevant provisions of the Statutes and Elections Code, and use of Hill's method described above, the Commission recommends no adjustments to the current allocation of seats. Since 2020, changes in the relative numbers of tenured faculty across schools are not large enough to justify any change.

We note, however,

1. If the number of seats for tenured faculty is 42, the Business School would lose one seat under Hill's method and the School of Medicine would lose one seat under Webster's method. Hence with 42 seats the two methods produce the same allocation.
2. If the number of seats is 43 but Webster's method is used, the Business School would lose one seat and the School of Medicine would gain one seat.

II. TTOT OFFICERS OF INSTRUCTION

The relevant language in the revised version of the Statutes reads as follows:

2. The seventeen memberships for officers of instruction with stated term shall be apportioned by the University Senate every five years among the Faculties of the Columbia Corporation other than the Faculties of Columbia College, General Studies, the Graduate School of Arts and Sciences, the Arts, Professional Studies, and Health Sciences, except as specified below. All such officers of instruction having an appointment as preceptor, associate, lecturer, instructor, and assistant professor, regardless of whether such officers are full time or part time, shall be entitled to vote.

Officers of instruction having an appointment with a stated term above that of assistant professor also shall be entitled to vote in this category. For the purposes of this paragraph (2), apportionment and election of members from the Faculties of Arts and Sciences, each division of the Faculty of Arts and Sciences, as specified in paragraph (1) above, shall be treated as a separate faculty.

The relevant language in the previous version of the Statutes read as follows:

The sixteen memberships for officers of instruction with stated term [i.e., non-tenured] shall be apportioned by the University Senate every five years among the Faculties of the Columbia Corporation other than the Faculties of Arts and Sciences and Health Sciences. . . . For the purposes of this paragraph (2), apportionment and election of members from the faculties of the College, General Studies and the Graduate School of Arts and Sciences, treated as one group, shall be among the three disciplines of the Social Sciences, Humanities, and Pure Sciences, respectively [Section 21(a)(2)]

The discrepancies are the same ones that appeared for the allocation of tenured faculty seats: Climate School and the Faculty of Arts and Sciences.

Population data. Current population data for this constituency were provided by OPIR as of July 1, 2025. These data are summarized in Appendix B.1.

Apportionment methodology. The 17 faculties of the University that include TTOT officers of instruction correspond perfectly with the 17 statutory seats designated for TTOT faculty. Thus, the simple apportionment of one seat per faculty follows past practice and remains appropriate.

Recommendations. Consistent with the Statutes and past practice, the Commission recommends that each faculty receive one seat. The Commission's reapportionment analysis and recommendations are presented in Appendix B.2.

If the number of TTOT seats is 16 rather than 17, the Statutes and Bylaws provide us no guidance and we have no recommendation.

III. STUDENTS

The relevant language in the amended Statutes is

The twenty-five memberships for full-time students shall be apportioned by the University Senate every five years as follows: twenty-three among the Faculties of the Columbia Corporation; provided, however, that at least one student member shall be elected from each Faculty other than the Faculties of Arts and Sciences and Health Sciences; two additional student members shall be elected from the Faculty with the largest number of full-time students; one additional student member shall be elected from each of the Faculties with the next largest number of full-time students; until the limit of twenty-three student seats for the Columbia Corporation is reached; one full-time student member shall be elected from Barnard College; and one full-time student member shall be elected from Teachers College. For the purposes of this subsection (b), the Faculty of the Graduate School of Arts and Sciences shall be treated as consisting of three separate Faculties, comprised of the divisions of the Humanities, Social Sciences, and Natural Sciences, respectively, as specified in paragraph (a.1) above. Students here are defined to include all those seeking degrees and all those non-degree-seeking students who have been designated as members of constituencies by the Senate By-Laws.

The relevant language in the previous version of the Statutes reads as follows:

The twenty-four memberships for students shall be apportioned by the University Senate every five years as follows: twenty-two among the faculties of the Columbia Corporation; provided, however, that at least one student member shall be elected from each Faculty other than the Faculties of Arts and Sciences and Health Sciences; two additional student members shall be elected from the Faculty with the largest number of full-time students; one additional student member shall be elected from each of the Faculties with the next largest number of students; until the limit of twenty-two student seats for the Columbia Corporation is reached; one student member shall be elected from Barnard College; and one student member shall be elected from Teachers College. For the purposes of this subsection (b), the Faculty of the Graduate School of Arts and Sciences shall be treated as consisting of three separate faculties, comprised of the disciplines of the Social Sciences, Humanities, and Pure Sciences, respectively [Section 21(b)]

The discrepancies are in the treatment of full-time students and the use of Section 153 to allocate students to schools and “disciplines.” We discuss the full-time issue in this section and the Section 153 issue as part of the larger discussion of the Faculty of Arts and Sciences.

Population data. Current population data for this constituency were provided by OPIR. These data are current as of November 2024 and are summarized in Appendix C.1. Additional current and historical population data for this constituency are available online at <http://www.columbia.edu/cu/opir/abstract/students.html>.

1. Who is counted.

- a. Full-time students. Under the revised version of the Statutes, it is clear that only full-time students count for the allocation of student seats.

If the revised version of the Statutes is not accepted, this interpretation should still hold. Without the 2020 amendments, the statutory language is ambiguous. In that case, there are two arguments for interpreting it the way we have proposed: first is precedent: the 2015 and 2020 Election Commissions both interpreted it that way. The second is the argument that the 2020 Elections Commission made from the principles of statutory interpretation:

“The relevant statutory language is clear that only full-time students are counted in the “Faculty with the largest number of full-time students,” which in this case was Columbia College. However, as the 2015 reapportionment report noted, the statutory language is not specific about whether only full-time students must be counted in “each of the Faculties with the next largest number of students.” The absence of “full-time” might suggest that all students, including part-time students, are to be counted in these population counts. Alternatively, the drafters of this provision might have merely omitted “full-time” from this sentence because the preceding sentence makes it sufficiently clear that only full-time students are to be counted.”

The 2020 Elections Commission argued that because the Statutes clearly require a count of only full-time students in at least one school (that with “the largest number of full-time students”), this approach is preferable in that it treats all schools equally.

- b. Degree-seeking and non-degree students. The 2020 Elections Commission found that neither the Statutes nor the Bylaws clarified whether non-degree-seeking students should be counted for purposes of apportionment and recommended that the issue be clarified. Following this recommendation, the Senate amended its bylaws in 2020 to state “Both degree-seeking and non-degree seeking students may be members of constituencies” (section 1 c (v)). Accordingly we count both degree-seeking and non-degree-seeking full-time students.

2. How students are assigned to constituencies.

- a. Certain Ph.D. candidates in GSAS. Some Ph.D. candidates, although officially enrolled in the Graduate School of Arts and Sciences (GSAS), pursue academic programs administered by other schools. (For instance, the Graduate School of Business and School of Engineering and Applied Science administer Ph.D. programs, the degree for which is awarded by GSAS.) Consistent with past practice and OPIR’s tabulation of the data, the Commission counted each student as part of the school that administers their program, rather than as part of GSAS. We discuss this issue at greater length in the section on the Faculty of Arts and Sciences and Section 153.
- b. Dual-degree students. Students enrolled in dual-degree or joint programs, such as a JD/MBA program, are classified by OPIR according to whichever “certifying office school” they were enrolled in during the fall 2024 term. Each school’s population count may include a certain number of dual-degree students, but these students were only counted once for reapportionment purposes.
- c. Office of Global Programs. OPIR reported no students under the Office of Global Programs
- d. Pure Sciences students. The following departments were counted under Pure Sciences for purposes of reapportionment: Astronomy; Biological Sciences; Chemistry; Earth and Environmental Sciences; Ecology, Evolution and Environmental Biology; Mathematics; Physics; Psychology; and Statistics.

Although the text of Section 21(b) of the Statutes calls for the Commission to refer to Section 153 in determining which departments constitute Pure Sciences, we realized that adhering strictly to Section 153 here would have caused illogical and extremely disruptive results. Thus, we instead adhered to the well-established understanding of Pure Sciences that is shared by all relevant stakeholders. Under this understanding, Pure Sciences includes the following nine departments: Astronomy; Biological Sciences; Chemistry; Earth and Environmental Sciences; Ecology, Evolution and Environmental Biology; Mathematics; Physics; Psychology; and Statistics.

The 2020 commission wrote:

“Section 153 of the Statutes describes Pure Sciences as comprised of 28 diverse departments, including many that clearly belong in the School of Engineering and Applied Science (e.g., Chemical Engineering, Electrical Engineering, and Mechanical Engineering). However, when the [2020] Commission spoke to several experts on this topic—including Pearl Spiro, Associate Provost for Academic Appointments, Office of the Vice Provost for Faculty Affairs; Andrea Solomon, Vice Dean and Dean of Academic Affairs, GSAS; Lucy Drotning, Associate Provost, OPIR; and Ryan Brown, Research Analyst, OPIR—we learned that all of the offices represented share an understanding of what departments constitute Pure Sciences that deviates significantly from Section 153. According to these experts, Pure Sciences is unquestionably made up of the nine departments listed above: Astronomy; Biological Sciences; Chemistry; Earth and Environmental Sciences; Ecology, Evolution and Environmental Biology; Mathematics; Physics; Psychology; and Statistics.

If we were to have adhered closely to Section 153, we would have counted students under Pure Sciences who are not considered by any office in the University, including GSAS, to be Pure Sciences students. In addition, we would have deviated dramatically from the methodology of the 2015 reapportionment; the Elections Commission that conducted that reapportionment also understood Pure Sciences to consist of the above nine departments. Our deviating from the methodology of the 2015 reapportionment in this way would have potentially resulted in an unprecedented and highly disruptive shift of student Senate seats among schools, not because of relevant changes in student population but because of a change in methodology between two quinquennial reapportionments. This was not an acceptable result to us.

We have concluded from this process that Section 153 of the Statutes should be amended to reflect the understanding of Pure Sciences that is shared by GSAS, OPIR, and the Office of the Vice Provost for Faculty Affairs. We have included this in our recommendations below.”

The Senate’s amendments resolve this issue in the manner the 2020 commission recommended (although these amendments use direct enumeration in chapter 20 in place of the references to section 153).

In the absence of these amendments, we would continue the practice of the 2020 commission.

Apportionment methodology. The Statutes provide that all schools shall receive at least one seat and the school with the largest population shall receive three. Whatever seats are left over after that go to the second largest, third largest, fourth largest, and so on, until all the seats are used up. As a

result, past practice has awarded a total of two seats to each of the schools with the second and third largest populations.

Recommendations. Based upon its analysis of the population data, and application of relevant provisions of the Statutes and Elections Code, the Commission recommends no changes to the current apportionment of student seats.

If there are only 22 seats for Columbia Corporation Schools rather than 23, the Business School would lose one seat.

The Commission's reapportionment analysis and recommendations are presented in Appendix C.2.

THE FACULTY OF ARTS AND SCIENCES

The Faculty of Arts and Sciences was established in its current form in the 1990s, well after the University Senate was established, and before the Senate's revision in 2020, the Statutes did not reflect current reality. The language in those Statutes was unworkable and it affected both faculty and students. There were three main problems.

1. Archaic language: "Pure sciences" for "natural sciences" and "disciplines" for "divisions."
2. Archaic organization chart for faculty. Unfortunately, the previous version of the Statutes had this relationship precisely backwards so that if read literally, it would disenfranchise the entire Faculty of Arts and Sciences.

The Faculty of Columbia College, the Faculty of General Studies, and the Faculty of the Graduate School of Arts and Sciences are vestigial. OPIR counts no members. No one is appointed to them. They do not hold meetings. (By statute the deans and the president of university are members of these faculties, but they do not count as tenured faculty for Senate purposes.) Instructors for the students in those schools are appointed to the Faculty of Arts and Sciences. That is how OPIR counts them. Two members of the Elections Commission are members of the Faculty of Arts and Sciences. We do not report to the deans of any of the three schools; through our department chairs and divisional deans, we report to the Executive Vice President of Arts and Sciences.

Thus the previous version of the Statutes assigns no seats to the one Faculty with members and it assigns seats to the three Faculties with no members.

3. Section 153. For both faculty and students, the previous version of the Statutes incorporates by reference Statute section 153 to delineate the three divisions ("disciplines") of the Arts and Sciences. The delineation in section 153 is substantially different from the delineation that the rest of the University uses. We have quoted the 2020 commission's reasoning in the section on students.

SUMMARY OF RECOMMENDATIONS

In this quinquennial reapportionment report, the Elections Commission has offered recommendations concerning apportionment of University Senate seats. A summary of all recommendations follows.

**Commission Recommendations Concerning
Apportionment of University Senate Seats**

Tenured Officers of Instruction	TTOT Officers of Instruction	Students
	all constituencies <i>no change</i>	<i>no change</i>
all constituencies <i>no change</i>		

ELECTIONS COMMISSION

2025

Brendan O’Flaherty
*Professor of Economics,
Department of Economics*

Melinda Aquino
*Associate Dean of Multicultural
Affairs,
CC/SEAS Undergrad
Student Life*

Ann Thornton
*Vice Provost and University
Librarian*

Sarah J.R. Hansen
*Senior Lecturer in the Discipline of
Chemistry,
Department of Chemistry*

Batya Tropper, Chair
*Student
School of Law*

Appendix A.1

Tenured Faculty: Population Count

	Fall 2014				Fall 2019				Summer 2025		
	Ten- ure	Tenure of Title**	Total Tenured		Tenure	Tenure of Title**	Total Tenured		Tenure	Tenure of Title**	Total Tenured
ARTS AND SCIENCES											
Columbia College, General Studies and GSAS	430	0	430		446	0	446		436	0	436
--Social Sciences	122	0	122		126	0	126		119	0	119
--Humanities	148	0	148		151	0	151		157	0	157
--Pure Science	160	0	160		169	0	169		160	0	160
Arts	11	0	11		19	0	19		26	0	26
Professional Studies (previously Continuing Education)	0	0	0		0	0	0		0	0	0
MORNINGSIDE PROFESSIONAL SCHOOLS											
Architecture, Planning, and Preservation	18	0	18		20	0	20		20	0	20
Business	75	0	75		79	0	79		77	0	77
Engineering and Applied Science	129	0	129		138	0	138		167	0	167
Journalism	19	0	19		20	0	20		14	0	14
Law	71	0	71		62	0	62		61	0	61
Social Work	18	0	18		16	0	16		20	0	20
Climate	0	0	0		0	0	0		7	0	7
International and Public Affairs	14	0	14		16	0	16		17	0	17
MEDICAL CENTER PROFESSIONAL SCHOOLS											
Dental Medicine	5	5	10		5	4	9		7	2	9
Medicine	226	29	255		264	16	280		282	12	294
Nursing	5	0	5		6	0	6		10	0	10
Public Health	53	1	54		57	1	58		58	1	59
UNIVERSITY TOTAL	1,074	35	1,109		1,148	21	1,169		1,202	15	1,217

Notes

Shaded rows indicate Senate constituencies

Source: Office of the Vice Provost for Academic Administration

Only officers with primary appointments are included. Those with secondary appointments (e.g. deans who are also professors) are included in the constituency of their primary appointment (e.g., administration members). Likewise, officers with multiple academic appointments are included in the constituency of their primary appointment.

Date: As of July 2025

Appendix A.2

Tenured Faculty: Commission Recommendations

Faculty or Academic Division <i>(descending order of 2025 population)</i>	2014 Tenured Faculty	2019 Tenured Faculty	2025 Tenured Faculty	2015 Seats	2020 Seats	2026 Seats	Change From 2020 Seats
Medicine	255	280	294	9	9	9	0
Engineering and Applied Science	129	138	167	4	5	5	0
A&S – Pure Sciences	160	169	160	6	5	5	0
A&S - Humanities	148	151	157	5	5	5	0
A&S – Social Sciences	122	126	119	4	4	4	0
Business	75	79	77	3	3	3	0
Law	71	62	61	2	2	2	0
Public Health	54	58	59	2	2	2	0
Arts	11	19	26	1	1	1	0
Social Work	18	16	20	1	1	1	0
Architecture, Planning, and Preservation	18	20	20	1	1	1	0
International and Public Affairs	14	16	17	1	1	1	0
Journalism	19	20	14	1	1	1	0
Nursing	5	6	10	1	1	1	0
Dental Medicine	10	9	9	1	1	1	0
Climate*	0	0	7	0	0	1	+1
Professional Studies**	0	0	0	0	0	0	0
UNIVERSITY SENATE TOTAL	1109	1169	1217	42	42	43	+1

NOTES

As explained in the reapportionment report, these calculations are made using the Method of Equal Proportions, employed by the U.S. Census Bureau since 1950 to reapportion congressional seats among the several states. See 2 U.S.C. § 2a(a) (2006); see also http://en.wikipedia.org/wiki/Huntington-Hill_method. This method minimizes the percentage differences in the number of persons-per-Senator among all constituencies with multiple seats.

*The Senate approved the expansion of its membership to accommodate the addition of the Climate School in 2021

**The Faculty of Professional Studies, having zero tenured officers of instruction, has previously not received representation in this category. See Appendix B.2 for non-tenured representation.

Appendix B.1

TTOT Faculty: Population Count

	Fall 2014				Fall 2019				Summer 2025		
	Tenure Eligible	Non-tenure Eligible	Total TTOT		Tenure Eligible	Non-tenure Eligible	Total TTOT		Tenure Eligible	Non-tenure Eligible	Total TTOT
ARTS AND SCIENCES											
Columbia College, General Studies and GSAS	155	223	378		170	251	378		138	265	403
--Social Sciences	44	29	73		45	35	80		41	31	72
--Humanities	48	159	207		58	168	226		40	183	223
--Pure Science	63	35	98		67	48	115		57	51	108
Arts	9	50	59		21	47	68		15	46	96
Professional Studies (previously Continuing Education)	0	25	25		0	56	56		0	47	47
MORNINGSIDE PROFESSIONAL SCHOOLS											
Architecture, Planning, and Preservation	11	6	17		8	10	18		9	10	19
Business	52	12	64		49	18	67		44	27	71
Engineering and Applied Science	48	22	70		58	31	89		53	37	90
Journalism	5	10	15		6	10	16		5	14	19
Law	7	14	21		5	15	20		9	11	20
Social Work	22	3	25		19	2	21		8	9	17
Climate*	0	0	0		0	0	0		4	5	9
International and Public Affairs	13	32	45		21	47	68		8	36	44
MEDICAL CENTER PROFESSIONAL SCHOOLS											
Dental Medicine	4	59	63		3	70	73		2	63	65
Medicine	187	1,515	1,702		179	1,877	2,056		179	2,154	2,333
Nursing	7	66	73		6	84	90		11	66	77
Public Health	40	81	121		42	86	128		46	77	123
UNIVERSITY TOTAL	560	2,118	2,678		575	2,585	3,160		531	2,867	3,398

Shaded rows indicate Senate constituencies

Source Summer 2025: Office of the Vice Provost for Faculty Affairs

Only officers with primary academic appointments are included. Those with secondary appointments (e.g., deans who are also processors) are included in the constituency of their primary appointment (e.g., administration members). Likewise, officers with multiple academic appointments are included in the constituency of their primary appointment.

*The Senate approved the expansion of its membership to accommodate the addition of the Climate School in 2021

Data as of July, 2025

Appendix B.2

TTOT Faculty: Commission Recommendations

Faculty or Academic Division (descending order of 2025 population)	2014 TTOT Faculty	2019 TTOT Faculty	2025 TTOT Faculty	2015 Seats	2020 Seats	2025 Seats	Change From 2020 Seats
Medicine	1,702	2,056	2,333	1	1	1	<i>no change</i>
A&S - Humanities	207	226	223	1	1	1	<i>no change</i>
Public Health	121	128	123	1	1	1	<i>no change</i>
A&S – Pure Sciences	98	115	108	1	1	1	<i>no change</i>
Engineering and Applied Science	73	90	90	1	1	1	<i>no change</i>
Nursing	70	89	77	1	1	1	<i>no change</i>
A&S – Social Sciences	73	80	72	1	1	1	<i>no change</i>
Business	64	67	71	1	1	1	<i>no change</i>
Dental Medicine	63	73	65	1	1	1	<i>no change</i>
Arts	59	68	61	1	1	1	<i>no change</i>
Professional Studies	25	56	47	1	1	1	<i>no change</i>
International and Public Affairs	45	37	44	1	1	1	<i>no change</i>
Social Work	25	21	17	1	1	1	<i>no change</i>
Law	21	20	20	1	1	1	<i>no change</i>
Architecture, Planning, and Preservation	17	18	19	1	1	1	<i>no change</i>
Journalism	15	16	19	1	1	1	<i>no change</i>
Climate*	0	0	9	0	0	1	<i>+1</i>
UNIVERSITY SENATE TOTAL	2,678	3,160	3,398	16	16	17	

NOTES

*The Senate approved the expansion of its membership to accommodate the addition of the Climate School in 2021

Appendix C.1

Students: Population Count

	Fall 2014			Fall 2019				Fall 2024				
	Full-time Degree En- rollment	Full- time Enroll- ment †		Full- time Degree Enroll- ment	Full- time Non- Degree Enroll- ment	Full- time Enroll- ment †		Full- time Degree Enroll- ment	Full- time Non- Degree Enroll- ment	Full- time Enroll- ment †		Change from 2019 to 2025
ARTS AND SCIENCES												
Columbia College	4,576	4,650		4,588	89	4,677		4,868	68	4,936		259
Graduate School of Arts and Sci- ences	2,907	2,908		3,487	29	3,516		3,306	19	3,325		-191
Social Sciences	774	774		1,082		1,082		1,136	7	1,143		61
Humanities	806	807		830		830		657	4	661		-169
Natural (Pure) Sciences	1,327	1,327		1,575		1,575		1,513	9	1,522		-53
General Studies	1,308	1,308		1,735	1	1,736		2,132		2,132		396
Arts	804	810		856		856		764		764		-92
Professional Studies	421	956		1,571	262	1,833		1,971	101	2,072		239
MORNINGSIDE PROFESSIONAL SCHOOLS												
Architecture, Planning, and Preserva- tion	765	780		771	8	779		767	4	771		-8
Business	1,871	1,883		1,980	23	2,003		2,347	32	2,379		376
Climate								113	0	113		113
Engineering and Applied Science	3,418	3,421		4,142	2	4,144		4,691	7	4,698		554
International and Public Affairs	1,226	1,227		1,142	1	1,143		1,217		1,217		74
Journalism	333	333		291	0	291		241		241		-50
Law	1,483	1,518		1,562	50	1,612		1,660	49	1,709		97
Social Work	860	860		906	0	906		1,034		1,034		128
MEDICAL CENTER PROFES- SIONAL SCHOOLS												
College of Physicians and Surgeons	1461	1726		1450	243	1693		1422	280	1702		9
Dental Medicine	407	413		438	0	438		439	5	444		6
Nursing	456	456		662	1	663		485	15	500		-163
Public Health	1100	1100		1272	0	1272		1298	0	1298		26
UNIVERSITY TOTAL	23,396	24,349		26,853	709	27,562		28,755	580	29,335		1,773

NOTES

Shaded rows indicate Senate constituencies

Source Fall 2014: Student Information Systems, Student Information Systems, available upon request from the Office of Planning and Institutional Research.

Additional data provided by the Office of Planning and Institutional Research.

Source Fall 2019: Preliminary data from Student Information Systems to be uploaded to

https://provost.columbia.edu/sites/default/files/content/Institutional%20Research/Statistical%20Abstract/opir_enrollment_degree_level.pdf.

Source Fall 2024: Office of Planning and Institutional Research

† Includes degree and non-degree students.

Appendix C.2

Students: Commission Recommendations

School or Academic Division (descending order of 2024 full-time enrollment)	2009	2015	2019	2024	2010	2015	2020	2025	Change From 2015 Seats
	Full-time Enrollment	Full-time Enrollment	Full-time Enrollment †	Full-time Enrollment †	Seats	Seats	Seats	Seats	
Columbia College	4,363	4,650	4,677	4,936	3	3	3	3	<i>no change</i>
Engineering and Applied Science	2,682	3,421	4,144	4,698	2	2	2	2	<i>no change</i>
Business	2,012	1,883	2,003	2,379	2	2	2	2	<i>no change</i>
General Studies	826	1,308	1,736	2,132	1	1	1	1	<i>no change</i>
Professional Studies	404	956	1,833	2,072	1	1	1	1	<i>no change</i>
Law	1,612	1,518	1,612	1,709	1	1	1	1	<i>no change</i>
College of Physicians and Surgeons	1,378	1,726	1,693	1,702	1	1	1	1	<i>no change</i>
GSAS – Natural (Pure) Sciences	984	1,327	1,575	1,522	1	1	1	1	<i>no change</i>
Public Health	669	1,100	1,272	1,298	1	1	1	1	<i>no change</i>
International and Public Affairs	1,164	1,227	1,143	1,217	1	1	1	1	<i>no change</i>
GSAS – Social Sciences	638	774	1,082	1,143	1	1	1	1	<i>no change</i>
Social Work	813	860	906	1,034	1	1	1	1	<i>no change</i>
Architecture, Planning, and Preservation	738	780	779	771	1	1	1	1	<i>no change</i>
Arts	871	810	856	764	1	1	1	1	<i>no change</i>
GSAS – Humanities	846	807	830	661	1	1	1	1	<i>no change</i>
Nursing	398	456	663	500	1	1	1	1	<i>no change</i>
Dental Medicine	395	413	438	444	1	1	1	1	<i>no change</i>
Journalism	344	333	291	241	1	1	1	1	<i>no change</i>
Climate School				113				1	
Columbia Corporation Total	21,137	24,349	27,533	29,335	22	22	22	23	
Barnard College					1	1	1	1	<i>no change</i>
Teachers College					1	1	1	1	<i>no change</i>
Affiliated Institution Total**					2	2	2	2	
University Senate Total					24	24	24	25	

Notes: Pursuant to the Senate By-Laws, Section 1(g), the Union Theological Seminary may elect one non-voting student observer who enjoys a limited role in Senate deliberations.

† Including both degree seeking and non-degree students.

Appendix on the Reapportionment of Tenured Faculty Seats

A. Why use geometric means

As noted, our decision to use Hill's method was based on University precedent and the example of the US House of Representatives and was made before we saw the data. However, some readers may find the use of geometric means in that method strange. After all, arithmetic means are what we grew up on. The purpose of this section is to explain a rationale for using geometric means. We are following a tradition and set of precedents, but those traditions and precedents are not implausible.

To begin, let's examine the rationale for using arithmetic means. Suppose that quotient q for some school is between two integers n and $(n+1)$. Since q can be thought of as the ideal number of seats that school should have in the absence of the integer constraint, one principle we might want to use is to say that we want to choose the lower integer n if and only if doing so makes the "absolute distortion" from doing so less than the "absolute distortion" from choosing the higher integer $(n+1)$. Here we define the absolute distortion from choosing the lower integer as $(q-n)$ and absolute distortion from choosing the higher integer as $(n+1-q)$. Then a little algebra shows that we should choose the lower integer if and only if $q < n + 1/2$, which is the arithmetic mean. So the principled argument for using Webster's method is that it minimizes the absolute distortion.

While minimizing the absolute distortion leads to an easy formula, arguments can be made for other criteria. Another criterion that has sometimes been appealed to is minimizing the proportional distortion. The distortion from losing, say, a half a seat from the ideal may be more serious for a school that has only two or three seats than for a school that has between nine and ten seats. The distortion for the smaller school is a much larger fraction of its representation than the distortion for the larger school. Define the proportional distortion from choosing the lower integer n as $\ln q - \ln n$ and the proportional distortion from choosing the higher integer as $\ln (n+1) - \ln q$. There is an argument for minimizing the proportional distortion instead of the absolute distortion. Algebra in this case will show that minimizing the proportional distortion implies choosing the lower integer if and only if $\ln q < [\ln (q+1) + \ln q]/2$ which is the logarithm of the geometric mean. This is Hill's method.

Schools with an ideal number of seats less than one-half present a direct contrast between Hill's method and Webster's method. Hill's method says that they should have one seat and Webster's method (applied literally) says that they should have no seats. The statutory requirement that they have one seat in this case suggests a statutory preference for Hill's method.

Hill's method minimizes proportional distortion and Webster's method minimizes absolute distortion. Reasonable arguments can be made for either criterion and its accompanying method. In this situation, we chose Hill before we saw the data because of tradition and precedent.

B. Graphical analysis

We have found a convenient graph to illustrate the reapportionment possibilities with any divisor method. We illustrate with Hill's method.

Given a data set and a method, any divisor determines a number of seats and an allocation among schools. For instance, take the smallest usable divisor: 1. If our ideal apportionment has one Senator per tenured faculty member, then we have 1217 Senators (the number of tenured faculty) and each school has

the number of seats equal to its number of tenured faculty. No rounding needs to be done, and so Hill's and Webster's methods agree. So for a divisor of 1, the number of seats is 1217.

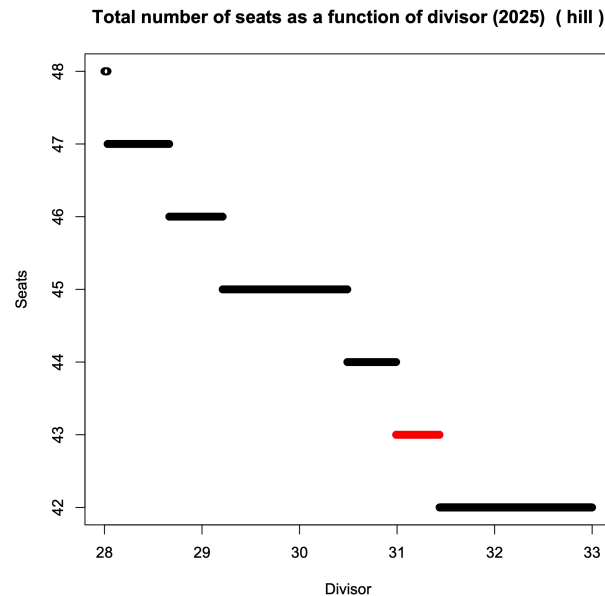
At the other extreme, a divisor of 294 (the population of the largest school) implies 17 seats, one for each school. Hill and Webster again agree. Increasing the divisor from 1 to 294 drastically reduces the number of seats.

Since we need to allocate 43 seats, a divisor of 1 is too small and a divisor of 294 is too big. We can think of the number of seats as a function of the divisor and graph the divisor on the horizontal axis and the number of seats on the vertical. This function will be (weakly) decreasing: as the divisor increases, the number of seats falls or stays the same. This is illustrated for Hill's method in figure 1 below. The figure concentrates on values of the divisor between 26 and 35 because away from this range the number of seats is far from 43.

The function in figure 1 is a step function. For many values of the divisor, small changes in the divisor cause no change in the number of seats. At occasional intervals, though, as the divisor falls, a school's rounded number of seats will fall enough that the number of seats that it is awarded falls by one, and so the total number of seats also falls by one.

In figure 1, for instance, the number of seats as a function of the divisor stays at 43 (the desired number) as long as the divisor is greater than 30.990, where P&S loses one seat from 10 to 9, and 31.441, where the Business School loses one seat from 3 to 2.

Figure 1:
Total Number of Seats as a Function of Divisor (2025) (Hill)



C. Proposed allocation of seats

Table 1.a below shows our reapportionment calculation. We use a divisor of 31; as we saw above, any divisor in the range [30.990, 31.441] would produce the same allocation of seats.

Table 1.a
Tenured Faculty: Commission Analyses (Divisor=31)

Table 1.a.	divisor	31			
Faculty of Academic Division (descending order of 2024 population)	Tenured	Ideal	G. Mean	Rounded	2025 Allocation
Architecture, Planning & Preservation	26	0.838710	1.414	1	1
Arts	20	0.645161	1.414	1	1
Business	77	2.483871	2.449	3	3
Climate	7	0.225806	1.414	1	1
Dental Medicine	9	0.290323	1.414	1	1
Engineering	167	5.387097	5.477	5	5
Humanities	157	5.064516	5.477	5	5
International & Public Affairs	17	0.548387	1.414	1	1
Journalism	14	0.451613	1.414	1	1
Law	61	1.967742	1.414	2	2
Natural Sciences	160	5.161290	5.477	5	5
Nursing	10	0.322581	1.414	1	1
Physicians & Surgeons	294	9.483871	9.487	9	9
Professional Studies	0	0.000000		0	0
Public Health	59	1.903226	1.414	2	2
Social sciences	119	3.838710	3.464	4	4
Social Work	20	0.645161	1.414	1	1
Total	1217			43	43

Notice that both the Business School and the College of Physicians and Surgeons have the same fractional part—0.483871—but the Business School is rounded up and P&S is rounded down. This illustrates how Hill's method differs from Webster's method. If we used Webster's method, both would be rounded down and there would be only 42 seats. We would have to increase the divisor to get 43. Intuitively, the Business School would suffer roughly a 20% loss in representation relative to its ideal if it were to lose one seat, while P&S would suffer roughly a 5% loss in representation relative to its ideal if it were to lose one seat. Hill's method causes the seat whose loss would result in the larger percentage decrease in representation to be preserved.

The allocation of 43 seats under Webster's method is in table 1.b

Table 1.b
Tenured Faculty: Commission Analyses (Divisor=30.9)

Table 1.b (Webster's Method)	divisor	30.9		
Faculty of Academic Division (descending order of 2024 population)	Tenured	Ideal	A. Mean	2025 Allocation
Architecture, Planning & Preservation	26	0.841424	1.5	1
Arts	20	0.647249	1.5	1
Business	77	2.491909	2.5	2
Climate	7	0.226537	1.5	1
Dental Medicine	9	0.291262	1.5	1
Engineering	167	5.404531	5.5	5
Humanities	157	5.080906	5.5	5
International & Public Affairs	17	0.550162	1.5	1
Journalism	14	0.453074	1.5	1
Law	61	1.974110	1.5	2
Natural Sciences	160	5.177994	5.5	5
Nursing	10	0.323625	1.5	1
Physicians & Surgeons	294	9.514563	9.5	10
Professional Studies	0			0
Public Health	59	1.909385	1.5	2
Social Sciences	119	3.851133	3.5	4
Social Work	20	0.647249	1.5	1
Total	1217			43

University Senate Plenary

December 11, 2020



University Senate

Proposed: December 11, 2020

Adopted: December 11, 2020

PROPOSED AGENDA

University Senate

Friday, December 11, 2020 at 1:15 p.m.

[Registration required](#)

After registering you will receive a confirmation email with meeting details.

1. Adoption of the agenda
2. Adoption of the minutes of November 20, 2020
3. President's report
4. Executive Committee Chair's report:
 - a. Covid-19 and vaccines: Dr. Wafaa El-Sadr, University Professor
 - b. Developments in hybrid and online learning at Columbia: Sen. Soulaymane Kachani, Vice Provost for Teaching, Learning and Innovation
 - c. Fiscal update
5. Old business:
 - a. Proposed Senate changes (Senate Structure and Operations Committee):
 - i. Resolution to Update the University Statutes to Clarify Constituency Membership and Eligibility, General Policies and Powers, and to Refer to Electronic rather than Virtual Meetings
 - ii. Resolution to Update the University Senate By-Laws
 - iii. Resolution to Update the University Senate Elections Code

University Senate

Proposed: December 11, 2020

Adopted: December 11, 2020

In favor-Opposed-Abstained: 70-0-1

**RESOLUTION TO UPDATE THE UNIVERSITY STATUTES TO CLARIFY
CONSTITUENCY MEMBERSHIP AND ELIGIBILITY,
GENERAL POLICIES AND POWERS,
AND
TO REFER TO ELECTRONIC RATHER THAN VIRTUAL MEETINGS**

BE IT RESOLVED that the Senate approve the revisions of the University Statutes clarifying constituency membership, eligibility, and referring to electronic rather than virtual meetings, as set out, below.

§20. Membership The University Senate shall be a unicameral body whose membership shall be composed of representatives from the following categories:

e. Professional library staff members

Two members who shall be elected from and by those persons either holding a ~~full-time~~ trustee or presidential full-time appointment to the professional library service or holding a full-time appointment as an officer of administration within the libraries

f. Research members

Six members who shall be elected from and by those ~~persons~~ full-time research officers designated as senior research scientist or senior research scholar, Lamont research professor, research scientist or research scholar, Lamont associate research professor, associate research scientist or associate research scholar, Lamont assistant research professor, postdoctoral research scientist, postdoctoral research scholar, or postdoctoral research fellow, senior staff associate and staff associate, as defined in Section 62 of these Statutes, and who are not entitled to vote as officers of instruction

h. Alumni members

Two ~~alumni~~ members who are either alumni or alumnae shall be chosen by the Columbia Alumni Association ~~Council of the Alumni Federation of the University~~

§21. Elections, eligibility, recall, and term of office

a. *Election of faculty members*

1. The forty-two memberships for officers of instruction having an appointment without stated term as professor or associate professor as defined in Sections 60 or 61 shall be apportioned by the University Senate every five years among the Faculties of the Columbia Corporation in proportion to the number of such officers of instruction; ~~provided, however, that each such faculty, other than the Faculties of Arts and Sciences and Health Sciences, which shall not be entitled to elect any members, shall be entitled to elect at least one member; and Each Faculty shall be entitled to elect at least one member, except for the Faculties of Columbia College, General Studies, the Graduate School of Arts and Sciences, the Arts, Professional Studies, and Health Sciences, which shall not be entitled to elect any members, except as specified below.~~ For the purposes of this paragraph (1), and paragraph (2) below, for the apportionment and election of members from the Faculty of Arts and Sciences, from the Faculties of the College, General Studies and the Graduate School each division of the Faculty of Arts and Sciences, treated as one group, shall be among the three disciplines of namely the Social Sciences, Humanities, and Pure Natural Sciences, respectively, as specified in Section 153 of the Statutes, shall be treated as a separate Faculty. The five divisions of the Faculty of Arts and Sciences are as follows:

i. The Division of the Humanities shall consist of the following departments: Art History and Archaeology; Classics; East Asian Languages and Cultures; English and Comparative Literature; French and Romance Philology; Germanic Languages; Italian; Latin American and Iberian Cultures; Middle Eastern, South Asian, and African Studies; Music; Philosophy; Religion; and Slavic Languages.

ii. The Division of Social Sciences shall consist of the following departments: African American and African Diaspora Studies, Anthropology, Economics, History, Political Science, and Sociology.

iii. The Division of Natural Sciences shall consist of the following departments: Astronomy; Biological Sciences; Chemistry; Earth and Environmental Sciences; Ecology, Evolution, and Environmental Biology; Mathematics; Physics; Psychology; and Statistics.

iv. The School of the Arts.

v. The School of Professional Studies.

2. The sixteen memberships for officers of instruction with stated term shall be apportioned by the University Senate every five years among the Faculties of the Columbia Corporation other than the Faculties of ~~Arts and Sciences~~ Columbia College, General Studies, the Graduate School of Arts and

~~Sciences, the Arts, Professional Studies, and Health Sciences, except as specified below.~~ All such officers of instruction having an appointment as preceptor, associate, lecturer, instructor, and assistant professor, regardless of whether ~~all~~ such officers are full time or part time, shall be entitled to vote. Officers of instruction having an appointment with a stated term above that of assistant professor also shall be entitled to vote in this category. For the purposes of this paragraph (2), apportionment and election of members from the Faculties of ~~Arts and Sciences, the College, General Studies and the Graduate School of Arts and Sciences, each division of the Faculty of Arts and Sciences, treated as one group, shall be among the three disciplines of namely the Social Sciences, Humanities, and Pure Natural Sciences, respectively,~~ as specified in ~~paragraph (1) above~~ Section 153 of the Statutes, shall be treated as a separate faculty.

b. Election of student members

The twenty-four memberships for full-time students shall be apportioned by the University Senate every five years as follows: twenty-two among the Faculties of the Columbia Corporation; provided, however, that at least one student member shall be elected from each Faculty other than the Faculties of Arts and Sciences and Health Sciences; two additional student members shall be elected from the Faculty with the largest number of full-time students; one additional student member shall be elected from each of the Faculties with the next largest number of full-time students; until the limit of twenty-two student seats for the Columbia Corporation is reached; one full-time student member shall be elected from Barnard College; and one full-time student member shall be elected from Teachers College. For the purposes of this subsection (b), the Faculty of the Graduate School of Arts and Sciences shall be treated as consisting of three separate Faculties, comprised of the ~~divisions~~ disciplines of the Humanities, Social Sciences, Humanities, and Pure Natural Sciences, respectively, as specified in ~~paragraph (a.1) above~~ Section 153 of the Statutes. Students here are defined to include all those seeking degrees and all those non-degree-seeking students who have been designated as members of constituencies by the Senate By-Laws.

c. Election of members from professional library staff and administrative staff

Two members shall be elected from and by the ~~research~~ professional library staff and administrative staff.

d. Election of members of officers of research

The six memberships for officers of research shall be ~~apportioned by the University Senate biennially elected~~ as follows: four ~~among shall be elected from~~ officers of research members designated as senior research scientist or senior research scholar, Lamont research professor, research scientist or research scholar, Lamont associate research professor, associate research scientist or associate research scholar, and Lamont assistant research professor; one additional research officer member shall be elected from those persons designated as postdoctoral research scientist, postdoctoral research scholar, or postdoctoral research fellow; and one additional research officer member shall be elected from those

persons designated senior staff associate or staff associate.

§23. General policies Subject to the reserve power of the Trustees and the provisions of Sections [25](#), [293](#), [and 333](#), the University Senate shall be a policy-making body which may consider all matters of University-wide concern, all matters affecting more than one Faculty or school, and all matters pertaining to the implementation and execution of agreements with the other educational institutions that are now or may hereafter become affiliated with the University. Without limitation by enumeration the University Senate shall

§24. Powers The University Senate, subject to the reserve power of the Trustees and the provisions of Section 25, shall have power, and it shall be its duty:

a. *Academic correlation*: to secure the correlation of courses offered by the several Faculties and Administrative Boards; to adjust all questions involving more than one Faculty or Administrative Board, except those matters reserved to the Faculty of Arts and Sciences under Section 293 of these Statutes and to the Faculty of Health Sciences under Section 333 of these Statutes;

b. *Degrees*: to prescribe, by concurrent action with the appropriate Faculty or Administrative Board, the conditions upon which the following degrees shall be conferred and to recommend candidates for such degrees:

Bachelor of Science (B.S.)—Faculty of Engineering and Applied Science

e. *Barnard College*: to prescribe the manner in which the degree of ~~B~~bachelor of ~~A~~arts conferred upon graduates of Barnard College shall be maintained at all times as a degree of equal value with the degree of ~~B~~bachelor of ~~A~~arts conferred upon the graduates of Columbia College;

§27. Meetings The University Senate shall meet regularly as provided in its By-Laws. Special meetings shall be held on the call of the President and in accordance with its By-Laws. When practicable, meetings of the Senate shall be conducted in person. ~~Virtual~~Electronic meetings of the Senate may be called by the President, by the chair of the Executive Committee of the University Senate in consultation with the members of the Executive Committee of the University Senate, and in accordance with other methods specified in its By-Laws. The President shall be the presiding officer of the University Senate. In the absence of the President, the chair of the Executive Committee of the University Senate shall preside.

Proponent:
Senate Structure and Operations Committee

II

THE UNIVERSITY SENATE

§20. Membership The University Senate shall be a unicameral body whose membership shall be composed of representatives from the following categories:

a. Administration members

1. The President
2. The Provost (or if there is more than one Provost, the Provost designated by the President)
3. The dean of the Faculty of the Graduate School of Arts and Sciences
4. The dean of Columbia College
5. Five members, who shall be appointed by the President, from among officers of administration who are part of the central administration and administrators of Faculties

b. Faculty members

1. Forty-two officers of instruction having an appointment without stated term as professor or associate professor as defined in Sections 60 and 61, to be elected from and by such officers of instruction, subject to the provisions of Section 21
2. Sixteen officers of instruction having an appointment for a stated term as defined in Sections 60 and 61 to be elected from and by such officers of instruction, subject to the provisions of Section 21

c. Student members

Twenty-two students as defined in Section 381 to be elected from and by such students as provided in Section 21, one student from Barnard College to be elected from and by the students of Barnard College as provided in Section 21, and one student from Teachers College to be elected from and by the students of Teachers College as provided in Section 21

d. Affiliated institution members

1. Two representatives of the faculty of Barnard College

2. Subject to renegotiation of the existing affiliation agreement with Teachers College, two representatives of the faculty of Teachers College

3. Subject to renegotiation of the existing affiliation agreement with the Union Theological Seminary, one representative of the faculty of the Union Theological Seminary

e. Professional library staff members

Two members who shall be elected from and by those persons either holding a ~~full-time~~ trustee or presidential ~~full-time~~ appointment to the professional library service or holding a full-time appointment as an officer of administration within the libraries

f. Research members

Six members who shall be elected from and by those ~~persons~~ full-time research officers designated as senior research scientist or senior research scholar, Lamont research professor, research scientist or research scholar, Lamont associate research professor, associate research scientist or associate research scholar, Lamont assistant research professor, postdoctoral research scientist, postdoctoral research scholar, or postdoctoral research fellow, senior staff associate and staff associate, as defined in Section 62 of these Statutes, and who are not entitled to vote as officers of instruction

g. Administrative staff members

Two members who shall be elected from and by those persons having an appointment from the President or the Secretary of the University, or who are in Grade VII or above of the University Personnel Classification System for officers of administration and supporting staff and who are not entitled to vote in any other category for members of the University Senate

h. Alumni members

Two ~~alumni~~ members who are either alumni or alumnae shall be chosen by the Columbia Alumni Association ~~Council of the Alumni Federation of the University~~

§21. Elections, eligibility, recall, and term of office

a. Election of faculty members

1. The forty-two memberships for officers of instruction having an appointment without stated term as professor or associate professor as defined in Sections 60 or 61 shall be apportioned by the

University Senate every five years among the Faculties of the Columbia Corporation in proportion to the number of such officers of instruction; ~~provided, however, that each such faculty, other than the Faculties of Arts and Sciences and Health Sciences, which shall not be entitled to elect any members, shall be entitled to elect at least one member; and Each Faculty shall be entitled to elect at least one member, except for the Faculties of Columbia College, General Studies, the Graduate School of Arts and Sciences, the Arts, Professional Studies, and Health Sciences, which shall not be entitled to elect any members, except as specified below.~~ For the purposes of this paragraph (1), ~~and paragraph (2) below, for the apportionment and election of members from the Faculty of Arts and Sciences, from the Faculties of the College, General Studies and the Graduate School each division of the Faculty of Arts and Sciences, treated as one group, shall be among the three disciplines of namely the Social Sciences, Humanities, and Pure Natural Sciences, respectively, as specified in Section 153 of the Statutes, shall be treated as a separate Faculty. The five divisions of the Faculty of Arts and Sciences are as follows:~~

i. The Division of the Humanities shall consist of the following departments: Art History and Archaeology; Classics; East Asian Languages and Cultures; English and Comparative Literature; French and Romance Philology; Germanic Languages; Italian; Latin American and Iberian Cultures; Middle Eastern, South Asian, and African Studies; Music; Philosophy; Religion; and Slavic Languages.

ii. The Division of Social Sciences shall consist of the following departments: African American and African Diaspora Studies, Anthropology, Economics, History, Political Science, and Sociology.

iii. The Division of Natural Sciences shall consist of the following departments: Astronomy; Biological Sciences; Chemistry; Earth and Environmental Sciences; Ecology, Evolution, and Environmental Biology; Mathematics; Physics; Psychology; and Statistics.

iv. The School of the Arts.

v. The School of Professional Studies.

2. The sixteen memberships for officers of instruction with stated term shall be apportioned by the University Senate every five years among the Faculties of the Columbia Corporation other than the Faculties of ~~Arts and Sciences~~ Columbia College, General Studies, the Graduate School of Arts and Sciences, the Arts, Professional Studies, and Health Sciences, except as specified below. All such officers of instruction having an appointment as preceptor, associate, lecturer, instructor, and assistant professor, regardless of whether ~~all~~ such officers are full time or part time, shall be entitled

to vote. Officers of instruction having an appointment with a stated term above that of assistant professor also shall be entitled to vote in this category. For the purposes of this paragraph (2), apportionment and election of members from the Faculties of Arts and Sciences, the College, General Studies and the Graduate School of Arts and Sciences, each division of the Faculty of Arts and Sciences, treated as one group, shall be among the three disciplines of namely the Social Sciences, Humanities, and Pure Natural Sciences, respectively, as specified in paragraph (1) above Section 153 of the Statutes, shall be treated as a separate faculty.

b. Election of student members

The twenty-four memberships for full-time students shall be apportioned by the University Senate every five years as follows: twenty-two among the Faculties of the Columbia Corporation; provided, however, that at least one student member shall be elected from each Faculty other than the Faculties of Arts and Sciences and Health Sciences; two additional student members shall be elected from the Faculty with the largest number of full-time students; one additional student member shall be elected from each of the Faculties with the next largest number of full-time students; until the limit of twenty-two student seats for the Columbia Corporation is reached; one full-time student member shall be elected from Barnard College; and one full-time student member shall be elected from Teachers College. For the purposes of this subsection (b), the Faculty of the Graduate School of Arts and Sciences shall be treated as consisting of three separate Faculties, comprised of the divisions ~~disciplines~~ of the Humanities, Social Sciences, ~~Humanities~~, and Pure Natural Sciences, respectively, as specified in paragraph (a.1) above Section 153 of the Statutes. Students here are defined to include all those seeking degrees and all those non-degree-seeking students who have been designated as members of constituencies by the Senate By-Laws.

c. Election of members from professional library staff and administrative staff

Two members shall be elected from and by the research-professional library staff and administrative staff.

d. Election of members of officers of research

The six memberships for officers of research shall be apportioned by the University Senate biennially elected as follows: four among shall be elected from officers of research members designated as senior research scientist or senior research scholar, Lamont research professor, research scientist or research scholar, Lamont associate research professor, associate research scientist or associate research scholar, and Lamont assistant research professor; one additional research officer member shall be elected from those persons designated as postdoctoral research scientist, postdoctoral research scholar, or postdoctoral research fellow; and one additional

research officer member shall be elected from those persons designated senior staff associate or staff associate.

e. Representatives from affiliated institutions

Each of the affiliated institutions shall choose representatives from among their respective Faculties to serve as members in such manner as each of them may determine.

f. Direct and indirect elections

All members elected under subsections (a), (b), and (c) shall be chosen by direct election, except that student members may be chosen by indirect election as hereinafter provided. If the indirect election method is chosen, then the student member of the University Senate shall be elected by the elected student governing body of the Faculty from which the student member of the University Senate is being chosen. Such choice shall be exercised only by a referendum of the students within such Faculty and shall stand unless and until reversed by a succeeding referendum. If there is no elected student governing body of the Faculty which is authorized to hold indirect elections, and if either a seat assigned to a student member has remained vacant for six months or longer, or elections have failed to fill such a seat, then a member may be elected from one or more departments within that Faculty in rotation, as may be prescribed by the body designated of the University Senate, to administer University Senate elections.

g. Time of election and term of office

There shall be two regular election periods each year, one in the spring and one in the fall. The regular term of office for each member shall be as follows:

1. For each member elected in the spring elections, the term of office shall begin fourteen days before the day of Commencement next following his or her election and shall be for two years; provided that a member elected to a vacant seat shall assume office immediately; and provided further that if the spring elections are not completed by the date set for the beginning of his or her term, the member shall assume office immediately upon the completion of the elections.
2. For each member elected in the fall elections, the term of office shall commence immediately upon election and shall expire fourteen days before the day of the second Commencement next following his or her election.
3. For each appointed member, the term of office shall commence immediately upon appointment and shall expire fourteen days before the day of the second Commencement next following his or her appointment.

It shall be the responsibility of each member to advise the commission supervising elections of members to the University Senate, as early as possible, if he or she will be unable to serve his or her full term. When such commission is so advised, provision will be made to vote, at the next election, for a member to fill the anticipated vacancy. The term of such member shall be the same as that of all other members elected in the same election period, except that if the seat is occupied at the time of election, the term shall commence upon the effective date of resignation of the retiring member. Except as provided in subsection (f), any vacancy occurring between election periods shall be filled in the same manner in which the original member was chosen, and the term of office for each member so elected shall commence immediately upon election and shall expire fourteen days before the day of the second Commencement next following the election. The Executive Committee of the University Senate may designate a date for the expiration of terms and beginnings of new terms different from the date set herein, if such a redesignation is necessary to allow for an orderly transition of the work of the University Senate from one session to the next. No person shall be disqualified from election because he or she will be a member of the category from which he or she is elected for less than two years. However, his or her membership shall terminate when he or she is no longer a member of the category from which he or she was elected.

h. Recall

Every elected member shall be subject to recall. Upon petition signed by one-fourth of the number of members of the category from which the member was elected, a recall election shall be held. A majority of votes cast for recall shall cause the recall of the member and his or her membership shall thereupon become vacant. The provisions of subsection (f) shall also apply to recall elections.

§22. Duties It shall be the duty of the University Senate

- a. to report to the Trustees its opinion as to any exercise of power proposed by a Faculty under Section 35;
- b. to submit such proposals to the Trustees or to the President or to the several Faculties as in its judgment may serve to increase the efficiency of University work;
- c. to consider any question that may arise as to the conduct or efficiency of any officer of administration or instruction, and to report thereon to the Trustees through the President.

§23. General policies Subject to the reserve power of the Trustees and the provisions of Sections 25, 293, and 333, the University Senate shall be a policy-making body which may consider all matters of University-wide concern, all matters affecting more than one Faculty or school, and all matters pertaining to the implementation and execution of agreements with the other educational

institutions that are now or may hereafter become affiliated with the University. Without limitation by enumeration the University Senate shall

- a. develop and review plans and policies to strengthen the educational system of the University;
- b. work on the long-range master plan for the physical development of the University; recommend ways in which it can be improved; and keep the same under continuing review;
- c. work for the advancement of academic freedom and the protection of faculty interests;
- d. work for the promotion of student welfare and the enhancement of student life;
- e. initiate and review policies to govern the University's relations with outside agencies for research, instruction, and related purposes;
- f. foster policies for cooperative and mutually beneficial relations with the neighboring community;
- g. review by broad categories the annual budget of the University after its adoption and advise the Trustees as to its general conformity with the goals of the University;
- h. consider and recommend policies relating to the awarding of University prizes and honors, and assist the Trustees in the selection of recipients of such prizes and honors;
- i. promulgate a code of conduct for faculty, students, and staff and provide for its enforcement;
- j. initiate proposed changes in Chapter II of these Statutes which have been passed by a vote of at least three-fifths of all incumbent members of the University Senate.

§24. Powers The University Senate, subject to the reserve power of the Trustees and the provisions of Section 25, shall have power, and it shall be its duty:

- a. *Academic correlation*: to secure the correlation of courses offered by the several Faculties and Administrative Boards; to adjust all questions involving more than one Faculty or Administrative Board, except those matters reserved to the Faculty of Arts and Sciences under Section 293 of these Statutes and to the Faculty of Health Sciences under Section 333 of these Statutes;
- b. *Degrees*: to prescribe, by concurrent action with the appropriate Faculty or Administrative Board, the conditions upon which the following degrees shall be conferred and to recommend candidates for such degrees:

Doctor of Philosophy (Ph.D.)—Faculty of the Graduate School of Arts and Sciences and Administrative Board of the Graduate School of Arts and Sciences

Doctor of the Science of Law (J.S.D.)—Faculty of Law

Juris Doctor (J.D.)—Faculty of Law

Doctor of Medical Science (Med.Sc.D.)—Faculties of Medicine and Dental Medicine

Doctor of Medicine (M.D.)—Faculty of Medicine

Doctor of Dental Surgery (D.D.S.)—Faculty of Dental Medicine

Doctor of Occupational Therapy (O.T.D.)—Faculty of Medicine

Doctor of Physical Therapy (D.P.T.)—Faculty of Medicine

Doctor of Nursing Practice (Dr.N.P.)—Faculty of Nursing

Doctor of Public Health (Dr.P.H.)—Faculty of Public Health

Doctor of Education (Ed.D.)—Faculty of Teachers College

Doctor of Engineering Science (Eng.Sc.D.)—Faculty of Engineering and Applied Science

Doctor of Musical Arts (D.M.A.)—Faculty of the Graduate School of Arts and Sciences

Master of Philosophy (M.Phil.)—Faculty of the Graduate School of Arts and Sciences and Administrative Board of the Graduate School of Arts and Sciences

Master of Architecture (M.Arch.)—Faculty of Architecture, Planning and Preservation

Master of Arts (M.A.)—Faculties of the Graduate School of Arts and Sciences, Faculty of the Arts, Faculty of Journalism, Teachers College, Union Theological Seminary, and Administrative Board of the Graduate School of Arts and Sciences

Master of Science (M.S.)—Faculties of Medicine, Engineering and Applied Science, Journalism, Teachers College, Architecture, Planning and Preservation, Journalism, Dental Medicine, Social Work, Business, Nursing, Public Health, and Professional Studies

Master of Business Administration (M.B.A.)—Faculty of Business

Master of Health Administration (M.H.A.)—Faculty of Public Health

Master of Professional Studies (M.P.S.)—Faculty of Professional Studies

Master of International Affairs (M.I.A.)—Faculty of International and Public Affairs

Master of Public Administration (M.P.A.)—Faculty of International and Public Affairs

Master of Laws (LL.M.)—Faculty of Law

Master of Public Health (M.P.H.)—Faculty of Public Health

Master of Fine Arts (M.F.A.)—Faculty of the Arts

Master of Education (Ed.M.)—Faculty of Teachers College

Bachelor of Arts (B.A.)—Faculty of Barnard College

Bachelor of Arts (B.A.)—Faculty of Columbia College

Bachelor of Arts (B.A.)—Faculty of General Studies

| Bachelor of Science (B.S.)—Faculty of Engineering and Applied Science

Bachelor of Science (B.S.)—Faculty of Nursing

Bachelor of Science (B.S.)—Faculty of General Studies

c. *Certificates*: to prescribe the conditions upon which certificates and such other certificates as the University Senate may from time to time approve, shall be awarded upon recommendation of the several Faculties, Administrative Boards, or committees;

d. *College courses*: to prescribe, by concurrent action with the Faculties of Columbia College, Barnard College, and General Studies, severally, the extent to which courses offered by other Faculties and leading to graduate or professional degrees or diplomas shall be included in the programs of studies under those Faculties, and the conditions upon which such courses may be elected by candidates for a nonprofessional first degree;

e. *Barnard College*: to prescribe the manner in which the degree of ~~B~~bachelor of ~~A~~arts conferred upon graduates of Barnard College shall be maintained at all times as a degree of equal value with the degree of ~~B~~bachelor of ~~A~~arts conferred upon the graduates of Columbia College;

f. *Other institutions*: to adopt regulations, subject to approval by the Trustees, providing for the proper execution, as regards educational matters, of agreements that are now in existence or that may hereafter be made between the University and such other educational institutions as are now or may hereafter become affiliated with the University, and to prescribe what degrees, diplomas, and certificates may be granted by said institutions and the conditions for granting the same;

g. *Summer Session*: to adopt regulations governing the relation of instruction in the Summer Session to the other work of the University;

h. *Fellowships and scholarships*: to determine the conditions upon which fellowships and University scholarships shall be awarded, to appoint all fellows and University scholars, and to make rules for their government, subject to such restrictions as may be prescribed by the Statutes or by the terms upon which the several fellowships and University scholarships are established;

i. *Academic Calendar*: to fix, annually in advance the Academic Calendar, the dates for entrance and final examinations, the date of Commencement, and the order of Commencement exercises;

j. *Research bureaus*: to encourage original research and to authorize the establishment of research bureaus to be conducted by a Faculty or by one or more departments under such terms as the University Senate may prescribe;

k. *Libraries*: to advise in such matters pertaining to the administration of the libraries as may be laid before it by the Provost or Provosts or by the University Librarian;

§25. Limitations of powers

a. Unless Trustee concurrence is required, acts of the University Senate under Sections 22 and 23 shall become final on passage. In all matters involving a change in budgetary appropriations, involving the acquisition or disposition of real property, affecting contractual obligations of the University, or as required by law, such concurrence shall be required. In all other matters, the action of the University Senate will be final unless the President shall advise the University Senate not later than its next regularly scheduled meeting that Trustee concurrence is necessary. Acts of the University Senate under Sections 22 and 23 shall be concurred in or not concurred in by the Trustees by the second stated meeting of the Trustees following the submission of the University Senate's action to the Trustees, except when the Trustees shall advise the University Senate of their need for a longer specified period of time to consider such actions. Whenever the Trustees

do not concur in an act of the University Senate under Sections 22 and 23, they shall return the measure to the University Senate with an explanation of the reason for their action.

b. No exercise of the powers conferred on the University Senate by Section 24 that involves a change in the educational policy of the University in respect to the requirements of admission or the conditions of graduation shall take effect until the same shall have been submitted to the Trustees at one meeting and another meeting of the Trustees shall have been held.

c. Notwithstanding the provisions of subsections (a) and (b), the President may convene a special meeting of the University Senate within fifteen class days of any University Senate action, and may request it to reconsider such action.

§26. By-Laws and committees The University Senate shall have the power to organize itself and to make all such By-Laws and regulations for its own proceedings as shall not contravene the Charter of the University or these Statutes. Such By-Laws shall be amended only by a three-fifths vote of all incumbent members of the University Senate. Any such By-Laws and regulations may provide for such committees as may be necessary or desirable. Such committees shall include an Executive Committee. The Trustees shall work with the Executive Committee of the University Senate in the nomination of six Trustees as provided in the By-Laws of the Trustees. The Trustees shall work with the Executive Committee of the University Senate in the selection of a President of the University as provided in the By-Laws of the Trustees. The President shall work with the Executive Committee of the University Senate in the selection of the Provost or Provosts as provided in Section 50. The Executive Committee of the University Senate shall participate in the appointment of University Professors as provided in Section 61.

§27. Meetings The University Senate shall meet regularly as provided in its By-Laws. Special meetings shall be held on the call of the President and in accordance with its By-Laws. When practicable, meetings of the Senate shall be conducted in person. VirtualElectronic meetings of the Senate may be called by the President, by the chair of the Executive Committee of the University Senate in consultation with the members of the Executive Committee of the University Senate, and in accordance with other methods specified in its By-Laws. The President shall be the presiding officer of the University Senate. In the absence of the President, the chair of the Executive Committee of the University Senate shall preside.

§28. Staff The University shall furnish, to the extent provided for in the University's budget, assistance to the University Senate as a whole and to its committees in connection with its official business, as may be authorized by the Executive Committee of the University Senate.

University Senate Plenary

October 22, 2021



University Senate

Proposed: October 22, 2021

Adopted: October 22, 2021

In favor: Opposed: Abstained: 83:0:0

RESOLUTION TO AMEND THE UNIVERSITY STATUTES TO ESTABLISH THE FACULTY OF CLIMATE

BE IT RESOLVED that the University Senate endorse the revisions of the University Statutes to establish the Faculty of Climate, as set out, below; and

BE IT FURTHER RESOLVED that the University Senate shall forward this resolution to the Trustees of Columbia University, to provide written notice of a proposed University Statute amendment at least thirty days in advance, in accordance with Chapter XLV of the University Statutes which governs the amendment process.

FACULTY OF CLIMATE

Sec. xxx. Faculty The Faculty of Climate shall consist of the President, the Provost or Provosts, the dean(s), and such officers of administration and instruction as may be assigned thereto by the Trustees.

Sec. xxx. Program of Study The program of studies shall be designed to provide technical and professional instruction and research in climate studies and related fields.

Sec. xxx. Degrees

- a. M.A. Candidates for the degree of Master of Arts shall be qualified to receive that degree upon compliance with the conditions prescribed by the University Senate by concurrent action with the Faculty of Climate.

Sec. xxx. Nothing contained herein shall be deemed to impair the powers of the Faculties of Columbia College, General Studies, the Graduate School of Arts and Sciences, the Arts, Professional Studies (which together constitute the Faculty of Arts and Sciences); Architecture, Planning and Preservation; Business; Engineering and Applied Science; Journalism; International and Public Affairs; Law; Dental Medicine; Medicine; Nursing; Public Health (which together constitute the Faculty of Health Sciences); and Social Work and of their several deans.

Sec. 24. Powers

- b. Degrees: to prescribe, by concurrent action with the appropriate Faculty or Administrative Board, the conditions upon which the following degrees shall be conferred and to recommend candidates for such degrees:

Master of Arts (M.A.)—Faculties of the Graduate School of Arts and Sciences, Faculty of the Arts, Faculty of Journalism, Teachers College, Union Theological Seminary, Administrative Board of Arts and Sciences, and Faculty of Climate

Sec. 40. Departments The following departments of instruction are established in the University:
- Climate

Proponent:

Education Committee

Proposal to Establish the Faculty of Climate

Executive Summary

This proposal sets out the key elements involved in the creation of the Faculty of Climate and the future steps in the development of the Climate School. Such a proposal requires the approval of the University Senate, with a three-fifths vote for the necessary changes to be made to the university statutes. This proposal has been considered by the Education Committee, in consultation with the Faculty Affairs Committee, and the Research Officers Committee.

Vision

To develop and inspire knowledge-based solutions and educate future leaders for just and prosperous societies on a healthy planet. The Climate School will provide the scholarship that is urgently needed to tackle climate change and related problems, and offer solutions through transdisciplinary research, partnerships, education, innovative technologies, and the sharing of ideas. It will be unique in design and purpose, built around inter- and transdisciplinary engagement and partnership.

Background

The development of the Climate School builds upon the work of the Climate Task Force, which met in Fall 2019 to consider what more Columbia University might do to tackle the climate crisis. The results of the Task Force discussions, as well as of the many meetings with faculty, officers of research, administrators, students, and leaders from across the different schools, formed the basis of a [Report](#), delivered to President Bollinger and the Columbia Trustees in December 2019. That document focused on several issues related to academic research, education, external engagement, and the design and implementation of solutions. The Report recognized that the problems of climate are hard and complex, covering many dimensions, and requiring an unusually broad degree of original systems thinking across disciplines. This necessitates collaboration between Columbia College, General Studies, the Graduate School of Arts and Sciences, the Arts, and Professional Studies (which together constitute the Faculty of Arts and Sciences), current Columbia schools and other relevant structures such as the Earth Institute, which includes the Lamont-Doherty Earth Observatory.

The Report recommended 11 broad principles for Columbia's new climate initiative. One key recommendation was that the University establish a **Climate School**. It would be unlike a conventional school and distinct from other kinds of environmental entities, including those at Columbia.

Much of the Climate School design has been developed in 2020 during the spreading coronavirus

pandemic. Notwithstanding the unspeakable tragedies and impacts on our ways of living across the world, it has served to usefully illustrate how well or otherwise society at large and societies, more specifically, respond to a global threat. In the case of climate and related sustainability issues, disaster is expected on both regional and global scales, but the full extent will not become evident immediately. Average conditions will change gradually, and as a result, the frequency of some extreme events will increase. Some regions will become uninhabitable, and the loss of life and home environment are expected to be most severe for those already disadvantaged. Conversely, those communities whose livelihoods are dependent on industries that provide fossil fuels are potentially at threat as society transitions its energy sources. Therefore, climate is not just a physical problem to fix; it has serious implications for society as whole, and, raises many complex social justice issues.

Columbia, with its great strength in climate, but also key cognate disciplines, is particularly well placed to establish a climate school. It should aim to provide the requisite education, research and impactful fourth purpose partnerships, so that society is better prepared, and has the right science, technology, and ethical and legal frameworks, to tackle such issues. It should consider the needs of tomorrow's citizens and should expand the fields of expertise needed to achieve these aims. With new technologies, and better understanding, monitoring and prediction, we will help society plan, prepare, transition, and thrive.

A University-wide task force recommended the establishment of a climate school, working in partnership with the deans and faculties of other Columbia schools to take on in a scholarly way an area of tremendous public attention and increasing concern. With the support of President Bollinger, the University's Trustees determined that Columbia's efforts in the area of climate change would be significantly enhanced by the creation of a school and unanimously approved the formation of the Climate School, with the understanding that School's activities would be subject to all regulatory and accreditation requirements and the University's usual programmatic, budget and other approval processes. Since 2020, as the internal planning regarding operational structure has continued, Dr. Halliday and his team have worked with the University Senate to propose changes to the University Statutes to finalize the status of the School and the Faculty within Columbia.

Proposal

1. Leadership & Administration

1.1. Leadership

In April 2021, President Bollinger announced the leadership of the Climate School. The School will be co-led by four of Columbia's most eminent climate experts: Alex Halliday, Ruth DeFries, Maureen Raymo, and Jason Bordoff. Alex Halliday has assumed the role of Founding Dean, while Ruth DeFries, Maureen Raymo, and Jason Bordoff have each assumed roles as Co-Founding Deans. (See appendix for biographies.)

Their leadership of the Climate School is an addition to their existing portfolios, all of which are integral to the school itself, with Dr. Halliday and Dr. Raymo directing the Earth Institute and Lamont-Doherty Earth Observatory, respectively. Each of these individuals brings unique and complementary areas of expertise to this endeavor and will be working closely over the next months and years to develop and execute the design vision presented in this document.

The Founding and Co-Founding Deans will work collaboratively to lead the school. Each dean brings a unique perspective and skillset and the school will benefit from having four strong leaders work together and complement each other.

1.2. Administration

The Climate School incorporates the Earth Institute and its units, including the Lamont-Doherty Earth Observatory (LDEO). As such, it draws upon their existing robust administrative structures, including comprehensive units for finance, human resources, information technology, and facilities, as well as development, communications, and research and educational support. Under the leadership of Senior Associate Dean for Finance and Administration, Alicia Roman, the Climate School is reorganizing these existing units to better serve and support the needs of a School, while ensuring the existing units of the Earth Institute continue to receive the services and resources they need to succeed. This will include key new hires, such as a Director of Facilities and an Associate Dean for Diversity, Equity, Inclusion and Antibias. In addition, with respect to education and students, GSAS and the Climate School entered into an MOU such that GSAS will continue to provide certain administrative and student support services for the MA in Climate and Society Program until the Climate School has built out those systems on its own.

2. Faculty

The initial faculty of the Climate School will include the four deans:

- Alex Halliday, Founding Dean, Columbia Climate School
- Ruth DeFries, Co-Founding Dean, Columbia Climate School
- Maureen Raymo, Co-Founding Dean, Columbia Climate School
- Jason Bordoff, Co-Founding Dean, Columbia Climate School, and

the President, the Provost, and Jeffrey Shaman, Professor of Environmental Health Sciences (in the International Research Institute for Climate and Society/ Earth Institute), who will serve as Senior Associate Dean for Faculty Affairs. These faculty will retain their home department appointments.

The Climate School does not expect to hire faculty with primary appointments in the Climate School during the 2021-22 academic year, and there is an expectation of hiring one to two faculty with primary appointments by July 1, 2022 to begin in academic year 2022-23. Beyond that, faculty appointment and recruitment will depend on the Faculty Hiring Plan, which is presently being developed, and ongoing fundraising to support that Faculty Hiring Plan. The Climate School will work closely with the Office of the Vice Provost for Faculty Affairs to ensure alignment with University rules of appointment.

Climate School faculty will consist of tenured and tenure-track professors as well as professors of practice, lecturers in discipline, and adjuncts, principally from research officer tracks. A final faculty size or number has not been determined as this depends on student programs and fundraising. It currently is estimated that 70 to 75 percent of faculty hired will be tenured or tenure track. Ultimately, this will be guided by the Faculty Hiring Plan once completed. All faculty titles will be in line with University policy.

Faculty responsibilities and expectations will be outlined in the Climate School Faculty Handbook or similar guiding document, which is yet to be developed. Responsibilities will include teaching and student mentoring, research and participation on committees. Some individuals may also take on leadership roles within the School. All faculty will be expected to participate in the intellectual life of the School.

Any subsequent faculty appointments will be determined in the coming years through discussions between faculty, their departments, and their deans, and will be contingent upon hiring priorities developed in the coming year and funds raised to allow a revenue neutral or positive expansion of the faculty size.

2.1. Joint Appointments

Consistent with existing processes, joint appointments with other University schools and departments will be reflected in a memorandum of understanding (MOU). This would be for both faculty new to the University and for existing University faculty.

The Climate School will develop a template MOU (provided by the Provost's Office) for joint appointments which addresses the following:

- tenure (following University tenure guidelines);
- funding exchanges between the Climate School and the other school/ department;
- teaching responsibilities at the Climate School and the other school/ department;
- arrangements with respect to PhD students and their funding (Note: All PhD students will continue to be part of GSAS but may work with Climate faculty and in Climate School programs);
- Climate School committee activity;
- the Climate School program(s) they are affiliated with;
- any ICR split for grants raised during the joint appointment, if relevant;
- any other resources that are provided by the Climate School or the other school/ department, including space or lab equipment;
- if applicable, activity they are released from at the partnering school/ department (teaching, committees, etc.).

2.2. Faculty Governance

The Climate School aims to establish its leadership, governance and its faculty within the rules and guidelines set by the University. Subject to all University requirements, the Climate faculty will establish a process to review recommendations for promotion and tenure, and degree programs and courses.

The School will also establish the Climate Council comprising administrators, faculty and officers of research. The Council will focus on strategy, resource allocation, and other items of concern to the School. The Climate Council will be developed with inclusive representation and foster engagement across the University.

3. Student Body

The initial student body will be composed of those enrolled in the MA in Climate and Society. In September 2021, the School welcomed a cohort of 87 students into the Climate and Society program. These students come from all over the world, though a majority are from the United States; three are first generation college students. Roughly one third come from an earth sciences/environmental sciences background, 10 percent come from other areas of the natural sciences, and about half are from the social sciences and humanities (broadly defined).

Other affiliated Earth Institute (EI) program students (roughly 750) will continue to be housed and supported primarily by their respective schools. However, those students do also receive significant support. Consistent with its guiding foundations, the School will continue the work of the EI and aim to amplify that which already exists to include students from all affiliated programs in a wide range of academic, professional, social and planning spheres. Currently, this includes, but is not limited to, co-

curricular activities, events, internships, research assistantships, travel funding, professional development support, spaces to meet, an annual “All Ivy” career fair run by the Earth Institute but with the involvement of other universities. The Climate School will continue to provide the services and supports for these programs and will expand those activities. The Earth Institute education programs, co-run with other Schools, are outlined later in this document. Together, these programs provide a rich, interdisciplinary, cross-school environment for the students.

Lastly, as the Climate School develops, it aims to serve as a hub for all Columbia students interested in climate or sustainability and to provide a community of students, faculty, and researchers with common interests, subject wise. In talking with students who study in climate and sustainability programs across Columbia, it is apparent that a central hub for convening, networking and coordinating would be welcome. This is viewed as one key benefit of establishing the Climate School; it will support students across Columbia.

4. School Structure and Functioning

The Climate School will have a networked structure that connects and catalyzes distributed activities and supports individuals and groups across Columbia. Every Columbia school has some level of climate-relevant research and education. To harness this diversity of academic power and to have the University plan and function strategically in terms of its evolving footprint in this area, there needs to be a stronger degree of networking of currently fragmented activities. The School will create an intellectually integrated academic center at the University, connecting, amplifying, and advancing the extensive and impressive work currently undertaken at the University on climate education, research, and solutions.

To facilitate this, the Climate School will bring together for the first time in a school, much of Columbia’s world-leading climate-relevant activities. This includes the Earth Institute centers, which do not currently sit in any school and will immediately give the School scale. The School will facilitate coordinated strategic development of subjects and inclusion of new fields and faculty.

Therefore, the Climate School will be fundamentally interdisciplinary in nature, with the following broad structure:

- a hub of existing and new faculty, staff, researchers, students and research, education and impact programs;
- connected via networks, shared strategic capabilities, joint appointments, interdisciplinary appointments, projects, education programs and communication vehicles to:
- a range of existing and new faculty, staff, researchers, students, and existing programs that are distributed across the entire university in current schools.

4.1. Academic Themes and Programs

The Climate School will have a clear academic organizational structure defined by academic themes¹.

1. Predicting and Adapting to Future Climate
2. Carbon-Neutral Economy
3. Earth Fundamentals
4. Resilient Ecosystems
5. Climate and Social Systems
6. Climate Justice and Equity

Climate School themes define areas of common intellectual interest and strategic thinking around a defined interdisciplinary subject – what needs building and strengthening in the long-term - across the University, not just within their own academic unit. The themes will provide a foundation for planning how Columbia advances relative to its peers and sets long-term priorities in these fields. Each will provide a basis for establishing academic hiring priorities and building a pipeline of junior scholars. Some of these themes are too broad for this purpose and Programs will be established within them for more focused attention to specific areas and activities. These may be more time-bound and project-focused. The themes are not meant to be equal in scale or scope and are fluid, such that they may change over time.

4.2. The Earth Institute and the Lamont-Doherty Earth Observatory

The Earth Institute, including the Lamont-Doherty Earth Observatory, is an umbrella organization of multiple research centers as well as education programs spread across the University, all of which will move into the Climate School. Earth Institute-affiliated research centers, whose administrative home is another school, will be jointly affiliated with the Climate School. The education programs that the Earth Institute co-sponsors, and that are delivered by both Earth Institute researchers and faculty at other schools, will become education programs co-sponsored by the Climate School but remain offered by their primary school. Their curriculum will not change, nor will the support the Earth Institute provides to those schools for the management of those programs.

The interdisciplinary role that the Earth Institute plays for the University will continue as part of the distributed/network activity of the Climate School (e.g. postdocs, seed funding, research assistantships, internships, interdisciplinary research facilitation, etc.).

All research officers at the Earth Institute, including those at the Lamont-Doherty Earth Observatory will have primary research appointments in the Climate School. Historically, the Institute and Observatory have not been situated inside a school, so no research officer scientists have officer of instruction appointments, except adjunct ones. In certain cases, research officers have secondary adjunct appointments in other parts of Columbia if they have existing arrangements to teach in those schools (DEES, SPS, SIPA). We expect that a subset of Lamont Research Professors and other research officers

¹ It will not have departments, similar to Business, Journalism, Law, and SIPA.

at the Earth Institute, may be considered for officer of instruction positions in the Climate School, subject to a process that will be developed by the Climate School and the Provost's Office.

5. Degrees

5.1. Current Degree Programs

Initially the Climate School will be authorized to confer the Master of Arts degree in Climate and Society only. No other degree currently affiliated with the Earth Institute will move into the Climate School. While those degrees will have support from the Climate School, no changes to those degrees are initially being made, and they will remain housed in their existing schools. By nature of the Earth Institute moving into the Climate School, these programs will have an affiliation with the Climate School.

For reference, these are listed below:

1. Undergraduate Program in Sustainable Development (College & GS)
2. MPA Environmental Science & Policy (SIPA)
3. MPA Development Practice (SIPA)
4. MS Sustainability Management with affiliated certifications (SPS)
5. MS Sustainability Science (SPS)
6. PhD Sustainable Development (SIPA/GSAS)

In addition to the above, there is a long-standing close relationship between the Lamont Doherty-Earth Observatory and the Department of Earth and Environmental Sciences (DEES). The DEES programs do not have a formal affiliation, but are very closely associated with Lamont, and in the case of doctoral students, are embedded in Lamont labs and advised by many Lamont scientists. Lamont Research Professors, holding faculty appointments in DEES, teach undergraduate and graduate courses in DEES.

The School will expand existing and establish new education programs. All new programs would be grounded in market demand and professional pathways for graduates and be subject to University, including University Senate, and New York State Department of Education review.

The MA in Climate and Society, previously offered through the Graduate School of Arts and Sciences, will be offered through the Climate School as of Fall 2021. The Climate School will significantly expand the one-year M.A. Climate and Society program. The inaugural class entering September 2021 has 87 students, more than double the typical 35 to 40 student cohort. The program will develop new electives courses and will consider curriculum needs for this program alongside new degrees in development.

5.2. New Degree Programs

Any new Master's degree programs at the Climate School will require review and approval by the School's Committee on Instruction (to be formed), the Dean(s), the Provost, the University Senate and New York State. The Climate School will work closely with the Office of the Vice Provost for Academic Programs to ensure alignment with University, State and federal guidelines. Consistent with University practice, the Committee on Instruction would be responsible for overseeing the entire curricular portfolio of the school with respect to quality, coherence, and appropriateness. In time, new programs will be developed and guided through the aforementioned reviews.

As new education programs are developed, careful consideration will be given to existing programs at Columbia. It is important that those programs continue to succeed and are, in fact, strengthened by the existence of the Climate School. The Climate School should give them greater visibility and allow them the opportunity to expand, while also filling educational gaps at Columbia with new programs.

5.3. MS in Climate

Subject to all required approvals, the Climate School will seek to develop a Master of Science degree in Climate. The MS program should be designed around interdisciplinary core competencies for all students and allow students to specialize through a modular approach. The creation of additional new Masters degrees will be considered and evaluated over time. The Climate School may partner with other schools to offer joint or dual degrees, certificates, or concentrations/specializations, as appropriate.

The curriculum development for the MS is still in its early stages. The faculty planning group is considering developing the new MS by building on the strengths and 16-year history of success of the MA in Climate and Society. A key element of this path could be to merge the MA in Climate and Society into an MS, amplifying and expanding the current curriculum, and adding tracks to what would be a second year of the program. The current plan would also include maintaining a one-year path. One possibility is that a single MS would emerge as the banner or flagship program for the Climate School in 2024.

The MS in Climate will be designed with a focus on fundamental aspects and practical skills that contribute to understanding, quantifying, communicating, and addressing the risks of climate change. The program will be rooted in interdisciplinary approaches and cross-sectoral perspectives relevant to climate change. It will be innovative and transformative, with the goal to provide students with expertise and skills required to address the climate challenge now and into the future. Faculty in the Climate School will be heavily involved in both designing and teaching in this program.

While the MS program is still in conceptual development, the basic structure will include a few key elements. First, the program will have a core curriculum based on a set of aligned core competencies, to provide students with a shared foundation of climate knowledge. The core will include climate dynamics/fundamentals, quantitative methods, climate management and adaptation, carbon mitigation, climate justice, and communications. Students will complete the core in the first 1-2 semesters of study.

A few courses (e.g., climate fundamentals; managing and adapting to climate) will be required for all students, with flexibility built into other areas (e.g., quantitative methods) to accommodate incoming students with varying levels of knowledge and exposure.

After completing the core, students will select a track, or specialization, to develop domain-specific skills. Initial tracks may include Energy, Climate Justice, Climate Fundamentals, Climate and Health, and/or Climate Finance. In alignment with the school's hub and spokes model, the tracks will be offered by the Climate School in partnership with other schools or departments at the University. For example, Climate Finance would be offered in partnership with the Columbia Business School; the Climate and Health track would be offered in partnership with the Mailman School of Public Health. Discussions with schools are underway to work out appropriate arrangements, such as cross-registration, revenue-sharing, and other logistics. Students will also have the option to take elective courses in areas of their choosing.

As the core and tracks come into detailed focus, the School is also exploring a wide range of pedagogical approaches to amplify learning across a number of dimensions and to prepare graduates to be active agents of change in any setting. These include but are not limited to cohort-based learning models, case-based teaching, innovation in technology, hybrid and online modalities and threading interdisciplinarity and climate justice throughout every aspect of the program.

A defining feature of the MS in Climate will be an emphasis on practical, hands-on experiences in professional settings to prepare students for careers. Students will complete an internship or fieldwork experience in the summer semester between the first and second year. Applied and experiential learning experiences allow students to develop, manage, evaluate, or lead evidence-based climate-related projects. A capstone or culminating project will also be required to complete the program.

5.4. Ph.D. Programs

Developing a new interdisciplinary Ph.D. program within the next three to five years will be a key priority for the School. As with all Ph.D. programs, the degree would be granted by the Graduate School of Arts and Sciences.

5.5. Undergraduate Programs

The Climate School does not plan to grant its own undergraduate degree or directly enroll undergraduate students. Instead, it will continue to partner with Columbia College and General Studies, as with the existing undergraduate program in Sustainable Development. The School will explore additional ways to expand the existing program to add climate-related coursework, and partner with other departments and schools on interdisciplinary climate-related majors, including the Climate and Civilization major under development with DEES.

5.6. Non-degree programs

The Climate School may also offer executive education programs including certificates and certifications of professional achievement, subject to all required approvals with the University, the University Senate, and New York State. The Climate School will seek to develop certifications of professional achievement in climate and related areas, available to Columbia and non-degree students.

The School will also offer professional training and capacity-building workshops in climate literacy for participants ranging from primary and secondary school through corporate and non-profit leaders. These programs and partnerships serve a fundamental purpose by enabling the Climate School to engage beyond the university with the community, the public and private sectors, advocates, non-governmental organizations, and other lifelong learners, with the central tenet that such interactions enlarge traditional research and educational programs through collaborations.

6. Facilities

The Climate School will create an intellectually integrated academic center at the University, connecting, amplifying, and advancing the extensive and impressive work currently undertaken at the University on climate education, research, and solutions, while serving as an innovation hub to spark new areas of inquiry and research. Central to serving as a hub around climate will be a dedicated physical space for an immersive, interdisciplinary experience. Given the breadth and nature of fields and areas of study within the University, it is critical that the School provide a central academic home from which to massively expand the subject of climate change in a strategic, cohesive manner. In time, this will also manifest as a defined and recognizable physical presence that supports interactions and socialization for research, education, outreach, and impact. Such a physical space will be important to facilitate the regular networking and community-building across the University that will be needed to understand new problems that will emerge and to creatively address them.

Investing in new and renovated buildings for the School are among the School's top priorities, including for fundraising. The vision is eventually to have a major new building in Manhattanville that provides new lecture theaters, seminar rooms and other convening, interaction and classroom space, to house our developing degree and non-degree education programs, and host major meetings on issues to do with sustainability and the planet. This is in addition to shared and individual office spaces for students, faculty, researchers, visitors, staff and some Earth Institute and affiliated centers. This creation of an immersive academic ecosystem, close to other Manhattanville and Morningside buildings, is viewed as critically important for the development of the School. The Manhattanville building will also offer the opportunity for direct engagement with the City and in particular the Harlem/West Harlem neighborhood, with the ground floor open to the public. This is consistent with the School's goal of framing the climate crisis and solutions in the context of communities, social justice and the co-creation of knowledge.

In the short-term, the School is utilizing space in the Forum on the Manhattanville campus for both faculty and staff offices and classrooms, while also utilizing classroom space from DEES, negotiated as part of their continuing administrative support for the degree.

The Climate School also has a very significant amount of space in the form of Columbia's Lamont campus, which is utilized by some Earth Institute centers, most notably the Lamont-Doherty Earth Observatory, which oversees most of the upkeep and administrative functioning. This beautiful campus has many well-established research facilities, as well as office accommodation, lecture theaters and other interaction space. The majority of Earth Institute researchers are based there, and it provides the key geoscience research capabilities for Arts and Sciences (overwhelmingly those in DEES) and their students. It provides the Climate School, and the wider Columbia community, with ample opportunity for expansion, particularly for research facilities that are harder to establish downtown, and as a place to hold retreats. For example, it will soon be hosting facilities associated with a new faculty hire for SEAS who works on decarbonizing buildings. Finally, it also provides a very successful and attractive venue for public engagement, including open days, summer programs for high school students, and executive education.

Both campuses will require investment for the expanding educational and research programs of the Climate School.

7. Fundraising

Lastly, major fundraising for the School will be expanded, more fully deploying the Founding and Co-Founding Deans to this immense effort. The Deans are working closely with the Office of Alumni & Development, the School's own development office, and the School's external Columbia Climate Board of Advisors to refine a comprehensive fundraising strategy for the short, medium, and long term. The four main categories for fundraising include:

- a. *Faculty and personnel.* The Climate School will be raising resources for hires in developing areas, but also strengthening the support base for existing research personnel.
- b. *Buildings and facilities.* This will be dominated by the infrastructure needs for Lamont and Manhattanville, as outlined above, but will also include new research facilities.
- c. *Education and scholarships.* A key fundraising priority is to raise funds to provide need-blind admission to the Climate School. This is seen as critical if we want the education programs to have global reach and to support those in the developing world.
- d. *Programs including research and impact capabilities.* These will be partially focused on trans-disciplinary research priorities such as decarbonization, food security, coastal resilience and disaster resilience more broadly. However, the Climate School also will focus on cross-cutting subjects that need establishing such as climate justice, climate finance and climate modeling. Finally, the School intends to develop or expand platforms for achieving greater 4th Purpose impact, such as a climate policy hub.

Within each of these areas, the deans are establishing strategic priorities that will evolve over time. A key goal is to expand areas that are critical for better addressing the evolving climate crisis and related issues, while strengthening our existing research, impact and education base.

8. University Senate Review Process

Three committees of the University Senate – Education, Faculty Affairs, and Research Officers – reviewed the School proposal in spring and summer of 2021. Over the course of the discussions, the Committees posed a series of specific questions regarding the School’s pedagogical, research, and faculty programs, which were answered in detail and with candor to the satisfaction of the Committees.

The University Senate will continue to engage with the School on a regular basis as part of its statutory duties, including, but not limited to, the following:

- Any new degree program proposed by the school will be reviewed by the Education Committee;
- The School’s Faculty Hiring Plan will be shared with the Faculty Affairs Committee upon finalization.

In addition to the above, and in light of the exciting opportunity this initiative represents, the appropriate committees of the University Senate will invite the School leadership to provide regular updates as the School ramps up operation. These updates may be concurrent with major developments and should be no less than once a year for the first five years, in accordance with the timeline below.

Moving Forward / Future: Proposed Timeline

Year 1:

Education

- Launch at least two to three new courses for the MA (approved through GSAS)
- Expand opportunities for student research and impact activities
- Develop curriculum for new degrees
- Serve as hub for students interested in climate across Columbia

Research

- Establish Office of Research
- Nurture and support new and emerging partnerships.

Years 2-5:

Education

- Launch Masters and doctoral programs
- Raise scholarships to attract diverse cohorts into climate careers

Research:

- Launch at least four major transdisciplinary projects guiding strategic investments in people, resources, and hiring
- Expand LDEO and EI post-doctoral programs to support transdisciplinary initiatives
- Support ambitious pursuit of major interdisciplinary center grants from foundations and agencies

Year 10:

Education:

- Establish education of students in climate across multiple degrees
- Alumni are climate leaders across sectors and across the globe
- Columbia Climate School is the premiere school of its kind in the world

Research:

- Global leader in addressing climate change through co-creation of knowledge, policy, and solutions.

Conclusion

The creation of the Climate School will build upon Columbia and the Earth Institute's history of success and commitment to the University's core mission to advance knowledge and learning at the highest level and outreach to New York City, the nation and the world.

Some key milestones and goals that will define success for the Climate School in a decade include:

- Be the go-to institution for climate research, education and impact;
- Secure \$400 million to \$1 billion in new philanthropic funding;
- Secure over \$1 billion in Federal funding;
- Have thousands of alumni transforming the world;
- Zero-carbon sustainable building on Manhattanville;
- Net-zero Lamont campus;
- A model institution for diversity, equity and inclusion;
- Solutions at scale to decarbonize and adapt to climate change;

Columbia University is responding to the urgency of the climate crisis by making the largest commitment a great research university can. Columbia is building an entire school of novel design devoted to tackling this existential threat. The Climate School will advance knowledge across the myriad disciplines needed to tackle the climate crisis; but it will be judged as successful not just by its research and many highly educated and successful alumni, but also by the degree to which it can turn knowledge into action. The goal is that the Climate School will be used by public and private sector leaders to create a more sustainable, just, and safer future for the world. It will develop innovative programs to educate society at large and train tomorrow's leaders in how to curb and cope with climate change.

The Climate School's mission is urgent, which is why it is being built as fast as possible, deploying modelers, social scientists, geoscientists, law professors, engineers, economists and others from across Columbia and beyond to swiftly respond to this unprecedented challenge. The Climate School will change Columbia, in terms of what it achieves and how it functions, and by strengthening existing schools. It will not just facilitate a wide range of new programs to co-develop. It will also establish a powerful recruitment magnet for existing schools as they seek to expand their own programs.

Appendix

Deans' Biographies

Alex N. Halliday, Founding Dean

Director, The Earth Institute, Columbia University

Professor, Department of Earth and Environmental Sciences

Alex Halliday joined Columbia in April 2018, after spending more than a decade at the University of Oxford, during which time he was dean of science and engineering.

With 400 published research papers, Halliday has been a pioneer in developing mass spectrometry to measure small isotopic variations in everything from meteorites to seawater to living organisms, helping to shed light on the birth and early development of our solar system, the interior workings of the Earth, and the processes that affect Earth's surface environment.

His scientific achievements have been recognized through numerous awards, including the Murchison Medal of the Geological Society, the Bowen Award and Hess Medal of the American Geophysical Union, the Urey Medal of the European Association of Geochemistry, the Oxburgh Medal of the Institute of Measurement and Control, and a Knighthood for services to science and innovation. He is a Fellow of the UK's Royal Society and an International Member of the US National Academy of Sciences.

Halliday has helped to lead a variety of distinguished scientific societies and advisory panels. He is the former Vice President of the Royal Society and former President of the Geochemical Society, the European Association of Geochemistry, and the Volcanology, Geochemistry and Petrology Section of the American Geophysical Union. He has served as an external board member for Britain's Natural Environment Research Council, the Max Planck Society, London's Natural History Museum, the American Geophysical Union, and more.

As a professor in Columbia's Department of Earth and Environmental Sciences, Halliday divides his time between Columbia's Morningside campus and his isotope geochemistry lab at Lamont-Doherty Earth Observatory.

Maureen Raymo, Co-Founding Dean

Director, Lamont-Doherty Earth Observatory

G. Unger Vetlesen Professor, Department of Earth and Environmental Sciences

Maureen “Mo” Raymo is a marine geologist and climate scientist who works at Columbia University’s Lamont-Doherty Earth Observatory (LDEO) where she is the G. Unger Vetlesen Professor of Earth and Climate Sciences as well as the Director of the Lamont-Doherty Earth Observatory, the first climate scientist to lead the Observatory. Raymo’s research focuses on the history and causes of climate change in the past, including understanding the consequences of climate change for future sea level and ice sheet stability. Her research has been profiled in numerous publications including *The New York Times*, *The Washington Post*, *The Atlantic*, *The New Yorker*, *U.S. News and World Report*, *Discover Magazine*, as well as featured on the History Channel, BBC World Service, BBC’s Planet Earth, and PBS Newshour. Her Uplift-Weathering Hypothesis that addresses why climate changes on geologic timescales was the subject of both a PBS Nova and BBC Horizon documentary.

Raymo has spent months at sea and in the field, planning, leading and participating in numerous scientific expeditions. She has authored or co-authored over 100 peer-reviewed scientific articles, including 12 in *Science* or *Nature*. Her book, *Written In Stone - A Geological History of the Northeastern United States* has been continuously in print since 1989. Maureen has given hundreds of invited science presentations and spoken to dozens of public audiences about climate change.

Mo Raymo is an elected fellow of the National Academy of Sciences, the American Association for the Advancement of Science, the American Geophysical Union, The Geological Society of America, The Geological Society of London, and The Explorer’s Club. In 2014, she became the first woman to be awarded the Wollaston Medal, The Geological Society of London’s most senior medal previously award to Charles Lyell, Louis Agassiz and Charles Darwin. She was awarded the Maurice Ewing Medal by the AGU and U. S. Navy “for significant original contributions to the ocean sciences” and the European Geosciences Union, upon recognizing her accomplishments with the Milankovic Medal, wrote “Maureen E. Raymo’s work has given names to critical, foundational ideas: the ‘uplift-weathering hypothesis’, the ‘41-thousand-year problem’, ‘Pliocene sea level paradox’, and ‘the Lisiecki-Raymo $\delta^{18}\text{O}$ Stack’ are all central themes in palaeoceanography that appear in textbooks and have their roots in Raymo’s research and intellectual contributions.” Maureen’s work, firmly based on observations and data, has shaped our understanding of Earth’s natural climate variability and her many landmark papers have influenced a generation of climate scientists.

Raymo currently leads the Lamont-Doherty Earth Observatory where she manages more than 500 employees and an annual budget of US\$77 million. The Observatory supports the research and educational mission of nearly 100 Columbia University faculty, ~50 post-doctoral scholars, as well as ~90 graduate students enrolled in a doctoral program that is consistently ranked number one in the nation. Twelve

members of the National Academy of Sciences make their professional home at Lamont on 168 mostly-wooded acres atop the Mesozoic Palisades Sill overlooking the Hudson.

Jason Bordoff, Co-Founding Dean

Professor of Professional Practice in International and Public Affairs

Founding Director, Center on Global Energy Policy

Jason Bordoff is Co-Founding Dean of the Columbia Climate School, Founding Director of the Center on Global Energy Policy, and Professor of Professional Practice in International and Public Relations at Columbia SIPA. Bordoff joined the Columbia University faculty after serving until January 2013 as Special Assistant to President Barack Obama and Senior Director for Energy and Climate Change on the Staff of the National Security Council, and, prior to that, holding senior policy positions on the White House's National Economic Council and Council on Environmental Quality. One of the world's leading energy and climate policy experts, Bordoff's research and policy interests lie at the intersection of economics, energy, environment, and national security. He has written prolifically about how to address our greatest energy and climate change challenges and has developed innovative programs and tools to train future leaders to bridge the gap between academic research and policy, focused on delivering research insights in formats and timeframes that are accessible and useful to decision-makers outside of academia.

Ruth DeFries, Co-Founding Dean

University Professor

Denning Family Professor of Sustainable Development

Ruth DeFries is a professor of ecology and sustainable development at Columbia University in New York. She uses images from satellites and field surveys to examine how the world's demands for food and other resources are changing land use throughout the tropics. Her research quantifies how these land use changes affect climate, biodiversity and other ecosystem services, as well as human development. She has also developed innovative education programs in sustainable development. DeFries was elected as a member of the U.S. National Academy of Sciences, one of the country's highest scientific honors, received a MacArthur "genius" award, and is the recipient of many other honors for her scientific research.

DeFries is committed to linking science with policy, for example through her involvement with the Environmental Defense Fund, Science for Nature and People, World Wildlife Fund, and reconciling conservation and development in central India.

**RESOLUTION TO AMEND THE UNIVERSITY STATUTES
TO ENABLE CLIMATE SCHOOL REPRESENTATION IN THE UNIVERSITY SENATE**

BE IT RESOLVED that the Senate approve the revisions to the University Statutes to enable Climate School representation in the University Senate, as set out, below.

II THE UNIVERSITY SENATE

§20. Membership The University Senate shall be a unicameral body whose membership shall be composed of representatives from the following categories:

a. Administration members

1. The President
2. The Provost (or if there is more than one Provost, the Provost designated by the President)
3. The dean of the Faculty of the Graduate School of Arts and Sciences
4. The dean of Columbia College
5. Five members, who shall be appointed by the President, from among officers of administration who are part of the central administration and administrators of Faculties

b. Faculty members

1. Forty-~~two~~-three officers of instruction having an appointment without stated term as professor or associate professor as defined in Sections 60 and 61, to be elected from and by such officers of instruction, subject to the provisions of Section 21
2. ~~Sixteen~~-Seventeen officers of instruction having an appointment for a stated term as defined in Sections 60 and 61 to be elected from and by such officers

c. Student members

Twenty-~~two~~-three students as defined in Section 381 to be elected from and by such students as provided in Section 21, one student from Barnard College to be elected from and by the students of

Barnard College as provided in Section 21, and one student from Teachers College to be elected from and by the students of Teachers College as provided in Section 21

d. Affiliated institution members

1. Two representatives of the faculty of Barnard College
2. Subject to renegotiation of the existing affiliation agreement with Teachers College, two representatives of the faculty of Teachers College
3. Subject to renegotiation of the existing affiliation agreement with the Union Theological Seminary, one representative of the faculty of the Union Theological Seminary

e. Professional library staff members

Two members who shall be elected from and by those persons either holding a trustee or presidential full-time appointment to the professional library service or holding a full-time appointment as an officer of administration within the libraries

f. Research members

Six members who shall be elected from and by those full-time research officers designated as senior research scientist or senior research scholar, Lamont research professor, research scientist or research scholar, Lamont associate research professor, associate research scientist or associate research scholar, Lamont assistant research professor, postdoctoral research scientist, postdoctoral research scholar, or postdoctoral research fellow, senior staff associate and staff associate, as defined in Section 62 of these Statutes, and who are not entitled to vote as officers of instruction

g. Administrative staff members

Two members who shall be elected from and by those persons having an appointment from the President or the Secretary of the University, or who are in Grade VII or above of the University Personnel Classification System for officers of administration and supporting staff and who are not entitled to vote in any other category for members of the University Senate

h. Alumni members

Two members who are either alumni or alumnae shall be chosen by the Columbia Alumni Association

§21. Elections, eligibility, recall, and term of office

a. Election of faculty members

1. The forty-~~two~~-three memberships for officers of instruction having an appointment without stated term as professor or associate professor as defined in Sections 60 or 61 shall be apportioned by the University Senate every five years among the Faculties of the Columbia Corporation in proportion to the number of such officers of instruction. Each Faculty shall be entitled to elect at least one member, except for the Faculties of Columbia College, General Studies, the Graduate School of

Arts and Sciences, the Arts, Professional Studies, and Health Sciences, which shall not be entitled to elect any members, except as specified below. For the purposes of this paragraph (1), and paragraph (2) below, for the apportionment and election of members from the Faculty of Arts and Sciences, each division of the Faculty of Arts and Sciences shall be treated as a separate Faculty. The five divisions of the Faculty of Arts and Sciences are as follows:

i. The Division of the Humanities shall consist of the following departments: Art History and Archaeology; Classics; East Asian Languages and Cultures; English and Comparative Literature; French and Romance Philology; Germanic Languages; Italian; Latin American and Iberian Cultures; Middle Eastern, South Asian, and African Studies; Music; Philosophy; Religion; and Slavic Languages.

ii. The Division of Social Sciences shall consist of the following departments: African American and African Diaspora Studies, Anthropology, Economics, History, Political Science, and Sociology.

iii. The Division of Natural Sciences shall consist of the following departments: Astronomy; Biological Sciences; Chemistry; Earth and Environmental Sciences; Ecology, Evolution, and Environmental Biology; Mathematics; Physics; Psychology; and Statistics.

iv. The School of the Arts.

v. The School of Professional Studies.

2. The ~~sixteen~~seventeen memberships for officers of instruction with stated term shall be apportioned by the University Senate every five years among the Faculties of the Columbia Corporation other than the Faculties of Columbia College, General Studies, the Graduate School of Arts and Sciences, the Arts, Professional Studies, and Health Sciences, except as specified below. All such officers of instruction having an appointment as preceptor, associate, lecturer, instructor, and assistant professor, regardless of whether such officers are full time or part time, shall be entitled to vote. Officers of instruction having an appointment with a stated term above that of assistant professor also shall be entitled to vote in this category. For the purposes of this paragraph (2), apportionment and election of members from the Faculties of Arts and Sciences, each division of the Faculty of Arts and Sciences, as specified in paragraph (1) above, shall be treated as a separate faculty.

b. Election of student members

The twenty~~-four~~-five memberships for full-time students shall be apportioned by the University Senate every five years as follows: twenty~~-two~~-three among the Faculties of the Columbia Corporation; provided, however, that at least one student member shall be elected from each Faculty other than the Faculties of Arts and Sciences and Health Sciences; two additional student members shall be elected from the Faculty with the largest number of full-time students; one additional student member shall be elected from each of the Faculties with the next largest number of full-time students; until the limit of twenty~~-two~~-three student seats for the Columbia Corporation is reached; one full-time student member shall be elected from Barnard College; and one full-time student member shall be elected from Teachers College. For the purposes of this subsection (b), the Faculty

of the Graduate School of Arts and Sciences shall be treated as consisting of three separate Faculties, comprised of the divisions of the Humanities, Social Sciences, and Natural Sciences, respectively, as specified in paragraph (a.1) above. Students here are defined to include all those seeking degrees and all those non-degree-seeking students who have been designated as members of constituencies by the Senate By-Laws.

c. Election of members from professional library staff and administrative staff

Two members shall be elected from and by the professional library staff and administrative staff.

d. Election of members of officers of research

The six memberships for officers of research shall be elected as follows: four shall be elected from officers of research members designated as senior research scientist or senior research scholar, Lamont research professor, research scientist or research scholar, Lamont associate research professor, associate research scientist or associate research scholar, and Lamont assistant research professor; one additional research officer member shall be elected from those persons designated as postdoctoral research scientist, postdoctoral research scholar, or postdoctoral research fellow; and one additional research officer member shall be elected from those persons designated senior staff associate or staff associate.

e. Representatives from affiliated institutions

Each of the affiliated institutions shall choose representatives from among their respective Faculties to serve as members in such manner as each of them may determine.

f. Direct and indirect elections

All members elected under subsections (a), (b), and (c) shall be chosen by direct election, except that student members may be chosen by indirect election as hereinafter provided. If the indirect election method is chosen, then the student member of the University Senate shall be elected by the elected student governing body of the Faculty from which the student member of the University Senate is being chosen. Such choice shall be exercised only by a referendum of the students within such Faculty and shall stand unless and until reversed by a succeeding referendum. If there is no elected student governing body of the Faculty which is authorized to hold indirect elections, and if either a seat assigned to a student member has remained vacant for six months or longer, or elections have failed to fill such a seat, then a member may be elected from one or more departments within that Faculty in rotation, as may be prescribed by the body designated of the University Senate, to administer University Senate elections.

g. Time of election and term of office

There shall be two regular election periods each year, one in the spring and one in the fall. The

regular term of office for each member shall be as follows:

1. For each member elected in the spring elections, the term of office shall begin fourteen days before the day of Commencement next following his or her election and shall be for two years; provided that a member elected to a vacant seat shall assume office immediately; and provided further that if the spring elections are not completed by the date set for the beginning of his or her term, the member shall assume office immediately upon the completion of the elections.
2. For each member elected in the fall elections, the term of office shall commence immediately upon election and shall expire fourteen days before the day of the second Commencement next following his or her election.
3. For each appointed member, the term of office shall commence immediately upon appointment and shall expire fourteen days before the day of the second Commencement next following his or her appointment.

It shall be the responsibility of each member to advise the commission supervising elections of members to the University Senate, as early as possible, if he or she will be unable to serve his or her full term. When such commission is so advised, provision will be made to vote, at the next election, for a member to fill the anticipated vacancy. The term of such member shall be the same as that of all other members elected in the same election period, except that if the seat is occupied at the time of election, the term shall commence upon the effective date of resignation of the retiring member. Except as provided in subsection (f), any vacancy occurring between election periods shall be filled in the same manner in which the original member was chosen, and the term of office for each member so elected shall commence immediately upon election and shall expire fourteen days before the day of the second Commencement next following the election. The Executive Committee of the University Senate may designate a date for the expiration of terms and beginnings of new terms different from the date set herein, if such a redesignation is necessary to allow for an orderly transition of the work of the University Senate from one session to the next. No person shall be disqualified from election because he or she will be a member of the category from which he or she is elected for less than two years. However, his or her membership shall terminate when he or she is no longer a member of the category from which he or she was elected.

h. Recall

Every elected member shall be subject to recall. Upon petition signed by one-fourth of the number of members of the category from which the member was elected, a recall election shall be held. A majority of votes cast for recall shall cause the recall of the member and his or her membership shall thereupon become vacant. The provisions of subsection (f) shall also apply to recall elections.

Proponent: Senate Structure and Operations Committee