PROPOSED AGENDA

University Senate
Friday, February 2, 2024 at 1:15 p.m. via Zoom

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

1. Adoption of the agenda
2. Adoption of the minutes of December 8, 2023
3. President’s report
4. Executive Committee Chair’s report
5. Old business:
   a. University Event Policy status
6. New business:
   a. Resolutions:
      i. Resolution to Approve an Academic Program Leading to the Master of Science in Climate (Climate School) (Education)
      ii. Resolution Reconfirming our Commitment to the Principles of Academic Freedom and Shared Governance (Faculty Affairs, Academic Freedom and Tenure, and Student Affairs)
      iii. Resolution to Endorse the University Policy for Recording Classes (Education)
   b. Committee reports and updates:
      i. Creation of an FLI Student Space (Commission on Diversity, Student Affairs, Campus Planning and Physical Development)
MEETING OF DECEMBER 8, 2023

Executive Committee chair Jeanine D’Armiento called the Senate to order at 1:15 on Zoom. Seventy-nine of 97 senators were present during the meeting, and about 135 additional spectators.

She reminded the group that only senators have a voice and a vote in plenaries. She said the Senate is an arm of Columbia’s shared governance, and a good sample of the Columbia population was present. She welcomed newcomers and their engagement.

Sen. D’Armiento said the Senate performs its work through committees and would be hearing from committees at this meeting. Committees bring forward concerns from constituents. On the present agenda were one resolution and two reports.

Adoption of the agenda. The Senate adopted the agenda as proposed (See Plenary Binder for December 8, p. 2).

Adoption of the minutes of November 17. Adoption of the minutes of November 17. Sen. Susan Bernofsky (Ten., Arts) said she had the impression that some editing had been done in a couple of sections of the minutes, particularly for EVP Rosberg’s remarks. She asked whether the Senate staff could say something about this, and whether anyone who speaks in plenaries is given the opportunity to edit their remarks.

Sen. D’Armiento said that if someone’s remarks are incorrectly recorded in the minutes, a senator can ask for a correction, not to change the content but to make the meaning clearer.

Sen. Bernofsky said she just had a question about the last sentence in one of Mr. Rosberg’s statements (recorded on page 17 of the November 17 minutes). She thought a substitution had been made there, and asked whether it was standard procedure to make such a change.

She recalled that in his actual remarks (about the decision-making process for the decision to suspend the two student groups), Mr. Rosberg indicated that the proposers and the deciders of the plan to suspend SJP and JVP were the same group, but that the minutes were changed later to indicate that the proposers and “senior leadership” were two distinct groups. Sen. Bernofsky wanted the record to show that she believed the minutes had been changed.

Sen. D’Armiento said the Senate staff does not change the content of the minutes. She also recalled leaving the last meeting thinking there were two entities, one that discussed the problem, and another that made the final decision. She didn’t get the names, but she offered to provide an update at the next plenary. Sen. D’Armiento thanked Sen. Bernofsky for raising the issue. Then she asked for and received a motion and a second to adopt the minutes.
Sen. Abosede George (Ten., Barnard) asked for a change in the reporting of one of her remarks in the minutes. The minutes had her saying the administration had responded “rationally” to a certain situation, but she had really said the administration had responded “rashly.”

Sen. D’Armiento said this is the kind of change the Senate staff does make. She said the minutes would be corrected accordingly; written corrections could also be submitted by email for other errors. She recognized that senators did not have much time to read the minutes of November 17.

Sen. Greg Freyer (TTOT, Public Health) moved to adopt the minutes (Binder, 3-21). The Senate adopted them as proposed.

Chair’s remarks. Sen. D’Armiento said President Shafik was traveling and would miss this meeting. As usual, Sen. D’Armiento invited senators to send her questions to relay to the president.

She said the Senate would continue the critical discussion that had begun on November 17. At that time, she said, senators had expressed serious concerns about changes made to the University events policy on around October 24, which led to the suspension of two student groups: Students for Justice in Palestine (SJP) and Jewish Voice for Peace (JVP).

Sen. D’Armiento said Rules Committee co-chair Jaxon Williams-Bellamy began the discussion on November 17 by summarizing the Rules of Conduct covering political rallies and demonstrations. Then leaders of the Senate Student Affairs Committee outlined the changes that had been made to the event policy, and noted where the new event policy conflicted with the Rules. Sen. D’Armiento said a robust discussion followed, with a commitment from her to provide answers to some of the questions that came up.

Sen. D’Armiento said that the Rules Committee had worked tirelessly since November 17 to develop recommendations for the administration about the modified event policy, and she anticipated that the Senate would be voting on these recommendations. She hoped the administration would then meet with Senate groups, and consider the recommendations, with a view to finding agreement on a new event policy. She said the administration’s primary concern throughout had been safety.

She said that for a policy to be effective, people must understand the process involved in developing it. The aims of the policy should be clearly articulated, and the members of the community affected by the policy must be aware of its existence. The authors of the policy should be identified.

Sen. D’Armiento proceeded to answer questions that senators had raised about the event policy. The first one was, Who are the members of the administration’s Special Committee on Campus Safety, which had produced the new policy? Sen. D’Armiento had learned that they are Gerald Rosberg, Senior Executive Vice President, the chair; David Greenberg, Executive Vice President for University Facilities and Operations; Shailagh Murray, Executive Vice President for Public Affairs; Felice Rosan, General Counsel; Jessica Fenton, Associate General Counsel; Dennis Mitchell, Interim Provost, and Joseph Defraine Greenwell, Senior Vice President for Student Affairs.
Sen. D’Armiento said the Senate had discussed the problem that there are no faculty or students on the Special Committee of Campus Safety. She said that she had been invited to a meeting of that committee in the past week.

Sen. D’Armiento realized that she had forgotten to list one member of the Special Committee: Susan Glancy, chief of staff in the president’s office. Sen. D’Armiento apologized for the omission.

She considered her participation in a Special Committee meeting as a first step in efforts to include Senate voices in the group’s deliberations.

She said that if she is invited to more of these meetings, she will seek assurances that any disciplinary actions under consideration for students will go through the Senate’s established processes and frameworks.

Sen. D’Armiento’s second point was to announce a special meeting of the Senate to address issues of freedom of speech. There had been a preliminary plan to hold this discussion at the end of the fall semester, but the pressure on students at this point in the term was too great. So the meeting would take place early in the spring semester.

Finally, Sen. D’Armiento mentioned the issue of the presence of New York City police on campus during the fall semester. She expected plenary discussion of this topic, including a presentation from the Senate Commission on Diversity.

Sen. D’Armiento invited questions.

Sen. Erick Zent (Stu., CC) asked whether Senate votes on recommendations implied that the administration has unilateral power over Columbia’s disciplinary policies.

Sen. D’Armiento welcomed the question. She said Columbia has shared governance. Different constituencies work together, with systems in place that ensure that no group has absolute authority.

She said processes that everyone understands have to be in place when there’s a disciplinary issue. The community is involved in making those decisions. That’s Columbia’s culture, Columbia’s history. And this is what the Senate would maintain.

She said there is a whole system of governance for student groups. The Senate would make sure that any actions taken against student groups would follow procedures of that system, because that’s the existing process unless the Senate were to agree to change it.

She asked Sen. Zent if this response made sense. He said it did, but he was confused that the administration changed this policy without going through the Senate or appropriate student groups. If Columbia has shared governance, people do what is within their rights or their power to do. But then something like this happens, and the community asks the administration, What did you do? Why did you do this without us?
New Business.

Resolution to Seek to Reconcile the University Event Policy with the Principle of Freedom of Expression Embodied in the Rules of University Conduct (Rules of University Conduct).

Sen. D’Armiento introduced Rules Committee co-chair Jaxon Williams-Bellamy (Stu., Law) and committee member Jalaj Mehta (Stu., SEAS/Undergrad), who presented the resolution.

Sen. Mehta presented a brief overview of the Rules of Conduct (Binder, 22-23).

Sen. Williams-Bellamy presented the resolution’s main recommendations (Binder, 21, 24-26).

At the end of Sen. Williams-Bellamy’s presentation, Sen. D’Armiento invited questions.

Sen. Minhas Wasaya (Stu., Bus.) made two points. The first was a sense, evident in a number of recent Zoom discussions, of a lack of transparency in the development of the current event policy, which was perceived to have been accomplished unilaterally, and, as a result, illegitimately. He said there was also voting going on now within student governing boards. He didn’t know the results of these votes, but there was clearly a gap between faculty and student perceptions of the event policy, on the one hand, and administration views on the other. He said student senators want to bridge that gap, and continue to build trust, with the present resolution.

He commended Sens. Williams-Bellamy and Mehta and the Rules Committee for their effort to consider all of the various issues in the new event policy, and to recommend changes that are acceptable to all of the groups involved. The goal is a policy that can be viewed as legitimate, as something people will follow.

Sen. Wasaya’s second point was to draw attention to the groups that have been negatively impacted by the current event policy, including Students for Justine in Palestine and Jewish Voice for Peace, which have both been suspended. But what about other groups? Who are they? How would the proposed resolution help them?

Sen. Williams-Bellamy said this was an important question, recalling an issue discussed at the November plenary—the chilling effect that he was seeing across campus, not only in the Law School but from the undergraduate schools as well. A policy this broad, giving so much discretion to the regulator, leaves the people being regulated uncertain about what’s allowed and what’s not, particularly with the wide range of sanctions included in the current policy. A consequence of this situation has been the cancellation or postponement or relocation off campus of numerous events, including some planned by Jewish student groups. Sen. Williams-Bellamy described this trend as insidious.

Sen. Maria Martinez (Stu., CC) thanked Sens. Williams-Bellamy and Mehta for their presentations. She particularly valued the recommendation calling for an independent review of applications to hold events, a provision she said would help to assure transparency in these decisions.

Sen. Madiyar Nurakhmetov (Stu., SIPA) said his school had probably suffered more from doxing than any other. And while he did not agree with every opinion expressed by pro-Palestinian students, he said the current policy does not function symmetrically, and has provided inadequate protection against doxing. He recognized that Columbia has few options in addressing doxing, and he understood that student safety is an important University’s priority, but the University’s policy seems to amount to taking a clear
substantive position in the conflict between student groups. Sen. Nurakhmetov supported the Rules Committee recommendations.

Sen. Jeffrey Gordon (Ten., Law) spoke about the choice between a 10-day and a 3-day notice period for student events. He understood the administration’s concern about campus safety and the reputation of the University. He recognized that a longer time interval would reduce the potential for conflict between student groups who might pick similar times and places for their events.

But Sen. Gordon agreed with the student argument that 10 days is too long time to plan for an event, particularly in a fast-moving situation in which people are eager to express their views, and he supported a three-day notice requirement. His reservation was that 3-day notice would not be able to accommodate the elaborate appeals procedure that students had proposed, including the convening of a board with students and other constituencies represented. He said a process like that might work with 10 days’ notice, but not in a three-day period.

Sen. D’Armiento responded that she didn’t think any new organizational infrastructure would be needed to manage a three-day notice period. She said necessary advisory groups and boards were already in place to handle that work. She added that in preliminary consultations with administrators, they had already said that a 3-day notice period was manageable, particularly in the large majority of cases that are not fraught. She also noted that these were the Senate’s recommendations and she expected negotiations with the administration to take their course, with an understanding that the administration must make final decisions about how to administer the event policy. She said that if there is an understanding that three days is not enough time to allow for the due process arrangements that the Rules Committee was recommending, it might be necessary to add some days to the notice-requirement protocol.

Sen. Williams-Bellamy said he was confident in a three-day notice period because administrators had made clear in discussion that it is workable. He listed the procedure in the University Statutes for consulting with the Senate about bringing the NYPD on campus as another example of an effective, rapid consultation protocol.

Sen. Gordon understood that procedures were in place to handle routine requests and disagreements over event permits, but he suggested that precisely as Sens. D’Armiento and Williams-Bellamy had said, disputes arising in less settled times on campus were one-off situations, and for that reason might require more time to work out.

Sen. Wasaya repeated the point that senior administrators had indicated in discussions that three days is a workable period to address disagreements. He also noted that other consequential consultations and decisions had been completed in less time. He cited the suspension of SJP and JVP as decisions reached less than 48 hours after their forbidden demonstrations, and the positive response from the Senate Executive Committee to an administration request in October to bring police on campus was achieved in a few hours. Sen. Wasaya said these decisions, affirming very different points of view, show that university groups can move fast when necessary.

Sen. Vishy Manve (Stu., Climate School) praised the Rules Committee resolution as a successful attempt to balance administration concerns to ensure campus safety with student concerns about transparency and accountability.
Sen. James Applegate (Ten., A&S/Natural Sciences) said it was important to give credit where credit is due, and he emphasized the importance of the Affirmative Statement at the start of the revised Rules of University Conduct in 2015 that was written mainly by former president Lee Bollinger.

Sen. Applegate said he felt uncomfortable being asked to vote for the Rules Committee recommendations based on assurances from senators that administrators had told them that a three-day notice period for public events is workable. This seemed to Sen. Applegate like voting on a negotiating position, when he was expecting the Senate to vote on a final agreement reached between Senate groups and the Special Committee. He said he would welcome a chance to hear from Senior EVP Gerald Rosberg, a member of that administration group, who was present at the current Zoom meeting.

Sen. D’Armiento interrupted Sen. Applegate to say Mr. Rosberg would not be speaking at the present meeting. She said the Senate would present its recommendations to the administrative group, and she hoped to report back to the Senate with news of an agreement. She said Mr. Rosberg was not the only administrator involved in this decision, and he would need to discuss the Senate recommendations with other administrators. This meeting was not the place for him to debate those issues. To address Sen. Applegate’s discomfort about characterizations of administration positions, she made clear that there was no agreement with the administration at this point on a three-day notice provision, which was now only a Senate proposal. Sen D’Armiento expected the administrative group to disagree with at least part of the Senate proposal. The Senate group accepted that possibility. But by advancing its recommendations in this public way, it was demonstrating a process of shared governance. If there had been a conversation between administrative and Senate groups before the administration changed the event policy, it would not have been necessary to present the Senate recommendations in this public way. The Senate was doing this to show its constituencies—particularly students—that shared governance can solve these problems.

Sen. Greg Freyer (TTOT, Public Health) said the speed of the Rules Committee’s work in developing this proposal was still more evidence of university organizations working effectively under urgent conditions. He said the Senate had discussed key recent events over and over again: the event policy was changed, without a thoughtful, shared deliberative process; other constituencies involved in university governance were marginalized—not only the Senate, but other faculty and student groups. His main concern was that major decisions are being made by the Office of General Counsel, and that Columbia is being ruled by lawyers. He asked, Are we the University? Do students come here to work with Columbia’s amazing faculty, and brilliant fellow students? Or do they come here to be with the lawyers? He said it was important now to take a stand, push back, and assert the Senate’s authority in the governance of the University.

Sen. Thiru Senguttuvan (Stu., Public Health) expressed concern about the state of freedom of expression at the University. At his school a student group had arranged to put on a film screening, after going through all the proper procedures. But the school administration forbade them to publicize the event by email or even fliers, expressing concern about hostile reactions from other student groups. The group had to try to publicize the film by word of mouth. Sen. Senguttuvan believed the problem was not really other student groups, but the school administration.

Sen. Senguttuvan said the new University event policy was cumbersome and unclear, and had created an atmosphere of fear among students. He believed that the goal should be the complete restoration of the
due process provisions of the Rules of University Conduct, as developed after 1968 and reaffirmed in the revision of 2015. He said the 10-day notice requirement is impractical and incompatible with the dynamic nature of student activism. He said that as representatives of the community, he and fellow senators have an obligation to uphold the principle of intellectual freedom. He urged all senators to support what he called a necessary and balanced resolution.

Sen. Wena Teng (Stu., CC) echoed previous expressions of appreciation for the work of the Rules Committee. She said student boards have regulated student groups responsibly over time, but were unfortunately disregarded in the decisions made by the administration’s Special Committee on Campus Safety.

Sen. Teng said these decisions had significant consequences. On December 5, the general body of the University’s Student Governing Board voted to declare non-cooperation with the Special Committee’s events policy. The vote included the SGB executive committee and 85 percent of the general membership of the SGB, representing more than 100 clubs, some of which are major political organizations on campus. She said this was the first time in the history of the SGB, dating back a half-century, that the group had declared a university policy invalid.

Sen. Teng affirmed her support for the Rules Committee resolution, but had one question. She said the resolution speaks of creating an independent board that will include students. Would this board be in tension with the existing student boards that have long overseen student events, including compliance with longstanding event policies? What accountability measures are in place to assure that existing boards are not undermined by the new one proposed by the Rules Committee, as they were by the Special Committee’s event policy in October?

Vote. Sen. D’Armiento, determining that there were no more comments or questions, called for a vote. The Senate approved the Rules Committee resolution by a vote of 63-0, with 5 abstentions.

Committee reports and updates:

Statement Regarding the Presence of NYPD on Campus (Commission on Diversity). Sen. Natalie Voigt, Faculty Co-chair of the Diversity Commission, briefly reviewed the group’s mandate and mission. She felt obliged to acknowledge the university’s climate as it relates to recent events, including the increased presence of the NYPD on the Columbia campus. She said this development had fostered anxiety, fear, and frankly anger in many members of the Columbia community. She introduced Sen. Rosalba Savage, Student Co-chair, who presented the Commission’s statement (Binder, 27-29).

At the end of the statement, Sen. Maria Martinez (Stu., CC), a member of the Diversity Commission, thanked the co-chairs for the presentation. She said the recent police presence raised emotional and mental stress levels for students instead of making them feel safer. Identifying herself as a first-generation, low-income (FLI) student, she said she was proud to associate herself with the Commission statement.

Sen. Abosede George (Ten., Barnard) thanked the Commission for its work. She raised two issues. First, she asked for more information about the initial Executive Committee decision to support bringing police on campus on October 12. Second, she recalled a comment from the November plenary about the “weaponization of the idea of safety,” and noticed more than one idea of safety in the Commission
statement. She invited Commission members to discuss a way to combine the concepts of safety and the free exchange of ideas, perhaps in a “social-justice-informed” idea of safety.

Sen. D’Armiento said the Commission and the Senate had done a good deal of work on issues of public safety, and she was concerned that this important work could get lost in the current setting.

In response to Sen. George’s first question, Sen D’Armiento recalled that October 12, only a few days after the October 7 Hamas attack, was a time of uncertainty. The Senate Executive Committee heard that the NYPD had learned of a credible threat to public safety related to demonstrations scheduled to take place on campus, in which two opposed student groups might be facing off. The threat was understood to be coming from a non-student, off-campus source. The credible threat was essentially an emergency, and the protocols in the University Statutes do not require the administration to consult with the Executive Committee under such conditions. But the Executive Committee chose to vote its support anyway (though not unanimously) on this occasion for calling for the police. She said a top priority for her was to make sure students don’t get arrested, and to make sure that they know the rules so they don’t unwittingly violate them. She repeated that Executive Committee support was not needed in this case, but said she would vote the same way again under similar circumstances.

Sen. Voigt said she was glad to be hearing from Sen. D’Armiento about that Executive Committee decision. In response to Sen. George’s second question, she said the Commission wanted to highlight different ideas of safety in its statement. As it turned out, having police on campus, which was supposed to make people safer, made many people feel less safe. She said she would be happy to collaborate with Sen. George on a revision of the statement to make it clearer.

Sen. Voigt said another purpose of the statement was to remind the Senate of the work the Commission and the Senate had done in recent years on public safety and inclusion, which she said must not be left behind. By bringing police on campus, the University had strayed from this important course.

Sen. Savage also responded to Sen. George, recognizing that safety means many things to different people. She gave her own experience as an example of divergent takes on safety. She is a veteran who had endured policy brutality. But when she lived in Rhode Island a year ago, the local police were good guys, walking children across the street. She welcomed the conversation that Sen. George had suggested.

Sen. Freyer said he certainly understood that different groups react differently to police. That idea has become a mantra in the School of Public Health. The worst thing about police on campus is that it creates an antagonistic us-and-them situation, undermining efforts to build trust among groups.

Sen. Applegate said he is a member of the Executive Committee, and he said Sen. D’Armiento’s account of the deliberation with the administration on October 12 about bringing police on campus was accurate. The situation on campus, with a credible threat of violence, was essentially an emergency. The Executive Committee discussed the issue quickly. Sen. Applegate voted to approve the request to bring police on campus because he thought that was the best step to preserve physical safety on campus. He said he was aware that there are other ideas about safety, but he did not fully understand them. He underscored Sen. D’Armiento’s recollection that the Exec consultation came days after the October 7 Hamas attack, and he added that there was an assault on a Columbia student near Butler Library shortly before October 12.
Sen. Voigt said the Commission was not disputing the Executive Committee decision of October 12. It was disturbed by what happened after that—repeated appearances by NYPD on campus during the weeks that followed without any consultation with the Executive Committee.

Sen. Wasaya noted that the assault near Butler Library was committed not by a Columbia student but by an off-campus person. He also said there was a widespread sense that actions taken to provide physical safety do little to promote psychological and emotional safety.

*Information and Communications Technology Committee Annual Report 2022-2023.* Sen. D’Armiento said this report would be postponed till the next plenary, on February 2.

**Adjourn.** Sen. D’Armiento thanked senators for their work and participation in the meeting now ending. She wished student senators good luck on their finals. She said the Senate had heard at this meeting how thoughtful, deliberative, and brilliant the student senators are. She said people need to trust one another to build a community. Without that trust, no policies or rules will be useful. She adjourned the meeting at 2:50 pm.

Respectfully submitted,

Tom Mathewson, Senate staff
RESOLUTION TO ESTABLISH AN ACADEMIC PROGRAM
LEADING TO THE MASTER OF SCIENCE IN CLIMATE (CLIMATE SCHOOL)

WHEREAS the rapid escalation of the threat that climate change poses across the world and an accelerating local and national response (with $370 billion in funding for climate actions in the Inflation Reduction Act) have assured prolonged growth in the need for leaders and experts in these efforts; and

WHEREAS the Climate School, established by the University Senate in October 2021, now presents its flagship academic program, the M.S. in Climate, a two-year 50-credit program designed to train climate leaders in a broad range of settings; and

WHEREAS the program will consist mainly of a Climate Core, followed by specialized training leading to an embedded Advanced Certificate in Climate Systems and Analytics, Climate and Food Systems, or Climate and Disaster Management, and

WHEREAS the designers of this two-year M.S. in Climate have ensured that it complements existing climate-related programs in other Columbia schools, as well as its own existing program, born in the Arts and Sciences—the one-year M.A. in Climate and Society; and

WHEREAS the University Senate Education Committee has reviewed and endorsed the proposed program;

THEREFORE BE IT RESOLVED that the University Senate approve the establishment of the Master of Science in Climate, and

BE IT FURTHER RESOLVED that the Education Committee will review the degree program five years after its launch.

BE IT FINALLY 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.

Proponent: Education Committee
Please insert the requested information in the table below:

<table>
<thead>
<tr>
<th>Degree:</th>
<th>Master of Science</th>
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<tbody>
<tr>
<td>Program Name:</td>
<td>Climate</td>
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<tr>
<td>If this program is currently a track in an existing program but has evolved as a stand-alone program, please indicate the program it's based on:</td>
<td>N/A</td>
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<tr>
<td>Sponsoring School(s):</td>
<td>The Columbia Climate School</td>
</tr>
<tr>
<td>Proposed Start Date:</td>
<td>Fall 2025</td>
</tr>
</tbody>
</table>
| Name and Email Address of the Primary Contact Person for this Proposal: | Jim Glover, jg2794@columbia.edu  
Alix Schroder, aschroder@climate.columbia.edu |
| Date of Proposal Submission: | August 15, 2023 |
DESCRIPTION OF THE PROGRAM

Please complete the questions below and submit this document and the external reviewer list (if applicable) through the APAS system (https://apas.provost.columbia.edu/) to begin the review process. Please note: Firefox is the recommended browser for APAS; functionality may be less optimal when using Internet Explorer or Chrome.

1) Purpose

A) Describe in 1-2 paragraphs the purpose of the proposed program, its target audience, its content, and its format/pedagogical approaches.

Leaders with an in-depth knowledge specific to climate are essential. The Master of Science (MS) in Climate degree is a two-year, professional program designed to prepare students to be future climate leaders at community, state, national, and international levels working in a range of institutions. The MS in Climate provides students with core climate knowledge, while enabling them to acquire depth and skills in a specific area of expertise through an embedded second credential. The program is targeted at young and mid-career professionals, as well as future academics, from a variety of backgrounds. Addressing the climate crisis requires a wide range of skills, knowledge, and interests. The program’s rigorous curriculum has been developed with faculty expertise to match current market needs and is imbued with the flexibility required to adapt to the rapidly evolving climate field.

The MS in Climate harnesses the unparalleled resources of the Columbia Climate School to prepare students for interdisciplinary, solutions-oriented careers in climate and climate-adjacent fields. The Climate School serves as an integrated hub of climate activity at Columbia University, building on the unique history of climate, sustainability, and environmental research at the University and bringing together leading climate experts across multiple disciplines to engage in novel research, scholarship, and practice. The School’s educational mission is to train and support students to be our world’s changemakers – to dream big and create solutions on global, national, and community scales, to drive fundamental research, and inspire new scientific and scholarly thought.

The MS in Climate has the following key features:

**Climate Core:** The core curriculum – termed the Climate Core – is based on a set of aligned competencies and provides students with a shared foundation of critical climate knowledge. The core courses center on the scientific understanding of climate, quantitative methods, mitigation pathways, adaptation strategies and policies, justice frameworks, and societal impacts; together, they provide students with essential tools to communicate, collaborate, and design just and equitable solutions in partnership with stakeholders at every level. The Climate Core contains the knowledge and skills every Climate School student needs to be successful in the field, preparing them to understand and address myriad aspects of the climate crisis. As such, many of the courses in the Climate Core will be shared across Climate School graduate programs.

**Specific Climate Expertise:** A defining feature of the MS in Climate is a required second credential that students must complete, in the form of a full New York State-level advanced certificate.
The second credential provides students with depth in critical specialization areas of the growing climate field and prepares them to succeed professionally in a targeted field of their choice. The initial proposed certificates are:

- Climate Systems and Analytics (proposal appended)
- Climate and Food Systems (proposal appended)
- Climate and Disaster Management (proposal appended)
- Climate and Energy Transitions (in development; proposal to be submitted in Spring 2024)

Additional certificates will be added in the coming years in line with the Climate School’s strategic priorities, faculty hiring, and emerging market need.

The Climate School is also engaged in active conversations with several institutions around dual degree programs, including schools in Columbia (for example, GSAPP). Proposals for dual programs will be submitted to the University Senate for approval in the next academic year.

Practical and Applied Experiences: The program has an explicit emphasis on practical and applied experiences to prepare students for professional careers. It features case-based teaching embedded in coursework, an internship requirement, a capstone course linked to the students’ second credential, an immersive field experience, and opportunities for research and practice experience outside the classroom. The immersive field experience will have a global anchor and framing, regardless of its physical location. These applied and experiential learning opportunities will allow students to develop, manage, evaluate, and lead evidence-based climate-related projects. Through these experiences, students will collaborate with peers, faculty, researchers, and external organizations and stakeholders. The immersive course serves not only to enhance the educational experience but also to link the MS students with the Climate School’s mission to connect to the world through a dedicated focus on co-production of knowledge. Furthermore, the overall program’s location in New York City provides unparalleled access for students and graduates to a variety of communities, institutions, businesses, and sectors.

Justice and Equity: A focus on justice and equity is embedded across the curriculum to ensure students gain an understanding of how these concepts intersect with climate impacts and solutions. Climate change disproportionately impacts communities who have been marginalized and made vulnerable, including communities of color, and exacerbates existing social and economic inequities. By integrating and embedding justice and equity across the program, the MS in Climate prepares students to incorporate an inclusive approach to climate action and develop transformative and inclusive climate solutions. The program includes a foundational Climate Justice course, several justice-oriented electives, and a focus on ethics and justice across the embedded certificates.

The MS in Climate degree operationalizes all the above elements and embraces interdisciplinarity as the way forward in conceptualizing and developing climate solutions. It also simultaneously honors and amplifies the work of other units, departments, and schools at Columbia, most exceptionally through collaborative certificates (e.g., Climate and Energy Transitions, developed and implemented with SEAS) and future dual degrees (e.g., dual degree with internal partners like GSAPP, as well as international partners).
The program requires a minimum of 50 credits and will be completed in two years, over five semesters (fall, spring, summer, fall, spring). It will be offered as both a full and part-time program with an in-person modality.

B) How does the new program relate to ongoing programs? Will it replace any existing program(s)? Does the proposed program completely or partially duplicate (an) existing program(s) in any other unit of the University?

The MS in Climate will not replace or duplicate any of the existing programs at the University; instead, it serves to complement and enrich Columbia’s current academic portfolio. Columbia currently offers a rich collection of sustainability, environmental, and climate programs at the undergraduate, masters, doctoral, and certificate levels. This includes the Climate School’s existing degree program, the Master of Arts (MA) in Climate and Society, and the School’s ‘partner programs’ – the Undergraduate Program in Sustainable Development (Columbia College and General Studies); the MS in Sustainability Management and the MS in Sustainability Science (both at the School of Professional Studies); and the MPA in Environmental Science and Policy, the MPA in Development Practice and the PhD in Sustainable Development (all three at the School of International and Public Affairs).

The MS in Climate is unique from existing sustainability and environmental programs at the University due to its explicit focus on climate science, impacts, and applications. The MS in Sustainability Management (SUMA) and the MS in Sustainability Science (SUSCI) are designed for students who wish to help organizations understand and manage sustainability, offering both full-time and part-time options for those with professional obligations. SUMA prepares students for management careers that place an emphasis on strategic and financial analysis, and SUSCI prepares students for careers in the technical aspects of sustainability, helping organizations better predict and address environmental impacts. The MPA in Environmental Science and Policy (MPA ESP) is an immersive one-year program designed for both recent graduates and returning professionals who require additional expertise or credentials in environmental policy, sustainability and financial management, or environmental science. We recognize the importance of distinguishing these programs and honoring the contributions and unique academic focus of each.

The Climate School offers the MA in Climate and Society program, a 12-month interdisciplinary degree that trains graduates to understand and address the impacts of climate variability and climate change on society and the environment. The MS in Climate has been designed to be different from, while complementing, the existing MA program. While the two programs share certain similarities – many purposeful – they are unique and distinct enough to justify the existence of both. The two programs share much of the Climate Core, with the following differences – unique to the MA in Climate and Society is a course focused on social change and unique to the MS in Climate is a quantitative methods course and a selective course where students choose from a short list of STEM-focused climate courses (climate finance/economics, climate science, or data analysis). The MA program is distinctive in that students tailor the program to their interests and have the freedom to choose their own electives from a diverse array of courses. Furthermore, the MA program is an interdisciplinary degree principally focused on the social implications of climate change. The differentiation between the longer, more STEM-focused MS in Climate and the shorter, more social implications-focused MA in Climate and Society will clearly guide future applicants when determining the program that meets their interests. The MS program is unique from the MA through the following features:
| Core Curriculum | The two programs share much of the Climate Core – this is important and intentional as our goal is to educate the next generation of climate leaders. Our faculty believe all climate graduates must have foundational knowledge in the Climate Core, embodied in the following courses:  
  - Dynamics of Climate  
  - Climate Mitigation  
  - Climate Adaptation  
  - Climate Justice  
  - Climate Communications  
  
There are also key distinctions in the core across the two programs, as noted below. |
| Core Differences | • *Social Change* core course  
  • *Quantitative Methods* core course  
  • *Core Selective*, choosing from courses in climate finance/economics, climate science, or data analysis |
| Structure | Interdisciplinary Electives  
  Students tailor the program to their interests and have the freedom to choose their own electives from a diverse array of courses. Students receive an interdisciplinary climate education crafted to their respective interests and skills.  
  Required 2nd Credential  
  Students receive deeper training in a specific area of expertise through an embedded second credential. This produces transdisciplinary professional graduates who are well versed in both climate fundamentals and an additional climate-impacted sector. Students take minimal electives. |
| Applied Learning | “Applications in Climate and Society” course, tailored to MA Capstone ONLY (summer)  
  Sequenced “Applied Climate” seminars tailored to MS  
  Internship + Capstone (flexible) |
An MS in Climate Finance, which would be offered by the Climate School in collaboration with Columbia Business School, has been submitted for University Senate review and approval. This would complement the MS in Climate program.

2) Need

A) Why is the proposed program needed locally, statewide or nationally?

The climate crisis is a problem of massive scale, complexity, and compounding impact. According to the Intergovernmental Panel on Climate Change (IPCC), substantial reductions in greenhouse gas (GHG) emissions are required by mid-century to limit the global average increase in temperature to no more than 2 degrees Celsius and minimize the risks of severe impacts from climate change. To do this, society requires knowledgeable leaders to work with businesses, communities, governments, and civil society to develop just climate solutions across multiple industries, sectors, roles, and geographic scales. Meeting this challenge therefore requires an interdisciplinary educational effort to train these future leaders with the knowledge and skills necessary to rise to these challenges. To this end, in 2021 at COP26 in Glasgow, the world’s ministers of education and environment committed to including climate change education in all educational institutions, recognizing “the large remaining gaps in providing everyone with knowledge, skills, values and attitudes needed to effectively participate in the transition towards climate positive societies.”

The rapidly evolving interest in and action on climate at the nation level – for example, the recent passing of the Inflation Reduction Act, which allocates $370 billion to climate change and clean-energy production – has created increased interest among the public and private sector to hire and recruit students in this field. Furthermore, there is existing demand for students with graduate-level expertise to support climate work at both the city and state-level. The multidimensional impacts of climate are evident across New York City, New York State, and the tri-state region more broadly, from rising sea levels to increasing extreme weather events and more. New York has been a national leader in climate legislation and action for years, including passage of the recent landmark Climate Leadership and Community Protection Act (Climate Act) in 2019. Similarly, over the last 15+ years, New York City has set some of the most ambitious climate goals and policies – since the first PlaNYC in 2007 – and continues to be a leader globally in reducing GHG emissions. Given these recent climate commitments, the job market for climate experts will only continue to grow in the coming years. This conclusion is also supported in the market research report conducted by Huron Consulting Group for the Climate School, which states “the concentration of jobs in and around NYC indicate significant opportunity for job placement after graduation and possible access to internships for current students.”

Additionally, the initial certificates in the MS program reflect a need for expertise in these specific areas.

- **Climate Systems and Analytics** – As the urgency to address climate change increases, there is growing demand for individuals with expertise in analyzing climate data, developing and interpreting models, and generating insights to inform climate-related decision-making at local, state and national levels.

- **Climate and Disaster Management** – Disasters are manifesting with increasing frequency and severity, and the role climate change plays in supporting this trend is increasingly understood. This
linkage necessitates a new kind of disaster management education; one in which experts in fields adjacent to disaster management, in this instance climate change, learn the fundamentals of disaster risk reduction to apply within their chosen fields.

- **Climate and Food Systems** – With climate change and related extreme weather events, among other challenges, food systems are facing increasing fragility. There is a growing demand for individuals with expertise at the intersection of food systems and climate impacts, who understand the underlying social, economic, and political systems and can propose related solutions to improve food security, environmental sustainability, and human livelihoods.

With the addition of the required second credential, MS in Climate graduates will be prepared to enter specialized roles within the climate field, linked to their chosen credential and area of focus (e.g., climate analytics, food systems, climate disasters). These specialized roles will make them more competitive in the marketplace, while having an increased earning potential because of their specialized training.

The Columbia Climate School is the first school nationally with a mission that is centered on addressing the climate crisis through research and education. The MS in Climate will be the flagship educational degree of the school, which will expand Columbia’s offerings in climate education and provide depth in critical specialization areas of the growing climate field. The degree will provide students with the knowledge and skills necessary for building their careers in the climate space, and with expertise that will be in increasing demand over the course of the 21st century.

**B) Have students at the University or elsewhere requested this program? How many?**

Yes. The current generation of students cares passionately about the climate crisis and is demanding curricula that provide them with the knowledge and tools to address this crisis. Students at the University have requested more climate education that can be broadly integrated into their studies. We have also seen a growing demand for graduate-level climate education. Current faculty, instructors, and administrators are regularly approached in their various professional roles within Columbia and elsewhere for education in this space, focused on science, skills, solutions, and innovation.

As part of a market analysis for the Climate School, Huron Consulting Group analyzed competitor institutions and surveyed alumni, current students, prospective students, and other key industry stakeholders to better understand the evolving landscape of competing institutions and inform future degree program development. This survey included interviews and surveys of current students and alumni of the MA in Climate and Society program. Some key insights are:

- Out of the 30 current students surveyed, 23 reported that a Master of Science (MS) degree is most aligned with their goals.
- Alumni expressed desire for a program with more depth of expertise in specific-interest and high-demand areas.
- Alumni and current students see value in a program longer than 12 months. 69 percent of alumni survey respondents said an additional semester (or more) would be beneficial if it added areas of focus that were aligned with their career paths.
Alumni and current students expressed a strong desire for a program that emphasizes practical coursework that provides students with opportunities to apply theory to real-world challenges and to learn how to implement solutions.

C) If the program is career or professionally oriented, have persons in the profession or career requested establishment of the program? Have the employment needs of professionals in the field been considered when designing the program?

Yes. The program has been designed with professional needs in mind, across the Climate Core and certificates. According to the Huron Report, all or most employers mentioned the following skills as critical for climate work: communication, data analysis, adaptation and mitigation, coding and geographic information system (GIS), climate impact assessment, community outreach and applied experience. Additionally, the Huron market analysis highlighted the critical need for employees who are highly literate in climate justice and just transition principles. The MS in Climate’s interwoven curricular focus on climate justice is designed to meet that need in the professional space.

The World Economic Forum’s The Future of Jobs Report 2023 shows that hiring for green roles has consistently outpaced the overall hiring rate globally four years in a row. The report also states that while global demand for green skills has risen by 40 percent since 2015, only 13 percent of the labor workforce actually possess the skills that are needed and wanted by organizations (Source). This indicates that the increasing demand for green skills is not currently being met by the available labor supply. Furthermore, Huron’s market analysis found that there is projected to be ~500,000 climate-related job openings by 2032, a space that includes 18 climate-related occupations that require a bachelor’s degree or higher. The Huron market analysis findings also point to the growing need for climate experts across industries and sectors. The public sector remains a strong professional market for climate graduates, with the analysis highlighting projected job growth in social and community service managers and management analysts over the next 10 years. In interviews with employers, Huron found there is a growing need for professionals with climate skills, knowledge, and understanding in the private sector. Despite a growing talent pool, there is a lack of graduates available to meet the demand. Specifically, there has been an increasing need for expertise in climate-conscious business strategies. As a result, the climate change and sustainability consulting field is growing. Firms include environmental specialty consultancies like ERM and established firms like McKinsey that built out Catalyst Zero solutions. The Climate School’s Career Development Office, which speaks to employers in the climate field regularly, confirmed this trend as well.

D) What other institutions in the metropolitan area and in the Northeast offer similar programs?

Huron conducted an analysis of competitor institutions to better understand the evolving landscape of programs in the climate, environment, and sustainability space. Using the results from the Huron analysis and additional data, we sampled 50 master’s programs, primarily in the US, to analyze programmatic trends and identify potential gaps where a new program could add value. These programs are located across the US, with a clustering of programs at major universities. Of the 50 institutions analyzed, we narrowed down the competitive pool to 23 relevant programs (see chart below). Those located in the Northeast region are marked. Note: the Huron analysis did include Columbia’s MPA Environmental Science and Policy program, but ultimately found it was not in direct competition.
The analysis of these master’s programs has been beneficial to understanding how other institutions of higher education approach climate and climate-adjacent education, and how the Climate School’s MS in Climate will fill a unique need. In general, the market of environment, sustainability, and climate related graduate degrees is growing across the US. However, the programs surveyed in this analysis still occupy a relatively small share of the overall educational market (in terms of enrollment numbers), indicating a significant opportunity for the MS in Climate program to enter this space. When compared with most competitor programs, the word “climate” in our degree acts as a key differentiator because most programs in the market have “environment” or “sustainability” in their names. The competitive programs that have climate in the title tend to offer a more specialized degree, with a focus on a particular aspect of climate (for example, Bard College’s MS in Climate Science and Policy and Boston University’s MS in Climate and Health). The MS in Climate clearly distinguishes itself from other programs as a flagship climate degree that offers the following unique features: the Climate Core, specialized second credential, applied learning opportunities, focus on justice and equity, and the Climate School’s immense resources. The Climate School is the first of its kind academic endeavor, and few other institutions can offer the depth and diversity of courses that we currently offer, let alone the courses and programs that are in the planning stages.

<table>
<thead>
<tr>
<th>INSTITUTION</th>
<th>DEGREE</th>
<th>PROGRAM</th>
<th>STATE</th>
<th>NORTHEAST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bard College</td>
<td>MS</td>
<td>Climate Science and Policy</td>
<td>NY</td>
<td>Y</td>
</tr>
<tr>
<td>Boston University</td>
<td>MS</td>
<td>Climate and Health</td>
<td>MA</td>
<td>Y</td>
</tr>
<tr>
<td>Boston University</td>
<td>MA</td>
<td>Earth and Environment</td>
<td>MA</td>
<td>Y</td>
</tr>
<tr>
<td>Johns Hopkins University</td>
<td>MS</td>
<td>Energy Policy and Climate</td>
<td>MD</td>
<td>Y</td>
</tr>
<tr>
<td>New York University</td>
<td>MS</td>
<td>Environmental Science</td>
<td>NY</td>
<td>Y</td>
</tr>
<tr>
<td>The New School</td>
<td>MS</td>
<td>Environmental Policy and Sustainability</td>
<td>NY</td>
<td>Y</td>
</tr>
<tr>
<td>Tufts University</td>
<td>MS</td>
<td>Sustainability</td>
<td>MA</td>
<td>Y</td>
</tr>
<tr>
<td>Yale University</td>
<td>MSc</td>
<td>Environmental Science</td>
<td>CT</td>
<td>Y</td>
</tr>
<tr>
<td>Yale University</td>
<td>MEM</td>
<td>Environmental Management</td>
<td>CT</td>
<td>Y</td>
</tr>
<tr>
<td>Arizona State University</td>
<td>MA / MS</td>
<td>Sustainability</td>
<td>AZ</td>
<td></td>
</tr>
<tr>
<td>Duke University</td>
<td>MEM</td>
<td>Environmental Management</td>
<td>NC</td>
<td></td>
</tr>
<tr>
<td>North Carolina State University</td>
<td>MA</td>
<td>Climate Change &amp; Society</td>
<td>NC</td>
<td></td>
</tr>
<tr>
<td>Northern Arizona University</td>
<td>MS</td>
<td>Climate Science and Solutions</td>
<td>AZ</td>
<td></td>
</tr>
<tr>
<td>Stanford University</td>
<td>MS</td>
<td>Environment</td>
<td>CA</td>
<td></td>
</tr>
<tr>
<td>Stanford University</td>
<td>MS</td>
<td>Earth System Science</td>
<td>CA</td>
<td></td>
</tr>
<tr>
<td>University of California – San Diego (Scripps Institution of Oceanography)</td>
<td>MAS</td>
<td>Climate Science and Policy</td>
<td>CA</td>
<td></td>
</tr>
<tr>
<td>University of California - Santa Barbara</td>
<td>MESM</td>
<td>Environmental Science and Management</td>
<td>CA</td>
<td></td>
</tr>
<tr>
<td>University of Colorado – Boulder</td>
<td>MENV</td>
<td>Environmental Science</td>
<td>CO</td>
<td></td>
</tr>
<tr>
<td>University of Maine</td>
<td>MS</td>
<td>Earth and Climate Sciences</td>
<td>ME</td>
<td></td>
</tr>
<tr>
<td>University of Michigan – Ann Arbor</td>
<td>MS</td>
<td>Environmental Justice</td>
<td>MI</td>
<td></td>
</tr>
<tr>
<td>University of Michigan – Ann Arbor</td>
<td>MS</td>
<td>Sustainability and Development</td>
<td>MI</td>
<td></td>
</tr>
<tr>
<td>University of Oregon</td>
<td>MS</td>
<td>Environmental Studies (Climate &amp; Society track)</td>
<td>OR</td>
<td></td>
</tr>
</tbody>
</table>
3) Curriculum

A) Provide a brief summary of the program, in the form of a one-paragraph catalog or website description.

The MS in Climate degree is a two-year, professional program designed to prepare students to be future climate leaders at community, state, national, and international levels, working for a range of institutions. The MS in Climate degree provides students with core climate knowledge and deeper training in a specific area of expertise through an embedded second credential. The program focuses on applied learning, skill-building, and professional development, and integrates climate justice and equity throughout the curriculum.

*MS in Climate’s curriculum at a glance:*

<table>
<thead>
<tr>
<th>Core (12 credits)</th>
<th>Core (6 credits)</th>
<th>Core (3 credits)</th>
<th>Certificate (6 credits)</th>
<th>Elective (3 credits)</th>
<th>Elective (3 credits)</th>
<th>Certificate (6 credits)</th>
<th>Elective (3 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dynamics of Climate</td>
<td>Quantitative Methods</td>
<td>Selective</td>
<td>Cert 5 Selective</td>
<td></td>
<td></td>
<td>Cert 6 Selective</td>
<td></td>
</tr>
<tr>
<td>Climate Mitigation</td>
<td>Climate Adaptation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Climate Justice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applied Climate 1 (1 credit)</td>
<td>Applied Climate 2 (1 credit)</td>
<td>Required Internship</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall Semester</td>
<td>Spring Semester</td>
<td>Summer Semester</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The degree requires a minimum of 50 credits to graduate. Students start the program in the fall semester and must complete the following requirements: Climate Core, second credential, Applied Climate seminars, summer internship, electives, and capstone project. Students must also complete an immersive field experience, either global or local, to graduate.

*The Climate Core:* The program’s core curriculum (the Climate Core) is 21 credits. Students take the majority of the core in the first year of study, which includes courses in climate dynamics, climate adaptation, climate mitigation, climate justice, quantitative methods, and climate communications. Students finish the final core requirement in their second year of study, choosing from a selective list of courses focused on climate finance/economics, climate science, or data analysis.

*Required Second Credential:* Students must complete a second credential. This currently takes the form of an embedded Advanced Certificate and may, in the future, take the form of a dual degree with another Columbia school or an external institution. All dual degrees will be submitted to the University Senate for review and approval. Two core courses – Climate Change Mitigation and Climate Change Adaptation – will count towards the credential automatically, given the foundational importance of mitigation and adaptation knowledge for all climate work. For certificates, students must then take 18 credits (6+ courses) of designated certificate courses, beginning in the first spring semester. The initial certificate options include Climate Systems and Analytics, Climate and Food Systems, and Climate and Disaster Management. A Climate and Energy Transitions certificate will also be proposed in 2024. Additional certificates will be added in the future based on student interest, faculty expertise, and market demand. Students may also
choose to pursue dual degrees to fulfill the credential requirement. Dual degree options will be announced at a later date.

**Applied Learning Experiences:** The program has an emphasis on practical, applied experiences to prepare students for professional careers. These experiences also offer students the opportunity to participate in collaborative and interdisciplinary learning and practice that mirrors professional climate work. Students engage in the following courses and experiences within the curriculum:

- Students take *Applied Climate 1 and 2* seminars in their first and second semesters, respectively. The Applied Climate seminars are required, sequenced courses (1 credit, each) focused on applied learning and professional development explicitly linked to the climate field.

- Students must do an *internship* in the summer semester between the two years of study. This offers students a professional, hands-on, and supervised work experience with an organization of their choosing related to climate.

- Students engage in a *capstone project*, linked to the student’s certificate and chosen area of climate expertise, in the final semester of the program. The capstone course (3 credits) provides students with the opportunity to work collaboratively with their peers in an interdisciplinary team setting on a real-world project.

**Case-based Learning:** Case-based learning is actively threaded through coursework in the program and designed to complement and build on each other. The Applied Climate seminars will teach case-based learning through projects, topics, real-world examples, and guest speakers. Two of the core courses, Climate Change Mitigation and Climate Change Adaptation, will draw upon different versions of case studies to illustrate global realities. The MS in Climate will be a pathway to cement a holistic approach to case-based learning, with experiences that build, amplify, and feed into each other, making conscious connections for students across the curriculum.

**B) Indicate the minimum total number of credits (or clock hours, as appropriate) required for completion of the program, as well as any other program requirements (e.g., final paper, field placement, capstone project).** For Bachelor’s programs, please indicate both the total number of points required for graduation (e.g., 124 or 128), as well as the minimum number of points within the major or concentration. Also note that the minimum number of points is 30 for Master’s programs, 20-24 for Certificate programs, and 12 for Certification of Professional Achievement (CPA) programs.

Students must complete a minimum of 50 credits to receive the MS in Climate. Completion of a summer internship, a second credential, and a capstone in the final year of study are additional requirements for graduation.

**C) Please use the table below to list the required, elective, and selective coursework. “Selective” coursework consists of a list of courses from which a student must select a minimum number of credits (but need not take all courses on the list).**
### REQUIRED COURSES

Minimum number of required credits = 44

- **Core** = 21
- **Capstone** = 3
- **Applied** = 2
- **Credential** = 18

<table>
<thead>
<tr>
<th>School</th>
<th>Course Number (indicate if course is NEW)</th>
<th>Course Title &amp; Instructor</th>
<th>Indicate whether course is fully, partially, or not at all online</th>
<th># of Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCS</td>
<td>CLMT GR5001</td>
<td>Dynamics of Climate Variability and Climate Change (Michela Biasutti and Mingfang Ting)</td>
<td>In-person</td>
<td>3</td>
</tr>
<tr>
<td>CCS</td>
<td>CLMT GR5015</td>
<td>Climate Change Adaptation (Lisa Dale)</td>
<td>In-person</td>
<td>3</td>
</tr>
<tr>
<td>CCS</td>
<td>CLMT GR5008</td>
<td>Climate Change Mitigation (Melissa Lott)</td>
<td>In-person</td>
<td>3</td>
</tr>
<tr>
<td>CCS</td>
<td>CLMT GR5009</td>
<td>Strategic Communications for Climate Change (Leah Aronowsky, co-instructor TBD)</td>
<td>In-person</td>
<td>3</td>
</tr>
<tr>
<td>CCS</td>
<td>CLMT GR5002</td>
<td>Quantitative Methods for Climate Applications (Simon Mason and Chia-Ying Lee)</td>
<td>In-person</td>
<td>3</td>
</tr>
<tr>
<td>CCS</td>
<td>CLMT GR5023</td>
<td>Climate Justice: Theory, Practice, and Policy (Sheila Foster)</td>
<td>In-person</td>
<td>3</td>
</tr>
<tr>
<td>CCS</td>
<td>NEW</td>
<td>Core Selective</td>
<td>In-person</td>
<td>3</td>
</tr>
<tr>
<td>CCS</td>
<td>CLMT GR5007</td>
<td>Capstone Workshop (TBD)</td>
<td>In-person</td>
<td>3</td>
</tr>
<tr>
<td>CCS</td>
<td>NEW</td>
<td>Applied Climate 1 (Andrew Kruczkiewicz)</td>
<td>In-person</td>
<td>1</td>
</tr>
<tr>
<td>CCS</td>
<td>NEW</td>
<td>Applied Climate 2 (Andrew Kruczkiewicz)</td>
<td>In-person</td>
<td>1</td>
</tr>
</tbody>
</table>

Students must take 18 additional credits to satisfy the second credential (e.g., certificate). Required courses for the certificates are listed in the separate certificate proposals.
Many of these electives are shared across Climate School programs. Certificate-specific courses are included at the end, as students may choose to take as an elective if space permits.

<table>
<thead>
<tr>
<th>School</th>
<th>Course Number (indicate if course is NEW)</th>
<th>Course Title &amp; Instructor</th>
<th>Indicate whether course is fully, partially, or not at all online</th>
<th># of Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCS</td>
<td>CLMT GR5004</td>
<td>Regional Climate and Climate Impacts (Andrew Robertson)</td>
<td>In-person</td>
<td>3</td>
</tr>
<tr>
<td>CCS</td>
<td>CLMT GR5012</td>
<td>Social Impact: Business, Society &amp; the Environment (Caroline Flammer)</td>
<td>In-person</td>
<td>3</td>
</tr>
<tr>
<td>CCS</td>
<td>CLMT GR5013</td>
<td>Climate Mobility (Alex DeSherbinin, Susana Adamo)</td>
<td>In-person</td>
<td>3</td>
</tr>
<tr>
<td>CCS</td>
<td>CLMT GR5014</td>
<td>Climate Justice and Equitable Climate Action (Christian Braneon)</td>
<td>Fully online</td>
<td>1.5</td>
</tr>
<tr>
<td>CCS</td>
<td>CLMT GR5017</td>
<td>Social, Equity, &amp; Governance Considerations for GHG Removal (Romany Webb)</td>
<td>In-person</td>
<td>1.5</td>
</tr>
<tr>
<td>CCS</td>
<td>CLMT GR5019</td>
<td>Climate Change Decision-Making (Ben Orlove)</td>
<td>In-person</td>
<td>3</td>
</tr>
<tr>
<td>CCS</td>
<td>CLMT GR5021</td>
<td>Environmental Justice: A Legal Framework (Christine Appah-Gyamfi)</td>
<td>In-person</td>
<td>1.5</td>
</tr>
<tr>
<td>CCS</td>
<td>CLMT GR5022</td>
<td>Imagining Climate Resilience and Justice (Johanna Lovecchio)</td>
<td>In-person</td>
<td>3</td>
</tr>
<tr>
<td>CCS</td>
<td>CLMT GR5024</td>
<td>Climate Policy and Law (Sheila Foster)</td>
<td>In-person</td>
<td>3</td>
</tr>
<tr>
<td>CCS</td>
<td>NEW</td>
<td>Black Ecologies (Kristina Douglass)</td>
<td>In-person</td>
<td>3</td>
</tr>
<tr>
<td>SEAS</td>
<td>EAEE E4000</td>
<td>Machine Learning for Environmental Engineering and Science (Pierre Gentine)</td>
<td>In person</td>
<td>3</td>
</tr>
<tr>
<td>CBS</td>
<td>FINC B8363</td>
<td>Climate Finance (Bruce Usher)</td>
<td>In-person</td>
<td>3</td>
</tr>
<tr>
<td>GSAPP</td>
<td>ARCH TBD</td>
<td>TBD (course to be determined by GSAPP and CS)</td>
<td>In-person</td>
<td>3</td>
</tr>
<tr>
<td>Certificate Courses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Climate &amp; Disaster Management</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCS GR5010  CLMT                  Climate Change and Disaster Management (Jeff Schlegelmilch)</td>
<td>Fully online</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCS GR5011  CLMT                  Post-Disaster Economic and Housing Recovery in the US (Thomas Chandler, Josh DeVincenzo)</td>
<td>In-person</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCS GR5018  CLMT                  Building Equitable Community Partnerships in Disaster Management (Jeff Schlegelmilch, Antonia Samur)</td>
<td>In-person</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCS NEW  CLMT                  Applied Disaster Research Methods (Jonathan Sury)</td>
<td>In-person</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCS NEW  CLMT                  Global Food Systems and Policy (Jess Fanzo)</td>
<td>In-person</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCS NEW  CLMT                  Food Systems and Climate Interactions (Jess Fanzo)</td>
<td>In-person</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCS NEW  CLMT                  Critical Analysis of Controversial Topics in Food Systems and Climate (Ruth DeFries)</td>
<td>In-person</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCS NEW  CLMT                  Methods for Analysis of Food Systems and Climate (TBD)</td>
<td>In-person</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCS NEW  CLMT                  Climate Science for Decision Makers: Modeling, Analysis, and Applications (Michael Previdi, Yutian Wu)</td>
<td>In-person</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCS CLMT GR5016  CLMT              An Introduction to Complex Climate Risks (Kai Kornhuber, Radley Horton)</td>
<td>In-person</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCS NEW  CLMT                  Applied GIS for Climate (Jason Smerdon)</td>
<td>In-person</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCS NEW  CLMT                  Computing and Research Methods for Climate Data Science (Mingfang Ting)</td>
<td>In-person</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
D) Provide a sample schedule showing the courses the students will take during each term of the program. For elective or selective courses, simply enter “elective” or “selective.”

*Sample Schedule for Student A, enrolled in the Climate and Disaster Management Certificate.*

<table>
<thead>
<tr>
<th>Semester 1: FALL 1</th>
<th>Course Number &amp; Title</th>
<th>Credits</th>
<th>New?</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLMT GR5001: Dynamics of Climate Variability and Climate Change</td>
<td>3</td>
<td>No</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>CLMT GR5015: Climate Change Adaptation</td>
<td>3</td>
<td>No</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>CLMT GR5008: Climate Change Mitigation</td>
<td>3</td>
<td>No</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>CLMT NEW: Climate Justice: Theory, Practice, and Policy</td>
<td>3</td>
<td>Yes</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>CLMT NEW: Applied Climate 1</td>
<td>1</td>
<td>Yes</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL CREDITS FOR SEMESTER:** 13

<table>
<thead>
<tr>
<th>Semester 2: SPRING 1</th>
<th>Course Number &amp; Title</th>
<th>Credits</th>
<th>New?</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLMT GR5002: Quantitative Methods for Climate Applications</td>
<td>3</td>
<td>No</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>CLMT GR5009: Strategic Communications for Climate Change</td>
<td>3</td>
<td>No</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>
| *Certificate ‘Required’ Course*  
CLMT GR5015: Climate Change and Disaster Management | 3 | No | None |
| *Certificate ‘Required’ Course*  
CLMT GR5020: Post-Disaster Economic and Housing Recovery in the US | 3 | No | None |
| CLMT NEW: Applied Climate 2 | 1 | Yes | Applied Climate 1 |

**TOTAL CREDITS FOR SEMESTER:** 13

<table>
<thead>
<tr>
<th>Semester 3: SUMMER</th>
<th>Course</th>
<th>Credits</th>
<th>New?</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer Internship</td>
<td>0</td>
<td>No</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL CREDITS FOR SEMESTER:** 0

<table>
<thead>
<tr>
<th>Semester 4: FALL 2</th>
<th>Course Number &amp; Title</th>
<th>Credits</th>
<th>New?</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Core ‘Selective’ Course</em></td>
<td>3</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| *Certificate ‘Required’ Course*  
CLMT GR5018: Building Equitable Community Partnerships in Disaster Management | 3 | No | CLMT GR5015: Climate Change and Disaster Management |
<table>
<thead>
<tr>
<th>Certificate ‘Required’ Course</th>
<th>Credits</th>
<th>New?</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLMT NEW: Applied Disaster Research Methods</td>
<td>3</td>
<td>Yes</td>
<td>CLMT GR5015: Climate Change and Disaster Management</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td>No</td>
<td>None</td>
</tr>
</tbody>
</table>

**TOTAL CREDITS FOR SEMESTER:** 12

**Semester 4: SPRING 2**

<table>
<thead>
<tr>
<th>Course Number &amp; Title</th>
<th>Credits</th>
<th>New?</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate ‘Selective’ Course</td>
<td>3</td>
<td>Yes</td>
<td>None</td>
</tr>
<tr>
<td>Certificate ‘Selective’ Course</td>
<td>3</td>
<td>Yes</td>
<td>None</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td>No</td>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Number &amp; Title</th>
<th>Credits</th>
<th>New?</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLMT GR5007: Capstone Workshop</td>
<td>3</td>
<td>No</td>
<td>Successful completion of the core and ongoing certificate requirements</td>
</tr>
</tbody>
</table>

**TOTAL CREDITS FOR SEMESTER:** 12

E) Please provide the typical number of weeks in the Academic Year for this program, counting Fall and Spring semesters. Note that regulations define a “week” as any 7-day period in which ANY instructional activity occurs; this includes classes, discussion sections, labs, exam periods, and study periods. A single activity in a given week counts as a week of school. Virtually the only weeks not to be counted are orientation week and vacation weeks.

Typical weeks in the Academic Year = **30 weeks**
- Fall semester: 15 weeks
- Spring semester: 15 weeks

F) Please also indicate the number of weeks IN TOTAL that it would take a typical full-time student to complete the program. For example, for a one-year MS program, which can typically be completed in Fall and Spring terms, you would likely provide the same answer you gave immediately above (for weeks in the academic year). If a program requires 2 years of study, then you would multiply the number of weeks in the academic year by 2. If summer terms are included, please include 6-10 weeks, as appropriate, for each summer term.

The total number of weeks it would take a typical full-time student to complete the program is **70 weeks**.

Full-time students in the MS in Climate can complete the program in five semesters:
- Fall 1: 15 weeks
- Spring 1: 15 weeks
- Summer: 10 weeks [required internship]
- Fall 2: 15 weeks
- Spring 2: 15 weeks
- **Total = 70 weeks**
G) Does the proposed program rely to a significant extent on courses that are offered by other parts of the University? If so, identify those courses and confirm that you have discussed course availability and capacity with the unit in which those courses are housed.

No, the MS in Climate program will not rely on a significant number of courses that are offered by other parts of the University. Students can satisfy all of the MS program requirements within the School. All of the core courses in the Climate Core are hosted internally. Students can complete the elective requirement in the School, as well. The Climate School has built 15+ electives internally over the past two years, with more to launch in the coming years. Cross-registration also remains a robust tool and students may choose to take electives outside of the School but are not required to do so.

For the certificates, all required courses within a certificate will be offered directly through the Climate School. Selective courses will allow students to choose from a short menu of courses to achieve the certificate requirement; these lists will typically have at least three to four choices, often more. When the certificates launch in the spring semester of Year 1, the Climate School will directly offer at least one course option within the selective category, and it will be designated as the primary option for students within that certificate. The selective course list will also include course options from other schools that fit within the academic scope of the certificate. Students interested in other options will rely on other schools' standard cross-registration procedures, which will be at the other school’s discretion. Any deviation from this will involve direct arrangements with other schools and discussion of course availability and capacity. For example, a Climate and Energy Transitions certificate is being developed in partnership with SEAS and will likely rely on courses offered in that school. The proposal for that certificate will be submitted in 2024.

H) For any new courses to be developed for this program, provide a draft syllabus and include information on when the courses have been or will be approved by the appropriate Committee(s) on Instruction.

The following courses will be developed for the MS program. All these courses have been approved, or are in the process of being approved, by the Climate School’s Committee on Instruction (COI). Note: new certificate-specific courses are listed in the respective certificate proposals.

<table>
<thead>
<tr>
<th>Course</th>
<th>COI Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate Justice: Theory, Practice, and Policy (Sheila Foster)</td>
<td>New course; approved by COI</td>
</tr>
<tr>
<td>Climate Policy and Law (Sheila Foster)</td>
<td>New course; approved by COI</td>
</tr>
<tr>
<td>Climate Change Adaptation (Lisa Dale)</td>
<td>Redesigned course; approved by COI</td>
</tr>
<tr>
<td>Black Ecologies (Kristina Douglass)</td>
<td>New course; COI approval in progress</td>
</tr>
<tr>
<td>Applied Climate 1 (Andrew Kruczkiewicz)</td>
<td>New course; COI approval in progress</td>
</tr>
<tr>
<td>Applied Climate 2 (Andrew Kruczkiewicz)</td>
<td>New course; COI approval in progress</td>
</tr>
</tbody>
</table>
I) Indicate whether course credits earned in the proposed program can also be counted toward another degree or certificate.

Students enrolled in the MS in Climate must complete a second credential embedded within the degree. This currently takes the form of an embedded Advanced Certificate and may, in the future, take the form of a dual degree with another Columbia school. All dual degrees will be submitted to the University Senate for review and approval. A limited number of credits will be double counted between the MS degree and the certificate embedded within the program, consistent with University policy (Senate and Provost) and aligned with current practice at other professional schools. When students opt for a dual degree path, course credits earned in the MS will count towards the dual degree with the partner institution – and often in both directions, with credits taken at the partner institution counted for the MS in Climate. This will be arranged by mutual written agreement between the two schools that might develop a dual degree and will be based on the guidelines and protocols in practice across dual degrees at the university currently.

Columbia students enrolled in other Master’s programs at the University may enroll in MS in Climate courses for elective credit, pending space and prerequisite requirements.

4) Library Resources

A) Have you consulted with a library subject specialist about what library resources (e.g., books, databases, journals, streaming video or audio, data sets, etc.) or other support (research consultations, library instruction, etc.) you anticipate needing for this program? If yes, please list those resources expected below.

Yes, we have been in touch with Amanda Bielskas (Director, Science, Engineering, & Social Sciences Libraries) to seek guidance on how best to collaborate in support of this new program. Columbia’s libraries already have significant resources to support climate and environmental research – diverse collections, data sets, subject specialists, and more. A few initial points for collaboration were identified, noted below, and we will continue to engage the Columbia libraries on the development of materials and support for students in the MS in Climate.

- Climate-Specific Resources – access to extensive resources on climate and related topics, which the Libraries have been increasing in recent years. Climate justice, in particular, is a growing area of research in which they wish to expand their resources.
- Data Research Services – technical help through individual consultations, bootcamps, and workshops for Python, R, Stata, SPSS, GIS, and JavaScript.
- Data Sets and Collections – if we need any specific data sets not currently in the libraries, we can request that the libraries acquire them.
- Research Support and Guides – individual or course library instruction sessions, notably for the applied learning and capstone courses.

5) Faculty

A) Provide the name of the program director and the percentage of time this individual will dedicate to leadership of the program.

The program director will be Ruth DeFries, Professor of Climate in the Climate School, University Professor, and Denning Family Professor of Sustainable Development in the Department of Ecology,
Evolution and Environmental Biology. She is an endowed faculty. It is estimated that approximately 20 percent effort will be dedicated to program administration.

B) Indicate if the program will require the hiring of new faculty either at its inception or by the time it reaches steady state. If so, indicate the number of new faculty it will require, divided between full- and part-time, the subjects they will teach and the year(s) of their initial appointment.

Since the launch of the Climate School in 2021, full-time faculty in the School have been involved in the conceptualization, development, and design of the MS in Climate degree. When the program launches, full-time Climate School faculty will be the major source of teaching in the program, teaching two or three courses each, on average, and sometimes more depending on the discipline. Faculty will teach across all Climate School programs, heavily in the Climate Core and across the elective and certificate courses. These faculty include, but are not limited to, Mingfang Ting (Professor), Lisa Dale (Lecturer in Discipline), Kristina Douglass (Associate Professor), Ruth DeFries (Professor), Jessica Fanzo (Professor), Radley Horton (Professor), Jason Smerdon (Professor), Sheila Foster (Professor), Melissa Lott (Professor of Prof. Practice) and Leah Aronowsky (Assistant Professor). Part-time faculty will also be involved in teaching in the program – specifically, Officers of Research in Climate School research centers (e.g., the International Research Institute for Climate and Society (IRI) and the National Center for Disaster Preparedness (NCDP)) who have a long tradition of, and experience in, teaching across a number of other Columbia programs, modalities, and populations. A small portion of the program will be taught by external adjunct instructors to support specific course needs.

Given these collective resources and plans, the Climate School expects to have, ultimately, 70 percent of teaching by full-time faculty, 25 percent by Officers of Research, who, in the semesters in which they will teach, will be granted a secondary instructional appointment per University policy, and 5 percent by adjunct faculty, across all school programs, including the MS in Climate. We have the appropriate financial support structures in place to support all teaching, modeled on best practices researched as part of the formation of the Climate School and including key elements of pay models introduced by the Earth Institute. Over time, the Climate School will continue to work with the University, the University Senate and other constituencies to adjust these percentages to respond to the feedback here and overall University guidance.
In addition to the existing faculty involved in the program, the Climate School expects to hire one lecturer and one full-time faculty to support the program within the first three years. If needed, the Climate School may choose to hire additional lecturers to meet growing enrollment and specific disciplinary needs.

6) Students

A) Describe the requirements for admission to the program.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deadline for Fall Admission</td>
<td>March 1</td>
</tr>
<tr>
<td>Deadline for Early Admission</td>
<td>January 15</td>
</tr>
<tr>
<td>Resume Requirement</td>
<td>Yes</td>
</tr>
<tr>
<td>Writing Sample</td>
<td>No</td>
</tr>
<tr>
<td>GRE General</td>
<td>No</td>
</tr>
<tr>
<td>Degree Programs</td>
<td>Full Time and Part Time</td>
</tr>
<tr>
<td>Free-Standing</td>
<td>Yes</td>
</tr>
<tr>
<td>Letters of Recommendation</td>
<td>3</td>
</tr>
</tbody>
</table>

Due to the interdisciplinary nature of climate and its complex impacts, the MS in Climate will admit students from a wide variety of academic backgrounds. This includes applicants from undergraduate and graduate programs in sciences, engineering, public health, social sciences, humanities, public policy, law, and business.

In addition to the requirements listed above, all applicants must have a Bachelor of Arts or Science, submit a transcript showing courses and grades per school attended, a statement of academic purpose, and three letters of recommendation. At least one letter of recommendation must be submitted by an academic recommender for applicants who have received a degree within the last five years. Applicants also must be able to articulate what knowledge and skills they are looking to develop through the MS in Climate and their professional goals after completing the program.

The Test of English as a Foreign Language (TOEFL), the International English Language Testing System (IELTS), or the Duolingo English Test is required for applicants who did not complete their undergraduate degree at a four-year English-speaking institution. Minimum scores will be in place to ensure candidates have the necessary English language foundation to succeed in our rigorous program. The minimum scores for the TOEFL and IELTS will follow requirements that have been historically used by the MA in Climate and Society per the minimum standards determined by the Graduate School of Arts and Sciences:

- 100 on the TOEFL internet-based test
- 7.5 on the IELTS
- 135 on the Duolingo English Test

Some undergraduate-level coursework on climate or a related topic is preferred, along with knowledge of calculus, undergraduate-level courses in introductory statistics or data analysis, and some previous social science courses or related experience.

To be considered for financial support, students must submit their application by the priority deadline date.
Applications submitted by the priority deadline will receive a decision by the end of March. Applications received after the priority deadline will be reviewed on a rolling basis.

B) Provide the anticipated enrollments of students in the program’s first five years, and ultimate enrollment once it reaches steady state. Indicate the number of years it will take to grow the program to its full size.

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Expected Enrollment (sum of new entering students and continuing students in the 2-year program)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2025 - 2026</td>
<td>65</td>
</tr>
<tr>
<td>2026 - 2027</td>
<td>145</td>
</tr>
<tr>
<td>2027 - 2028</td>
<td>175</td>
</tr>
<tr>
<td>2028 - 2029</td>
<td>220</td>
</tr>
<tr>
<td>2029 - 2030</td>
<td>300</td>
</tr>
</tbody>
</table>

*Assumes even spread across embedded certificates and some dual degree enrollment (dual degree options will be announced at a later date.) The initial certificate options include Climate Systems and Analytics, Climate and Food Systems, and Climate and Disaster Management. A fourth certificate, Climate and Energy Transitions, will be submitted for approval in the coming year.

C) If this is a dual-degree program, either between schools of the University or a joint program in collaboration with another institution, describe the support the students will receive from the participating schools or institutions and how the program will ensure that they have access to the courses and resources they will need to complete its requirements.

We expect that students in the MS in Climate will have the option to satisfy their second credential requirement through a dual degree program in the future. We envision that dual degree programs – both in partnership with schools at Columbia or with external global partners – will be critical to training students with interdisciplinary skills and providing the practice-based experience needed to be successful as climate change practitioners. We are enthusiastically exploring dual-degree program options for the MS in Climate and will formalize those proposals in the next academic year.

D) Describe the types of positions for which the program will qualify its students.

The complex nature of the climate crisis necessitates a wide and diverse professional field. Data from the Climate School’s Career Development Office, as well as Huron’s market analysis, both indicate a need for climate specialists across many sectors and fields. The MS in Climate is therefore intentionally interdisciplinary and skills-based to equip students to succeed professionally in a wide variety of climate-based fields.

The program’s core curriculum prepares students with foundational knowledge of climate science, adaptation, mitigation, communications, and justice to be interdisciplinary climate practitioners. Graduates also will be qualified to communicate the value and impact of climate-related initiatives, build and steward partnerships to accelerate action and progress, and possess analytical and systems thinking skills that will
qualify them for a range of jobs and sectors. With the addition of the required second credential, graduates will also be prepared to enter specialized roles within the climate field, linked to their chosen credential and area of focus (e.g., climate analytics, food systems, climate disasters, decarbonization).

Below are some examples of positions for which students may qualify; these examples are meant to illustrate the range of jobs available to graduates; they are not inclusive of all available jobs. The climate field is rapidly evolving, and we expect the types of roles and careers available to our students to only expand in the coming years.

<table>
<thead>
<tr>
<th>General Climate Job Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Private Sector</strong></td>
</tr>
<tr>
<td>Climate and Sustainability Consultant</td>
</tr>
<tr>
<td>Climate Resilience Planner</td>
</tr>
<tr>
<td>ESG Analyst</td>
</tr>
<tr>
<td>Carbon Removal Business Development Manager</td>
</tr>
<tr>
<td>Energy Analyst</td>
</tr>
</tbody>
</table>

7) Online Delivery. If the proposed program will have an on-line component, answer the following questions.

A) Confirm whether the online and in-person programs will be identical with respect to content, admission criteria, student learning outcomes, and assessment methods; and if not, indicate how they will differ.

The MS in Climate degree will only be offered as an in-person program.

B) What percentage of the program will be offered online?

N/A

C) Please describe: N/A

a. The on-line platform you will be using to teach this program;
b. Student support resources that will be available to the on-line students;
c. How you will authenticate the identity of the on-line students in the program.
8) Evaluation

A) Describe how the quality of the program will be evaluated, including the frequency of the reviews and who will conduct them. Describe how student input will be obtained as part of the evaluation of the program.

The program will be evaluated through all the standard evaluation procedures for academic degrees. These include, but are not limited to, end-of-semester course evaluations, intermittent course evaluations at approximately five-week intervals, feedback sessions with faculty program directors, students and key administrators, standard town-hall meetings between the dean and students, student government feedback, and end-of-program exit surveys.

Additionally, in the first year of the program the Climate School will deploy a new comprehensive evaluation protocol in sync with the innovative nature of the program. This includes the following:

- Current student “quality of program” surveys, deployed every two weeks:
  - Mapped to randomized groups of 5 percent of the student body.
  - Mapped to a control group of 15 students.
- End-of-semester program-level evaluations (in addition to course evaluations)
- Alumni “quality-of-program” surveys with additional focus on career/skill/program match and success for each graduate, deployed routinely after graduation.
- Employer surveys, launched in partnership with the Office of Career Placement.

Reasonable and achievable improvements to the program will be put in motion in real-time based on the results of these on-going evaluations. Other changes will be considered and enacted based on a number of factors, including resource requirements and the calendar. The program will be rigorously evaluated at the end of year two (after the graduation of the first student cohort) and the faculty director will determine which of the additional evaluation elements will be continued in the following year. The faculty program director, the Climate School’s Committee on Instruction (COI), and the dean will be directly involved and guide all of these processes.
B) Include a learning outcomes and assessment plan for the proposed program, using the below template. Examples here: https://provost.columbia.edu/content/assessment-student-learning

<table>
<thead>
<tr>
<th>Program Goals for Student Learning</th>
<th>Assessment of Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 1: Students will learn how the climate system works, its features and processes, and the links between the physical climate and social and economic systems.</td>
<td>Direct: Embedded measures within courses, such as class participation and performance on assignments, group projects, and exams. Indirect: Course evaluations; End-of-program exit survey; Alumni surveys.</td>
</tr>
<tr>
<td>Goal 2: Students will analyze climate impacts and design solutions using statistical tools, climate models, quantitative and qualitative research methods, and systems-based approaches.</td>
<td>Direct: Embedded measures within courses, such as class participation and performance on assignments, group projects, and exams); Experiential learning outcomes (capstone presentations, internship evaluations) Indirect: Course evaluations; End-of-program exit survey; Alumni surveys.</td>
</tr>
<tr>
<td>Goal 3: Students will evaluate climate adaptation and mitigation strategies by assessing the ethical, scientific, policy, financial, and social dimensions of these strategies.</td>
<td>Direct: Embedded measures within courses, such as class participation and performance on assignments, group projects, and exams); Experiential learning outcomes (capstone presentations, internship evaluations). Indirect: Course evaluations; End-of-program exit survey; Alumni surveys.</td>
</tr>
<tr>
<td>Goal 4: Students will learn to synthesize, translate and communicate interdisciplinary climate information and uncertainties for public and professional audiences across diverse sectors.</td>
<td>Direct: Embedded measures within courses, such as class participation and performance on assignments, group projects, and exams); Experiential learning outcomes (capstone presentations, internship evaluations). Indirect: Course evaluations; End-of-program exit survey; Alumni surveys.</td>
</tr>
<tr>
<td>Goal 6: Students will engage in collaborative learning, research, and practice, and center equity and justice in their work, with a focus on building community engagement and partnerships.</td>
<td>Direct: Embedded measures within courses, such as class participation and performance on assignments, group projects, and exams); Experiential learning outcomes (capstone presentations, internship evaluations). Indirect: Course evaluations; End-of-program exit survey; Alumni surveys.</td>
</tr>
<tr>
<td>Goal 7: Students will develop expertise in at least one specific area of specialization within the climate field.</td>
<td>Direct: completion of the required second credential Indirect: Job placement data; Alumni surveys.</td>
</tr>
</tbody>
</table>

10) External Review for NEW Master’s and Doctoral Programs.

Please provide the names of experts in the field of the program at institutions outside of New York State. Proposed reviewers should be specialists in the area of the program but should not have had an association with Columbia that would compromise the independence of their evaluations. NYSED considers that a conflict of interest exists if a proposed reviewer:

- has had an appointment at the University or is related to someone who has;
was previously consulted about the development of the proposed program; or

- has a professional relationship with someone at the University such as collaborating on externally funded research and publications.

For new master’s programs, the University must supply one external review; for doctoral programs, two external reviews are required. For this reason, please identify 3 potential reviewers for master’s proposals, and 5 potential reviewers for doctoral proposals.

For each potential reviewer, include institutional affiliation, contact information and a link to the individual’s website which lists his/her educational credential (including where his/her degrees were received) and employment history. If full information on degrees and employment cannot be viewed from the website, NYSED may require that we supply them with the individual’s CV.

Please note that this requirement does not apply to new DUAL or JOINT degree programs, or to new BACHELOR’s programs; we do not need to submit external reviews for these programs.

1. **Corey J. Gabriel** – Executive Director, Master of Advanced Studies Program in Climate Science & Policy, UC San Diego. cjgabriel@ucsd.edu | https://csp.ucsd.edu/our-team/leadership-team/


3. **Diana Liverman** – Regents' Professor, School of Geography, Development and Environment, University of Arizona. liverman@arizona.edu | https://liverman.faculty.arizona.edu/
Date: January 30, 2024

To: Columbia University Senate

From: Shih-Fu Chang, Dean of Columbia Engineering
      Costis Maglaras, Dean of Columbia Business School

Subject: Support of the Climate School’s Flagship MS in Climate New Degree Proposal

We are writing in strong support of the Columbia Climate School’s proposal for its new MS in Climate program. This flagship degree is critical to realizing the promise of the Columbia Climate School while advancing the role of the University in addressing the world’s climate crisis. It will expand Columbia’s offerings in climate education and ensure depth in key areas of specialization in the growing climate field. The degree will provide students with the knowledge and skills necessary for building their careers in the climate space, and with expertise that will be in increasing demand over the course of the 21st century and beyond.

Climate change poses a challenge for our society, for every aspect of our lives and for every sector of our economy. Over the next half a century and beyond, this challenge will necessitate the development of human capital that will affect a transition to a new, sustainable, thriving and equitable economy and society. The human capital gap, globally, is very significant, and the MS in Climate program is going to be a flagship program that will develop students into agents of change in this area. It will be a program that would lead across the academy by developing curricula that can serve other schools globally over time; it will serve as a catalyst for collaboration across our schools and across disciplines in delivering an integrated program to best equip Columbia students in this area; and it will move Columbia to being a leader in climate education.

The MS in Climate program will be a valuable addition to Columbia’s intellectual and academic ecosystem—allowing existing programs that are engaged with climate, sustainability and the environment to continue to thrive, and in our view, enhancing their own reputation and attractiveness through synergies with the school and through the recognition of Columbia as the leading institution for climate education. The Climate School has designed the MS in Climate to easily facilitate partnerships with other disciplines, particularly those across the University. The program is conceived in a way that offers – indeed builds on – exciting opportunities for collaboration and partnership, embracing interdisciplinarity as the way forward in conceptualizing and developing climate solutions.

On behalf of both Columbia Engineering and Columbia Business School, we express our full support of the MS in Climate degree and excitement about the opportunities for partnership to be realized with the Climate School in the coming years.

Regards,

Shih-Fu Chang
Dean of Columbia Engineering

Costis Maglaras
Dean of Columbia Business School
Resolution Reconfirming Our Commitment to the Principles of
Academic Freedom and Shared Governance

1. Whereas — Chapter VII of the University Statutes, “Code of Academic Freedom and Tenure,” states in Section 70.a. that:

   “Academic freedom implies that all officers of instruction are entitled to freedom in the classroom in discussing their subjects; that they are entitled to freedom in research and in the publication of its results; and that they may not be penalized by the University for expressions of opinion or associations in their private or civic capacity; but they should bear in mind the special obligations arising from their position in the academic community;” and,

2. Whereas — In October 2001, in a time of loss, grief, and heightened emotions, the University Senate reaffirmed Columbia’s commitment to “the free expression of ideas and open debate as well as the respect for diversity of opinions and beliefs”; and,

3. Whereas — In 2015, in adopting the revised Rules of University Conduct, the University Senate included the Affirmative Statement, which asserts that

   “the University has a vital interest in fostering a climate in which nothing is immune from scrutiny”; “the role of the University is not to shield individuals from positions that they find unwelcome”; and “the University has an obligation to assure members of its community that they can continue in their academic pursuits without fear for their personal security or other serious intrusions on their ability to teach and to study;” and,

4. Whereas — In 2018\(^1\), the University Senate affirmed that

   a. “[a]ll members of the Columbia community […] have the freedom to disagree with conventional wisdom, with one another and with official policies whether institutional, local, national or global” and that

   b. “[i]t is this freedom that empowers each of us to continue to question, experiment, explore and even be wrong — undertakings that support and perhaps even define the academic mission of Columbia University”; and,

   c. these shared freedoms include a commitment to maintaining an environment of respectful disagreement; and,

5. Whereas — We, the Columbia University Senate, accordingly understand academic freedom to be a set of rights and responsibilities governing both faculty and University leaders that protect faculty’s rights

\(^1\) Resolution Concerning the Principle of Academic Freedom, proposed jointly by Faculty Affairs Committees and Student Affairs Committees adopted February 2, 2018
to teach, conduct and publish research, and speak and write both on campus and off, and that are

6. Whereas — We, the Columbia University Senate, believe that the protections of academic freedom allow and oblige all faculty to pursue their teaching, research and clinical endeavors and communicate to a wider public in ways that strengthen our society and affirm the social importance of higher education; and,

7. Whereas — We, the Columbia University Senate, are committed to the rights and responsibilities of faculty as stewards of the institution, in the interest of its long-term well-being, and its capacity to be of benefit to its students, its immediate community, and the world at large;

8. Therefore, be it resolved that the Columbia University Senate is committed to the following principles of academic freedom and shared governance:

   a. Academic activities at Columbia are subject to review set by normal institutional processes in accordance with best professional practice; and

   b. Faculty speech and expression, including in the press and via social media, are subject to the protections and restrictions laid out in the Affirmative Statement §440, including “the right to speak, to study, research, to teach, and to express their own views” and the obligation to “allow others in the community to do the same”, except in cases of genuine threat of harassment, unjustifiable invasion of individual privacy, or false defamation; and

   c. The University and its leaders should refrain from taking political positions in their institutional capacity, either as explicit statements or as the basis of policy, except in the rare case when the University has a compelling institutional interest, such as a legal obligation, that requires it to do so; and

   d. Both principles of academic freedom and obligations of institutional stewardship permit inquiry into whether the University’s corporate activities remain compatible with “paramount social values”\(^2\); and,

   e. University policy in general should arise from mechanisms of shared governance, and should not be set by, or in deference to, entities external to the institution or those mechanisms; and,

   f. Matters of university policy that touch on or may benefit from areas of academic expertise should be informed by that expertise, and consultative bodies should be appointed with deference to the University’s strengths in faculty expertise and knowledge; and,

   g. The University Senate, as the representative body of all University constituencies and the statutory policy-making body of the University concerning matters of academic freedom as provided by in the University Statutes §23(c), has an historic and vital role to play in convening and fostering further discussion, articulation, and/or ratification of principles around academic freedom and the rights and responsibilities that obtain to it.

Proponents: Faculty Affairs, Academic Freedom and Tenure Committee
              Student Affairs Committee

\(^2\) In the words of [the 1967 Kalven Report](https://www.columbia.edu/itc/announcements/1967.html).
RESOLUTION TO ENDORSE THE POLICY FOR RECORDING CLASSES

WHEREAS the Office of the Provost has developed the attached Policy for Recording Classes, and
WHEREAS the University Senate Education Committee has voted unanimously to approve the Policy;
THEREFORE BE IT RESOLVED that the University Senate endorse the Policy for Recording Classes.

Proponent: Education Committee
Policy for Recording Classes

February 2, 2024

Overview

▪ **Reason(s) for the Policy:** Prohibits unauthorized recording, including surreptitious recording, during University classes

▪ **Primary Guidance to Which This Policy Responds:** Not applicable.

▪ **Responsible University Office:** Office of the Provost

▪ **Revision History:** Not applicable

▪ **Who is Governed by This Policy:** All faculty, employees, students, contractors, volunteers, visitors and guests attending University classes.

▪ **Who Should Know This Policy:** All faculty, employees, students, contractors, volunteers, visitors and guests attending University classes.

▪ **Exclusions & Special Situations:** The policy addresses exclusions and special situations.

Policy Text

**Purpose:** To prohibit unauthorized recording of attendees in University classes, and to provide restrictions regarding the authorized recording of attendees in such classes.

**Scope:** This policy is applicable to all faculty, employees, students, contractors, volunteers, visitors and guests attending University classes.

As used in this policy, “recording” refers to the use of any device to film, tape or otherwise take, in any format or medium, audio, video or visual images of another individual, including, without restriction, in-person or via phone or videoconference. “Attendees” includes all individuals who are present, including bystanders, participants and presenters, for class or other course content, including, without restriction, lectures, recitations, discussions, presentations, critiques, performances, and office hours. “Surreptitious” means furtive, secret, hidden or partially hidden.

**General Principles:** It is expected that University affiliates and other attendees at University classes will engage openly and forthrightly with others in educational settings. To this end, the purpose of this policy is to prohibit unauthorized recording, including surreptitious recording, and to provide restrictions regarding the recording of attendees in classes. The policy is intended to foster a spirit of trust and promote the open exchange of viewpoints and ideas within the University community.

**Authorized Recordings:** The University’s authorized personnel may make recordings of University activities in furtherance of the academic and operational needs of the University. The Office of Government and Community Affairs may authorize members of the media to record certain University
events and Campus Services may authorize commercial filming, as described in the Commercial Filming, News, Documentaries, and Student Filming Policy. Video recording by Public Safety is authorized consistent with the CCTV Monitoring and Recording Policy. Audio and video recording at student events may be permitted with the consent of the sponsoring organization pursuant to the Recording Policy.

Recording in class is subject to the following restrictions.

**Recording Classes Subject to Restrictions:** Faculty members may record class, lectures, recitations, review sessions and other course content after providing notice to students in advance (for example, by notice on the syllabus, on CourseWorks, or at the first class). Students may not record class or other course content, such as lectures, recitations, discussions, presentations, critiques, performances, or office hours, whether in-person or via phone, videoconference or other modality, without advance written permission from the instructor or, in the case of a request for a reasonable accommodation for a disability, from Disability Services. If permission is granted, the recording must not be shared beyond the class members without the written consent of all attendees who were recorded.

**Prohibition on Surreptitious Recordings:** Attendees at University classes may not make surreptitious recordings under any circumstances, including in-person or via phone, videoconference or other modality. Certain federal, state and local laws may also prohibit such recordings. When recording is authorized, recording devices may only be used in an overt and conspicuous manner so that it is readily apparent to all attendees that a recording is being made.

Violations of the above policy may be referred, as appropriate, to Dean’s Discipline through Standards and Discipline or at the student’s school, where applicable.

**Cross Reference(s) to Related Policies**

i. CCTV Monitoring and Recording Policy

ii. Commercial Filming, News, Documentaries, and Student Filming Policy

iii. Federal Family Educational Rights and Privacy Act (FERPA)

iv. Recording Policy
COMMISSION ON DIVERSITY

THE CREATION OF AN FLI STUDENT SPACE FOR COLUMBIA UNIVERSITY’S FIRST-GENERATION LOW-INCOME STUDENTS

February 2, 2024

Current Policies and Resources:

Most resources are heavily undergraduate focused and we are hoping this safe space can contribute to fostering a larger FLI community throughout all schools.

Columbia has a webpage under Multicultural Affairs for resources for FLI students:

As a complement to the academic-related support and transition resources provided by First-in-Family Programs in the Center for Student Advising, Multicultural Affairs offers social and cultural support, resources, programming, and advocacy for First-Generation and/or low-income (FLI) college students on issues related to student life outside of the classroom. Additionally, the office offers opportunities for campus education and training on socio-economic class awareness and a greater understanding of FLI college student experiences.

First-in-Family Programs are outlined as:

Columbia College and Columbia Engineering are proud to have approximately 1,000 undergraduates who are the first in their families to attend college. First-in-Family (FiF) Programs encourage the success of every first-generation college student at Columbia via year-long academic support, professional development, and cultural enrichment opportunities.

Academic Success Program (ASP) is outlined as:

Academic Success Programs (ASP) provide a holistic approach to student development through a network of comprehensive programs and services. Through an array of retention-based opportunities, transitional programming, tutoring, skill-building seminars, educational and personal advising, and mentoring programs, ASP participants receive supportive services throughout their college experience. ASP seeks to foster
collaborative partnerships with University departments, external organizations, and alumni.

**FLI Partnership Library** is outlined as:

Located on the third floor of **Butler Library, Room 303A**, the Columbia FLI Partnership Library is a collection of textbooks and other course materials available to low-income and/or first-generation students from one of Columbia University's undergraduate schools: Columbia College (CC), the School of Engineering and Applied Sciences (SEAS), and General Studies (GS), as well as students from Barnard College. Students who identify as first-generation or low-income and who register can borrow materials from the collection for extended (semester-long) loan periods.

**FLI Resource Guide** (has not been updated since August 2021):

**FLI Resource Guide.** A Guide to Columbia’s Campus Resource Designed for and by first-generation and/or low-income students.

UpLIFT house is offered through Columbia Residential’s Special Interest Communities program:

Our Special Interest Communities create opportunities to impact the larger Columbia community through the implementation of educational programs, events, and workshops in addition to fostering a connection to faculty, staff, and alumni… upLIFT House is a vector through which we support, organize, and highlight First-Generation, low-income students and their allies on campus.

Columbia Admissions for Undergraduates policy on undocumented applicants is as follows:

As an undocumented or DACA applicant, you’re eligible for the same need-blind admissions policy and processes as US Citizens, permanent residents, and eligible non-citizens... One of the highlights of our financial aid program is that we meet 100% of the demonstrated financial need of all students admitted as first-years, or transfer students pursuing their first degree, regardless of citizenship status. Undocumented students and DACA recipients are not eligible to receive federal and state financial aid, so Columbia College and Columbia Engineering meet their full needs entirely from institutional resources.

Columbia’s Undergraduate Current Leave of Absence Policy:
A voluntary leave from the University is granted to students who wish to take time away from their studies for a variety of reasons, including employment opportunities, personal or family circumstances, the desire to travel, or simply to gain perspective on their academic and career priorities...Please note that you will not receive credit for any courses taken during a voluntary leave and that you will not be guaranteed housing when you return.

Proposed Added Resources:

We propose that the University establish a subcommittee dedicated to the creation of an FLI Space. This subcommittee would meet with constituents regularly over a semester. This subcommittee within Student Affairs, Commission on Diversity and Campus Planning and Physical Development includes but is not limited to faculty, student leaders, Senators, and Dean of Schools who come together to discuss the funds, placement, and management of the FLI Space. Each school will be represented by either a faculty member or student representative to ensure all schools are supported in this space. This subcommittee is geared towards aiming inequitable resources across the schools.

By implementing a physical space for FLI students, this underrepresented group can come together and gather resources such as books, technology, advisors, calculators, and tutors to bring unity and inclusivity to this underrepresented group. This is not to eliminate what schools are doing for their students. This is to ensure that the central entity is to benefit their respective students. To bring more resources for all schools, Columbia can be at the forefront of undergraduate and graduate school FLI student experience.

Precedents for FLI Resources

1. Brown: In 2016, Brown implemented the U-FLI Center, which serves as a communal, learning, and advocacy center for members of the Brown community who identify with the undocumented, first-generation college, and low-income student experience. The U-FLI Center develops programming and resources that support the holistic development of the U-FLI student community at Brown. The center coordinates a few major programs including the FLI Scholars Program, Undocumented Student Program, Class Dissonance Series, and Undocu-Series.

2. University of Pennsylvania: In 2018, the University of Pennsylvania was one of the first partner schools to implement a safe space for resources and programs for FLI students. In Penn First Plus, Penn promises inclusivity of all forms of diversity, specifically at the
intersections of social and economic backgrounds. By having support course materials and a safe space for these students, Penn has successfully established an environment conducive to learning for all students. Penn First Plus helps with summer internship and research opportunity funding, grant funding to cover the cost of Penn’s health insurance plan, a free laptop computer for incoming first-year students, stipends to cover the cost of food during Thanksgiving and Winter Breaks while dining halls are closed, free academic regalia as seniors, and grant funding to cover tuition for summer courses.

3. **Harvard**: In 2018, Harvard implemented an initiative, Primus, aimed towards supporting first-generation, low-income students. Primus, a FLI student union, hosts information sessions about opportunities on campus, how to navigate the resources available to students, and pre-professional information panels.

4. **Stanford**: In 2018, Stanford created an FLI Student Success Center that operates on the pillars of advocacy, mentorship, community & belonging, and connections to resources to provide holistic support for first-generation, low-income, transfers, current/former foster youth, and FLI graduate students at Stanford. This includes providing critical resources, networks, and services that set them up for success. Stanford also runs various initiatives for undocumented students through El Centro Chicano y Latino, which include school-year programming, support groups, and funds for DACA application fees among other things.

5. **Barnard**: In 2020, Barnard created ACCESS Barnard which serves as the hub of College efforts to enhance the academic experiences, and promote the inclusion and excellence of first-generation, low-income, and international students in their transition to and persistence through the Barnard experience. The center celebrates identities, cultivates community, empowers exploration, mentors fellow peers, and builds allyship, holistic development, and self-advocacy.

6. **Cornell**: In 2018, Cornell issued their First Generation & Low-Income Student Support program. FGLI workshops at Cornell made strives to ensure students received education on maintaining financial sustainability, food security, stable housing, and overall wellness. Additionally, FGLI provides up to $500 of funding for low-income students with basic needs and access to transformational educational experiences.
### Table 1: Forms of FLI Spaces Across U.S. Colleges and Universities

<table>
<thead>
<tr>
<th>Institution</th>
<th>Group Recognition</th>
<th>Dedicated Resources</th>
<th>Dedicated Spaces</th>
<th>Year Established</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barnard</td>
<td>ACCESS Barnard</td>
<td>The hub of College efforts to enhance the academic experiences, and promote the inclusion and excellence of first-generation, low-income, and international students in their transition to and persistence through the Barnard experience</td>
<td>Located in Milbank Hall at the north end of campus</td>
<td>2022</td>
</tr>
<tr>
<td>Brown</td>
<td>U-FLi Center</td>
<td>The space serves as a communal, learning, and advocacy center for members of the Brown community who identify with the undocumented,</td>
<td>Housed within the Division of Campus Life at Brown</td>
<td>2016</td>
</tr>
<tr>
<td>Institution</td>
<td>Program</td>
<td>Description</td>
<td>Year</td>
<td></td>
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<tr>
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<tr>
<td>Cornell</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Columbia</td>
<td>FLI @ Columbia</td>
<td>This program series supports FLI college students on issues related to campus life, navigating the campus community, and experiences outside of the classroom.</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Harvard</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>U Penn</td>
<td>&quot;Penn First Plus was established under the leadership of our 8th President, Dr. Amy Gutmann, to provide centralized leadership and support for these efforts&quot;</td>
<td>Undergraduate advising staff in each of the four Schools (the College, SEAS, Wharton School of Business, and the School of Nursing) The Office of on the ground floor of College Hall, serves as Penn's hub of efforts to make the undergraduate experience more inclusive and supportive of first-generation and/or lower-income student experience.</td>
<td>2018</td>
<td></td>
</tr>
<tr>
<td>University</td>
<td>Center/Program</td>
<td>Address</td>
<td>Year</td>
<td></td>
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<tr>
<td>---------------------</td>
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</tr>
<tr>
<td>New York University</td>
<td>Financial Aid, The Center for Undergraduate Research and Fellowships, Career Services, Weingarten Learning Resources Center, The Center for Teaching and Learning, Student Intervention Services, Cultural Resource Centers in the Arch (La Casa, Makuu, and PAACH), the LGBT Center, as well as the FGLI Program in the Greenfield Intercultural Center, The University of Pennsylvania College Achievement Program (PennCAP), P1P Alumni Relations.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stanford</td>
<td>FLI Success Center</td>
<td>520 Lasuen Mall, Suite 200</td>
<td>2018</td>
<td></td>
</tr>
</tbody>
</table>
Princeton Center for Access and Opportunity offers programs designed to provide all students, including those from first-generation, low-income, and underrepresented backgrounds, with the mentorship, academic enrichment, and community that they need to thrive at Princeton.

We offer in-person and virtual one-on-one advising for undergraduate and graduate students.

2021

Need for FLI Space:

First-generation, low-income (FLI) students face many adversities while attending college. The most obvious of these adversities stems from the fact that families who are low-income face additional financial responsibilities that come with attending college. This places an additional burden on these students compared to non-FLI students, as FLI students may take on work responsibilities to support themselves through these financial responsibilities due to their families being unable to do so. In some cases, students may not only have to work to support themselves but support their families financially or in other ways. It is not uncommon for students coming from these backgrounds to support their families with tasks such as filing taxes or paying bills. Some FLI students, especially those from immigrant backgrounds, may be the only English speakers in their immediate families and so they have the additional responsibility of continuing to support their families in essential tasks that necessitate an English speaker present. Needless to say, these students often come from backgrounds that under-prepared them to participate and succeed in a rigorous academic environment like Columbia. To name a few of these backgrounds, students may have attended high schools that did not offer advanced coursework, or come from families with little to no professional experience in corporate jobs. Furthermore, these students can often have unique cultural identities that, when combined with their low-income background, will make navigating the academic and professional environments at Columbia and beyond more difficult. For undocumented students, beyond being treated as an
equal applicant, there is no support once students arrive on campus dedicated to undocumented students. As it currently stands, there are no dedicated resources for undocumented students. For example, Columbia’s Career Center does not have a respective section on its website for undocumented students (unlike their resources dedicated to FLI students, women, etc.). Also, according to Columbia’s financial aid office and staff, there currently are not any alternatives to supplement federal work student/student contributions for those who do not qualify due to lack of work authorization, etc.

Colleges should (and many currently do) implement centralized administrative spaces that support this community, ensuring the disproportionate challenges this population faces do not impede their success relative to their peers. As put by a peer institution, Yale: “Yale is a school, and if you go to a school, you go there to learn, and grow, and have fun. But hitting students with costs that they have to find employment to earn money to repay takes away their chance to make the most of the school.” As outlined above, Columbia has various resources and policies intended to support FLI students, but the burden often falls on the FLI student body to share these resources and advocate for better support systems. The decentralized structure of Columbia can often be confusing to navigate. FLI student leaders argue that a FLI Space will help ease this burden and create clearer avenues for student support in addition to holding the administration accountable for their responsibility to FLI students.

Hence, it’s important to support these students by providing resources such as funding and book allocations that are on the Literature Humanities, Core Civilizations syllabi as well as crucial course materials. Having increased financial aid assistance, accessing the Dean’s Student Assistance Fund for the unique challenges undocumented students face (like DACA reapplication funds), and having a specific work exemption program for students who cannot find work due to their status are just some of the things Columbia’s proposed FLI Space can provide. FLI student leaders have shared support in creating a center that would ensure the well-being and excellence of FLI students by providing support within the following areas. Note this list includes but isn’t limited to:

- Safe Space
  - Supportive Staff Members Trained on Available FLI Resources

---

- A Place for FLI Students to Connect

- Basic Necessities
  - Hygiene Products
  - Cooking Supplies

- Healthcare Assistance
  - First Aid Kit
  - Specialized Mental Health Resources
  - Support in Navigating Health Insurance

- Food Insecurity
  - Visibility of Food Pantry
  - EBT SNAP Application Support

- Transportation resources
  - Subsidized Student Pass Metrocards
  - Supporting Domestic and International Travel Plans

- Social Work Assistance
  - Columbia’s School of Social Work students volunteer their time to bring resources, guidance, and assistance to fellow FLI students in exchange for hours that go towards their program.

Existing institutions and their failings:

FLI @ Columbia (Multicultural Affairs):

FLI @ Columbia is the closest thing to a FLI Student Space on campus. However, their mandate does not meet the needs of students. While it is important to provide “social and cultural support, resources, programming and advocacy for First-Generation and/or low income (FLI) college students on issues related to student life outside of the classroom”, students need increased efficiency in other systems that work to support them with academic resources, food insecurity, and other necessities. For reference, an example the authors of this document consider to be a successful FLI space is Access Barnard, who runs a student support fund (SASA), Lending Library, and in addition to The Food Pantry at Columbia, a mini Barnard Food Pantry.

Further below are results from surveys conducted by the First-Generation, Low-Income Student Network where students express the various areas of need that are not addressed by
Multicultural Affairs and other existing administrative entities. FLI Students have one Associate Director whose responsibilities are split between supporting various groups among FLI students. FLI Student Leaders believe one individual with split responsibilities is not sufficient to support the needs of the many FLI students across Columbia’s campus. Additionally, let’s compare this to Stanford, whose FLI support team includes 20 staff members, not counting student workers.

Multicultural Affairs only provides programming and support for CC and SEAS students only, GS is completely excluded. FLI Student Leaders believe that GS students, who have many more responsibilities outside of school as well as a higher effective cost of attendance, would benefit from the introduction (in addition to CC/SEAS students) of a new space with an expanded mandate to support FLI students beyond CC/SEAS.

First in Family Programs (FIF)

The First in Family Program is led by existing advising deans in Berick Advising Center who are already overloaded with advising other students who are not within “First in Family.”

All students who identify as First Generation Students receive notifications about the program’s application, but not all students who apply are accepted. Programming includes program-wide webinars and outings, but not individualized support.

Academic Success Program (ASP)

Academic Success Program (ASP) is a program through the Berick Center for Student Advising offered to students who were admitted to Columbia College and the Fu Foundation School for Engineering and Applied Sciences through programs known as the Higher Education Opportunity Program (HEOP\(^2\)) and National Opportunity Program (NOP).

Students who are admitted through HEOP and NOP are asked to attend a summer bridge program where they take condensed versions of classes a typical freshman in their respective undergraduate colleges might take—connecting them to a community and to academic resources before ever stepping foot on campus. Completion of the summer bridge is required for ASP students to matriculate. Furthermore, ASP offers students both academic and financial support. Students receive priority registration, specialized advisors, tutoring, mentorship, and a book stipend at the beginning of every semester.

\(^2\) [https://www.nysed.gov/postsecondary-services/higher-education-opportunity-program-heop](https://www.nysed.gov/postsecondary-services/higher-education-opportunity-program-heop)
The main problem with ASP is that the services it provides do not extend to enough students—every FLI student deserves specialized advising and administrators who are passionate about connecting them to academic, mental health, and financial resources, as well as a space where they know their needs will be met. Though technically housed under the Berick center for Student Advising, not even ASP students have a physical space or center to call their own. Expanding ASP to the fullest extent possible without sacrificing the quality of its programming while also providing a space for FLI students whether they are part of ASP or not.

FLI Partnership Library

The library is slow at processing the books they purchase into the system, which means that they are accessible to students much later than when they are needed. If more staff is required to expedite this process, they should be hired. The FLI Library has suffered from an insufficient amount of staff, if any, to help it run smoothly. The past year, there was not a librarian in charge of facilitating the FLI Library. With no one appointed, there was no one that students could be redirected to, leaving students to learn on their own how to use the library. There are new individuals in this role but given the lack of experience in this position, interacting with students to learn of the shortcomings of the library and plan how to address them so students have a better experience.

Students are granted access to the FLI Library by submitting a response to the FLI Library’s Google Form that asks students to self-identify as FLI. To ensure that FLI students have full access to all the resources, we would like for a review of a student’s income and parent’s education level to determine if this student meets Columbia’s definition of first-generation and/or low-income. The FLI Library was initially started by students who donated their old course materials. The library grew thanks to continued donations over time and then was eventually formalized. The library receives money from the budget allocated for the libraries on campus. Since the budget for the FLI Library is limited, we ask that the FLI Library receive its own budget that will grant the library the financial freedom to purchase any materials that it needs to meet the increasing student demand for a wide variety of books.

There are many course material needs not met by the Library, for example, some students have to pay money to do their homework: CHEM 1403, a required class for all engineers, requires software (Cengage) that is $90 for homework. The bundle in the Columbia University
A Bookstore which includes the textbook and code for software is $124.80. These students also need to purchase an i>clicker from the Columbia University Bookstore ($50.00, new; $38.00, used). For calculators in CHEM 1403, students can only use TI-30XS Multiview calculators which is approximately $20.00. Most engineering students also take PHYS 1401 which also requires (Wiley Plus) which is $70 for homework. An average FLI freshman SEAS student will spend approximately $300 to do their homework in the first semester.

UpLIFT House (Special Interest Community through Residential Housing)

In 2019, the upLIFT house became the first Special Interest Community (SIC) dedicated to FLI students at Columbia and has since been a new living community for FLI students to support and organize around our needs on campus. Initially in Wallach floor 2, and later moved to River Hall floor 2, upLIFT is known to host at least 6 events per year to introduce students to this living community, connect FLI groups through partnerships, and highlight the struggles and joys of what it means to be FLI at Columbia. From upLIFTs records, 26 people were interviewed for the 2022-2023 school year, and 30 people were interviewed for the 2023-2024 school year, indicating an increase in interest in the SIC. upLIFT was impacted by the COVID-19 pandemic, but has made a concentrated effort to be a centralized student-run space for all FLI students.

However, upLIFT faces many challenges. Membership is limited to up to 9 students, depending on whether the RA brings a rider (a friend to live with them) or not. Having less than 10 students in upLIFT during any given year when well over 1,000 FLI students are on campus is considerably inadequate. upLIFT has an RA on our side of the floor that connects us with general housing resources, but it also limits membership more so than other SICs in River Hall. Only CC and SEAS undergraduate students are eligible to live in upLIFT, but many events are open to the wider FLI community. This leads to problems with access to River Hall, particularly for Barnard and GS students. Also, River Hall is not wheelchair accessible, which presents a barrier for disabled FLI students. According to the Fair Housing Act of 1968, “in buildings with an elevator, all of the units and all common use areas must be accessible and usable by people with disabilities. In buildings without an elevator, all ground floor units and common use areas must be accessible and usable by people with disabilities.” However, this building proves to not have accessible accommodations for students with disabilities.

As with all SIC’s, there is a budget of only $300 to host all of our events for the year. This severely limits the scope of events, and upLIFT often relies on external clubs, like Columbia FLI Network, to fund initiatives. During both the 2019-2020 and 2021-2022 academic years, upLIFT applied for a brownstone to expand the community and have a larger communal space for internal and external events. However, upLIFT was denied both years as brownstones are rare and highly competitive, and other (more established) SICs have a stronger presence on campus. As a SIC dedicated to FLI students, upLIFT members often have other priorities like work and family that have impacted participation within the house, and there have been instances where some members had to take leaves of absence to deal with the burdens all FLI students know very well. It is unfair to expect students to facilitate a strong living environment with such limited resources. Since its inception, upLIFT has set out to be a central resource for FLI students, but the house must receive institutional support to address the specific needs of this special interest community.

Food Pantry

The Food Pantry at Columbia is a long-standing, student-run organization that has worked endlessly to provide adequate non-perishable food to students in all colleges at the university. There are three locations open to all students in need at Columbia University: one in Lerner Hall, one on the Barnard campus, and one at the Medical Center. Their total distributions to date totaled 9,836 spread across all schools. 3,469 of those disbursements are for undergraduate students (including CC, SEAS, GS, and Barnard). This organization is a prominent example of how necessary food support has been across the university, regardless of school. However, in recent years, the food pantry has not been as strong or reliable of a support system within the Columbia community. To start, the Barnard location is closed until further notice. In the “Letter to Trustees on Behalf of FLI Students,” formally composed in the spring of 2022, the food pantry was captured to have completed 8,889 food disbursements across all of Columbia’s schools – this means that only 947 occurred over the last 18 months, corresponding to less than 2 distributions per day. Additionally, the Food Pantry lacks visibility as a campus resource with the last post on the Food Pantry’s Instagram account being published in March 2023. Moreover, the historic timeline of the Food Pantry as presented on their website stopped in September 2021 – over 2 years ago. It is unacceptable that student leaders have to shoulder the
burden of addressing food insecurity on campus when some of them are also experiencing it first-hand. Institutional support must be implemented so that no student at Columbia has to worry about their next meal.

**Student Feedback:**

The following survey results were conducted by the First Generation-Low Income Student Network (FLI Net) for various initiatives. They are meant to highlight the lack of communication and efficacy of existing academic entities that support FLI students in their academic pursuits.

Columbia Core Books Survey (11/15/2022):
Has buying required texts for core classes been a financial burden for you?
93 responses

- Yes: 94.6%
- No: 5.4%

Did you successfully gain free access to required texts for core classes through the FLIP library or other ways?
93 responses

- Yes, through the FLIP library: 47.3%
- Yes, through other ways: 29%
- No: 23.7%
If buying these books is a financial burden to a student, the Center for the Core Curriculum is one of the resources on campus to help. Were you aware that the Center for the Core Curriculum allows students in this situation to borrow core books at no cost to you?

93 responses

- Yes: 68.8%
- No: 31.2%

Have you used the Center for the Core Curriculum to borrow required core texts before?

93 responses

- Yes: 80.8%
- No: 19.4%

2022 Laptop Accessibility Survey Results (10/13/2022):
Your school year:
131 responses

Which school are you in?
131 responses

Do you use a laptop/personal computer for your classes?
131 responses
Are you in need of repair or servicing of your electronic apparatuses at the moment?
126 responses

- 51.6% Yes
- 48.4% No

Are you currently lacking any technology device that is necessary or could be advantages to your studies?
126 responses

- 54% I am lacking a device that is necessary
- 23% I am not lacking a necessary device but I am lacking a device that could be an advantage to my studies
- 23% I am not lacking either

If you were to damage your laptop/personal computer and it was to stop working, how confident are you in your ability to find and purchase a replacement?
127 responses

- 63.8% Very confident
- 28.3% Somewhat confident
- 11.6% Not very confident
- 6.2% Not at all confident
Do you know of existing resources at Columbia that would support you in getting a laptop replacement?
126 responses

As a FLI student, how beneficial would it be to help you with technological repairs or making the technology accessible to you?
126 responses

On a scale of 1-5, 5 being most helpful and 1 being not helpful
Have you had your laptop damaged during this or past academic years, and have you been able to get a replacement on your own?

127 responses

- **48%**: I had my laptop damaged, and I was able to get a replacement
- **35.4%**: I had my laptop damaged, and I was not able to get a replacement
- **16.5%**: I have not had my laptop damaged this academic year or in previous academic years
The following Student Interest & Support Statistics from upLIFT’s Brownstone Survey was conducted by upLIFT for their 2021-2022 Brownstone application which highlights the support for a larger FLI residential space and the demographics of those who participated in the survey.

**Are you**

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>QuestBridge affiliated</td>
<td>32.5%</td>
</tr>
<tr>
<td>An ASP alumni</td>
<td>18.2%</td>
</tr>
<tr>
<td>Both</td>
<td>23.4%</td>
</tr>
<tr>
<td>Neither</td>
<td>26%</td>
</tr>
</tbody>
</table>

**Racial or Ethnic Identity**

<table>
<thead>
<tr>
<th>Identity</th>
<th>Count (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghan/Paki</td>
<td>3 (4.1%)</td>
</tr>
<tr>
<td>Afro-Latino (Dominican)</td>
<td>4 (5.5%)</td>
</tr>
<tr>
<td>Asian-American</td>
<td>6 (8.2%)</td>
</tr>
<tr>
<td>Black/African American</td>
<td>3 (4.1%)</td>
</tr>
<tr>
<td>Cuban (Hispanic)</td>
<td>4 (5.5%)</td>
</tr>
<tr>
<td>Cuban (Hispanic Cuban)</td>
<td>4 (5.5%)</td>
</tr>
<tr>
<td>Latino</td>
<td>2 (2.7%)</td>
</tr>
<tr>
<td>Mexican</td>
<td>2 (2.7%)</td>
</tr>
<tr>
<td>North African</td>
<td>5 (6.8%)</td>
</tr>
<tr>
<td>White</td>
<td>2 (2.7%)</td>
</tr>
</tbody>
</table>

77 responses
Anonymous Testimonials about Laptops:
“The screen on my laptop is starting to split in two. I’ve been able to hold it together so far with tape but it comes off often. Without the tape my screen will fall flat or the inside of the screen is visible. I have to be careful how I handle it, which makes going to office hours hard. It’s also embarrassing sitting amongst my peers with a clearly old and broken laptop. I’ve had it for 5 years. It was a hand me down from my stepdad. He gave it to me freshman year of high school”

“I was unable to attend most of my classes in person because the battery of my computer was shot and I could not use my laptop unless it was plugged in. That lasted for an entire semester until I could save up to get my battery replaced.”

“I’m a computer science student and had my working laptop’s charging port damaged, so it became unusable. I am working on a 2015 MacBook that I got for $300, and a laptop loaner system and tech replacement fund would ease the stress of a big purchase that I cannot currently afford to make.”

“My laptop was damaged and began running very slowly. This impacted my Columbia experience negatively in many ways - Almost all of my classes require a laptop to complete classwork or take notes in class, and my thesis requires me to take notes and send emails from my laptop on the go, which I can't do from a library desktop computer. I also use my laptop for
all of my extracurricular activities and my on campus job. Fortunately, I was able to mitigate the damages and continue using my laptop. However, if my laptop was broken beyond repair, I don't know how I would be able to get a replacement. Having a fast and reliable laptop is absolutely critical as a college student.”

Need for increased communication and awareness:

The dissemination of information regarding FLI resources such as the FLI library is not readily accessible for the public. As the FLI community has uplifted the accessibility of these resources, there is a duty and responsibility from the University to also make these resources known and spread this knowledge.

Some ways to communicate these resources can be:

1. Student Advising (Berick Center spreads this information to FLI students)
2. Email chain to all students who identify as FLI and First In Family
3. Promote during first-year orientation
4. Add the resources to the newsletter FLI Net and CCSC/ESC/GSCS newsletter
5. Require all teachers to add this to their syllabus (that the FLI Space and FLI Library exist)
6. Admissions Letter Statement
7. Including a tab in CLIO where they can find FLI space/libraries
Forward Thinking the FLI Experience at Columbia University:

Currently, there are three main issues with how Columbia supports its First Generation-Low Income Students:

1. There are many issues that current administrative entities do not address as outlined above

2. Some of the most useful entities are severely limited in their resources and therefore inaccessible to students

3. There is no centralized entity that holds these entities accountable for enacting their responsibilities

With the outlined needs and asks, we want to help foster a safe space and home for fellow FLI students where they feel inclusive and united in the Columbia community. By implementing this all-encompassing safe space, we believe the next generation of FLI students will have the resources and guidance necessary to ensure academic and personal success.