INTRODUCTION TO ARCHITECTURAL DESIGN AND VISUAL CULTURE Spring 2021 (Spring B)

Arch UN1020

ONLINE: Mondays and Wednesdays, 10:00am – 12:50pm

Barnard and Columbia Colleges Architecture Department

Studio faculty: Madeline Schwartzman

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Office hours: by appointment (before 10am, after class or by appt.)

Student Teaching Assistant: TBA

Email both TA and Madeline on urgent matters, attendance, lateness,

Program architecture office Location: 5th Floor Diana Center

Architecture Administrator: Rachel Garcia-Grossman 212 854-8430







(Image top: images above: Pew House, Piercy and Company; Barnard and Columbia students wearing their architecture)

Architecture encompasses so much of our daily life. We live and work inside of homes and offices, travel and commute through cities and suburbs, play inside of tree houses and playgrounds, disrupt and divide with border walls, curbs, fences and zip codes (an architectural form of infrastructure) and we dream of flying through cities, passing through corridors, bounding through walls. That's just the start of how architecture is infused into culture.

The boundaries of the disciplines are now permeable. Architecture now flows into so many other areas of our visual culture, from film, gaming, virtual reality, augmented reality, and all manner of digital environments, to painting, sculpture, and installation art. On a psychological level, architecture affects our well-being. We can feel oppressed by it, uplifted, or overly reflected. Our identity and social relationships are deeply tied to a negotiation of spatial relationships, of being observed and watching, or having public lives and private, of attempting to read people in places. We are an amalgam of the actual and digital spaces we inhabit.

How can one discipline be so vital to all of our lives, and yet remain largely unexplored by so much of the population? Why is the discipline so infused with preconceptions of cute sloped roofs, cottages, and castles? This course aims to make visible the decisions, processes, and concepts that go into the making of our built environment. We will learn the conceptual language of architecture, making visible and transparent decisions about form and space that have a massive impact on humans. We will explore architecture's relationship to the human body: how humans emerge, pass through, evade, dissolve into, and snuggle up into the build environment. We will also explore the various tools and methods by which we design, document, and analyze architecture, including writing and poetry, sketches, diagrams, and mapping, orthographic drawing and projection methods, and computer representations and translations.

This course is considered a "studio." This means that we are leaving behind all the baggage of preconceptions, and exploring, adventuring, playing, investigating, iterating, and exercising our brains. Coming from different majors and disciplines, we will join forces to make things, draw, present, test, argue, and propose. Design equals time. This is a time consuming process and you must be prepared for ways of working—model making—that require patience, and a willingness to fail and rework. Design is a process.

There will be three major projects throughout the semester, each one divided up into miniexercises. The first week of each two-week exercise will be more exploratory in terms of materials, methods, and making. The second week will use the first week's explorations as a springboard for a mini design project. This doesn't mean that the second week is more important. Brainstorm weeks are critical. Good ideas and varied ideas emerge during that space for investigation and play. Please note that a seven-week studio is extremely intensive. Work must be completed on time. Stay with it, and contact me if/ when you are having any difficulties.



Project 1. Personal space/ shared space: WEARABLES AND BOOKS

We begin the semester with a constructive exploration of material and space using the pages of a simple paperback book (one you are willing to discard). Books, in architectural terms, are a series of laminates, bound on one edge. We will dismantle that ordering system, and provide a new one. In doing so we'll explore frame, laminate systems, structure, iteration, gradients, and conceptual ideation.

Next we'll design a new way of reading the new type of book, one that is structurally and conceptually united with the human body. The new wearable will also encourage explorations in human interaction: projects will be designed to be accessible to the wearer, and to another

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individual. The wearable book becomes both a private and public project. Drawing introduction: orthographic drawing

Project 2. Walls that bring us together and keep us apart: **DESIGNING THE VOID: SECTIONAL INTERSECTIONS, HUMAN ACTIVITY, AND NEGATIVE SPACE**



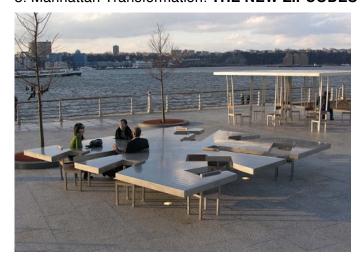


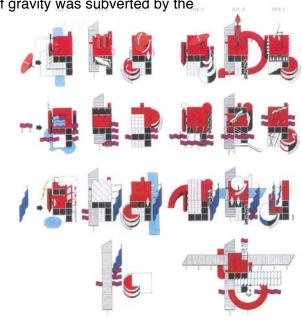
"By un-doing a building there are many aspects of the social condition against which I am gesturing: to open a state of enclosure which had been preconditioned not only by physical necessity but by the industry that profligates suburban and urban boxes as a context for insuring a passive, isolated consumer—a virtually captive audience."

"Interview with Gordon Matta-Clark" (Antwerp, September 1977), published in Gordon Matta-Clark and Gloria Moure, Gordon Matta-Clark: Works and Collected Writings (Barcelona: Polígrafa, 2006), 250. (b)

This assignment emphasizes excavation over construction. We create a planar laminated form using scoring methods and material intersections. Then we excavate, cutting away parts of planes one at a time in the style of artist Gordon Matta-Clark, to liberate sectional space within the work. A simultaneous study of human habitation of space—the way we overlap and intersect in city spaces—will allow us to use Photoshop to populate these new spaces. What ways can space flow? What can we learn the collective volumes left by connecting spaces? How do we feel in sectional space? (Matta-Clark: A "normal sense of gravity was subverted by the experience")

3. Manhattan Transformation: THE NEW ZIPCODES





This is an exercise in research, site studies, urban infrastructure, and iteration. We'll be studying existing urban street "furniture" and structures to develop a prototype for a new programmatic Manhattan infrastructure, one that capacitates more than one person, in section, meeting the site and specificity of a particular location. We begin with an in depth study of New York City zip codes, and features of the neighborhood. Using designs and data from Project Two, we'll be designing a new type of hybrid urban infrastructure—a public restroom, mini-gym, seat, meditation space, nursing station, or function of your own devising.

(images above: former student Mai's Literacy Project on the subway; Gordon Matta Clark's Conical Intersect; Allan Wexler's Two Too Large Tables for NYC; Bernard Tschumi's Follies for Parc de la Villette, Paris)

STUDENT LEARNING OBJECTIVES

Students in Introduction to Architectural Design and Visual Culture should be able, at an introductory level, to:

- 1. Visually communicate architectural concepts and design intent using discipline-specific techniques including:
 - orthographic projections (plans, elevations, sections),
 - paraline projections (axonometrics, isometrics),
 - physical models using various techniques and materials,
 - multiple media and/or combined representational strategies
- 2. Verbally communicate architectural research methods and spatial concepts
- 3. Demonstrate an understanding of precedent and site analysis
- 4. Demonstrate an understanding of design method as a step-by-step, iterative and incremental process of research, synthesis and feedback
- 5. Demonstrate an understanding of design thinking as responsive to and shaper of social and cultural context
- 6. Demonstrate the ability to work independently and collaboratively

FORMAT:

The course, now fully online, is based on the studio method, in which students are expected to work independently to develop their thinking and making, under specific challenges, with constructive criticism and conceptual provocation of a design faculty member. Class time will be divided into individual dialogues or critiques (desk critiques) between student and critic, open discussions, tutorials, workshops, student presentations, and/or informal lectures. Presentations of work will be public – either informal (pin-up) or formal (review with guest critics). In both, students are required to intelligently (visually and verbally) present their work in order to instigate a discussion about the ideas in their work.

Teaching Modality Statement:

Remote only: This course takes place fully online. All class meetings will be online. All work will be posted to Canvas, where all assignments, discussions, and tutorials will be posted.

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CALENDAR (subject to change)

Week 1. Monday March 8th Introduction

PROJECT 1A: WEARABLES AND BOOKS: BOOK

EXPLORATION

In class exercise in modelling and drawing

Wed. March 10th Meeting and mini-presentations, continued model

construction and drawing

Week 2. Monday March 15th Discussion of 1A.

BEGIN PROJECT 1B: WEARABLES AND BOOKS: HUMAN

BOOK INTERFACE

In class brainstorming and modelling for body

Wed. March 17th Model integration of book component and body.

In class drawing

Week 3. Monday March 22nd CRITIQUE 1B.

Begin Project 2A: Designing the Void: Sectional Intersections, Human activity, and Negative space In class exploration of human activity, in class corrugated

cardboard construction and brainstorm

Exploration of iterative model-making with found materials

Wed. March 24th Photoshop workshop, in class model excavation

Week 4. Monday March 29th Discussion of 2A.

BEGIN PROJECT 2B DESIGNING THE VOID:

SHARED WALLS AND INTERACTION

Model construction, axonometric drawing

Wed. March 31st Model construction and work on Photoshop

Week 5. Monday April 5th **CITIQUE 2B.**

BEGIN PROJECT 3A: MANHATTAN TRANSFORMATION: THE

NEW ZIP CODE

In class discussion and research

Wed. April 7th In class prototyping

Week 6. Monday April 12th In class models and drawings

Wed April 14th Final Critique

Readying week Friday April 16 -19

Exams: April 20 - 23rd

TEXTS/ RESOURCES

Jacob, Mary Jane. *Gordon Matta-Clark*, Museum of Contemporary Art, Chicago, 1985 *Oskar Schlemmer*, Musee Cantini, 1999
Porter, Tom. *Manual of Graphic Techniques 1-3 Samaras*, An Aperture Book,1987
Schwartzman, Madeline. *See Yourself Sensing*, Black Dog London, 2011
Schwartzman, Madeline. *See Yourself X*. Black Dog Press, 2018
Tufte, Edward, *Visual Explanations*Wexler, Allan. *Absurd Thinking*, Lars Muller, 2017

COURSE REQUIREMENTS AND ASSESSMENT CRITERIA

Prerequisites

This is an introductory course for students interested in thinking about architecture. There are no requirements. Students may join this class from all other majors. Preference is given to

Studio Procedures

This course is taught by the studio method. The core method of instruction is that of "desk critiques," a one to one dialogue at the desk between the student and the faculty or TA (also described as "studio critics"). At the desk crit, previous design work is reviewed and discussed and the student and faculty formulate the next steps in the process. Desk crits are supplemented by interim reviews, or 'pinups,' during which all students in the studio present their design ideas for group critique and discussions. The culmination of each project is the Final Review in which students present their work for public evaluation by a group of Critics. No excuses for incomplete work should be made for lack of equipment. Each project will use different equipment more specific purchases should be made at that time.

Studio Work

The studio work will consist of analog drawings, model making and computer work. You will maintain a sketchbook throughout the semester that will be used for sketching and writing notes for all projects. This sketchbook will be reviewed during desk crits and may be required for grading. In addition to periodic presentations by the TA and the critic, DAL Teaching Assistants will conduct other informal online evening workshops focusing on techniques and methods relevant to ongoing projects. These sessions are sometimes mandatory, and mostly optional, but you are strongly encouraged to attend.

SKETCHBOOK

Students should maintain a book within which to draw, sketch, and take visual notes. This is a critical supplement to the studio process. Ideas concerning your studio assignments should be recorded here. It is also helpful to use as a record of issues discussed during desk crits. It is not a substitute for assigned work.

CANVAS and GOOGLE DRIVE ARCHIVE

Canvas will be the repository for the course, with work deposited into Discussions within weekly Modules.

At the end of the semester, students are required to upload their work to a designated Google Drive folder, with format files as high resolution jpeg or pdf.

INSTRUCTIONS FOR ACCESSING APPORTO

Barnard College Student Computing has implemented a new virtual computer lab platform, Apporto, that will provide students who are enrolled in architecture courses with remote access to the same academic software that is currently installed in the physical architecture computer lab (DAL) on campus.

In order to access these applications (e.g. Adobe Creative Cloud, Rhino 6, ArcGIS, etc.) please go to barnard.apporto.com and log in using your Columbia UNI and password. Once you are logged in, you will see two Virtual Lab desktop icons: **BC GPU Virtual Desktop** and **BC Virtual Desktop**. These two virtual environments have some common applications on both, but mostly contain different software for different types of classes. For software related to your architecture courses, please use **BC GPU Virtual Desktop**.

Instructions for requesting support and reporting problems:

If you have any issues logging into Apporto with your Columbia UNI credentials, please review these pages regarding <u>resetting your UNI password</u> and <u>contact CUIT</u> directly if you are unable to resolve the problem on your own.

If you can log into Apporto, but experience any issues opening or using the applications, please email BCIT at help@barnard.edu with a description of the problem and any relevant screenshots or screen recordings. Someone from BCIT will follow up with you directly to help you troubleshoot and resolve the issue.

Online Weekly Format and Feedback

Where and when will work be posted and due:

All work will be available through the Modules section of Canvas.

Weekly assignments will be either given synchronously during class, or posted to Canvas with a message accompaniment.

Major projects will be due on Mondays (occasionally Wednesdays). Please post timely responses to discussions, and when required, load work onto discussions before the next class. It will be much easier to respond and allow the group to read your posts.

Technical problems during class:

If I have a power outage (and they happen once a month) or wifi problem, I will contact you through a Canvas message, and/or ask our TA to conduct class, or post an assignment on Canvas to be completed asynchronously. Should my wifi or the zoom portal quit, do the following:

- 1. Go back to the Zoom and try to get back into the class.
- 2. Check your Canvas messaging or email.
- 3. Check the weekly canvas module for any new postings

If you have wifi problems, please email me and the TA. Try to get back in, or head to a better

location. Everyone should have a class "buddy" for support. Have emails, phone numbers and any other method to get in touch, in order to keep up with anything you missed. Intensive courses deliver a great deal of content, and they do so rapidly.

Asynchronous work:

Since then course is intensive, you will be required to do some asynchronous work. A miniassignment will be posted to a Canvas weekly Module. The assignment will give careful instructions. All associated media will be in the Module as well, including any tutorials or videos. The deadline for the project may not correspond to our online synchronous sessions. Projects will be posted to the appropriate Discussion in the weekly Module. Feedback to such projects will be given in writing, in the same discussion stream.

When will I be responding and communicating:

During the spring session, I will be available to assist and answer questions throughout the week. I will be more available during week days, since I have two high school age students working from home. I am likely to answer you withing a 5 hour period, and often very likely within the hour. At maximum, I will try my best to answer within 24 hours, but will be certain to respond withing 48 hours max. Please know that I am here for you, and that we can adapt and communicate as necessary. One-on-one meetings can be extremely useful during the online experience.

It would be best if you email questions to mschwart@barnard.edu. It will streamline my responses.

Attendance

You are encouraged to work in the studio and to take advantage of the shared learning environment to discuss your work with your peers. That environment is now on Canvas, but it can be made to feel like a studio environment. In addition, a social media group on Instagram or other site will serve as a communal space during hours outside of class time.

Attendance is mandatory at all scheduled classes and reviews. *Studio is held Monday and Wednesday beginning promptly at 10:00 AM.* Any student joining after 10:20 AM will be considered late and anyone that joins after 10:00 AM will be marked absent. Absences due to acute illness, a personal crisis (e.g. a death in the family), religious observance, or for other reasons of comparable gravity may be excused. In all such cases, students must promptly email their instructor to communicate the reason for their absence and to arrange an opportunity to review any important information they may have missed.

Students who know they will miss one or more scheduled classes due to a religious holiday should meet with their instructor during the first week of classes to discuss their anticipated absences. During this time of crisis and difficulty, if something urgent comes up and you need to miss one class, you may watch the class recording. The links will be posted on Canvas.

Unexcused absences, late arrivals, or early departures from class will reduce your course grade. Three non-consecutive absences will result in a grade reduction by one-third (1/3) of one letter grade (e.g., A- to B+). Three consecutive absences or four non-consecutive absences will adversely affect your final grade."

Grading

Each project will be graded with a letter grade. Work will be evaluated by the following criteria:

- 1. Depth of investigation and critical thinking skills
- 2. Understanding of abstract architectural ideas
- 3. Iterative design process
- 4. Ability to articulate ideas verbally
- 5. Ability to express concepts via well crafted tectonic compositions
- 6. Precision of drawings using a range of graphic conventions
- 7. Concept and precision involved in media, including video, models and digital forms
- 8. Participation during group meetings, design crits and timeliness of assignment completion

Project Grading Breakdown

Project #1: 25% Project #2: 25% Project #3: 25%

In class work / participation / final compilation: 25%

You will receive a written evaluation after the Midterm Review and one after the Final Review. Students are required to present their work in all reviews/critiques. Failure to do so will reduce the grade of the exercise by a minimum of one letter grade (e.g. B to C). Work not presented at the designated time will not be reviewed at a later date. Project grades will be based on the work you present at your reviews. Required work that was not completed at the Final Review must be completed in time for grading. Additional work completed after the Final Review and before grading will not be considered at the grading session, unless stated by the Studio Critics.

Studio Work Practices

- Please remain on mute unless you are presenting to class, or if we decide to unmute as a group.
- Remember that sessions are recorded. Be careful before and after class, as the recording is contiguous
- If you do miss class, and need to watch the video, please skip the pre-class banter, and the post class personal meetings. Please respect any moment that you think may be private.
- I prefer to allow you to join class, rather than to be a gatekeeper. This means that the recording will begin when you join.
- Design studios can provoke emotional reactions. We can sometimes become hurt or angry. These are acceptable reactions, but the Zoom environment is not the best place to air these feelings. Instead ask me to have a breakout session, or to meet with you some time after class. Sit with the feelings for a few minutes. None of our comments are meant to be hurtful or disparaging, though it can sometimes feel that way.

Room Rules and Security

Note that all access to campus is governed by current campus health protocols, and these protocols may be revised by the College and University at any time.

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We are planning to implement new protocols for access to the studio in 404 Diana and the Digital Architecture Lab (DAL) through online signups and onsite swipe access through your school ID. We hope to be able to open these spaces to you in some limited capacity beginning January 25th. More information for this process will be communicated through the Architecture Department and by your faculty.

Once access to these spaces is allowed, it is crucial that our standard safety procedures are followed, including that the doors to these spaces remain closed and locked at all times for your personal safety and your belongings' security. Please do not prop open the door and do not leave any valuables unattended at your desk.

The studio and the DAL are open to students in approved courses; please respect other critics and students that are using the space. Barnard and Columbia Public Safety officers do periodically check the studio but security is a responsibility that we all share; please help us maintain a safe and productive environment. Additional instructions and rules for using the studio and DAL will be reviewed with you during the first few weeks of classes.

If your personal belongings are stolen (or go missing) please notify your instructor and Barnard Public Safety (for room 404 Diana) or Columbia Public Safety (for 116 Lewisohn).

Here is a sample of some general studio rules:

- You must provide your own lock for the locker.
- The studio must remain locked at all times.
- Use the spray hood in the model building room for spray paint or fixative.
- · Use headphones for listening to music.
- You are responsible for keeping your desk and your storage area clean and organized. If you are using an empty desk adjacent to your assigned seat, it is also your responsibility to keep this area free of debris.
- 100% of the work surface of your desk space should be covered with 3-ply chipboard or vinyl board cover. Do not cut, carve, glue or otherwise destroy the plywood desktop.
- Please help us recycle and reuse extra materials by donating anything you don't need to our recycling locations in the studios.

Studio Materials and Equipment

During Covid, we will do everything possible to work around any material issues. The items on this list will continue to be useful throughout your careers as designers, and should be considered investments in quality tools. However, they are precision instruments and some of them are expensive. If you are uncomfortable purchasing some of these items for yourself please check with the Department Assistant about borrowing used equipment.

- Sketchbook (minimum size 8"x10")
- architects' scale (6 sided) (or download this free scale:

https://www.archtoolbox.com/representation/scale/free-downloadable-architects-scale.html)

- 12" roll of white tracing paper (or you can use white printer paper
- ead pointer, lead holder, leads (h) or you can even use a number 2 Mongol style pencil
- x-Acto knive or Olfa or similar utility knife with breakaway blades (and replacement blades)
- box cutter (and one or two replacement blades you may use x-Acto but carefully)

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- 24" metal T square ruler for drawing and cutting
- self healing cutting mat (or use a piece of thick chipboard to cut on)
- model making materials (as needed throughout the term, including corrugated cardboard (found is fine)
- Elmer's glue
- · Glue gun and glue sticks

Supply Purchasing

Blick Art Materials

https://www.dickblick.com/

Canal Plastics Center

https://www.canalplastic.com/

Amazon

https://www.amazon.com/

Utrecht

https://www.utrechtart.com/

POLICIES AND STATEMENTS

Honor Code:

The Barnard Honor Code applies to all students in this class regardless of academic affiliation. Approved by the student body in 1912 and updated in 2016, the Code states: We, the students of Barnard College, resolve to uphold the honor of the College by engaging with integrity in all of our academic pursuits. We affirm that academic integrity is the honorable creation and presentation of our own work. We acknowledge that it is our responsibility to seek clarification of proper forms of collaboration and use of academic resources in all assignments or exams. We consider academic integrity to include the proper use and care for all print, electronic, or other academic resources. We will respect the rights of others to engage in pursuit of learning in order to uphold our commitment to honor. We pledge to do all that is in our power to create a spirit of honesty and honor for its own sake.

The Columbia College Honor Code and the Columbia College Faculty Statement on Academic Integrity can be viewed here:

https://www.college.columbia.edu/honorcode

https://www.college.columbia.edu/faculty/resourcesforinstructors/academicintegrity/statement

The Barnard Honor Code includes relevant language for the proper use of electronic class material:

We consider academic integrity to include the proper use and care for all print, electronic, or other academic resources.

To be clear, this means that any recorded class content — from lectures, labs, seminars, office hours, and discussion groups — is the intellectual property of your professor and your fellow students, and should not be distributed or shared outside of class

Academic Accommodations Statement:

"If you are a student with a documented disability and require academic accommodations in this course, you must register with the Office of Disability Services (ODS) for assistance. Students requesting accommodations will need to first meet with an ODS staff member. Once registered, students are required to request accommodation letters each semester to notify faculty. Accommodations are not retroactive, so it is best to contact ODS early each semester to access your accommodations. If you are registered with ODS, please see me to schedule a meeting outside of class in which you can bring me your faculty notification letter and we can discuss your accommodations for this course. Students are not eligible to use their accommodations in this course until they have met with me. ODS is located in Milbank Hall, Room 009/008. Columbia ODS is located in Wien Hall. Suite 108A."

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Center for Accessibility Resources & Disability Services (CARDS) Statement:

Please include the following statement verbatim on your syllabus:

If you believe you may encounter barriers to the academic environment due to a documented disability or emerging health challenges, please feel free to contact me and/or the Center for Accessibility Resources & Disability Services (CARDS). Any student with approved academic accommodations is encouraged to contact me during office hours or via email. If you have questions regarding registering a disability or receiving accommodations for the semester, please contact CARDS at (212) 854-4634, cards@barnard.edu, or learn more at barnard.edu/disabilityservices. CARDS is located in 101 Altschul Hall.

Affordable Access to Course Texts Statement:

Please include the following statement verbatim on your syllabus:

All students deserve to be able to study and make use of course texts and materials regardless of cost. Barnard librarians have partnered with students, faculty, and staff to find ways to increase student access to textbooks. By the first day of advance registration for each term, faculty will have provided information about required texts for each course on CourseWorks (including ISBN or author, title, publisher, copyright date, and price), which can be viewed by students. A number of cost-free or low-cost methods for accessing some types of courses texts are detailed on the Barnard Library Textbook Affordability guide (library.barnard.edu/textbook-affordability). Undergraduate students who identify as first-generation and/or low-income

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students may check out items from the FLIP lending libraries in the Barnard Library (library.barnard.edu/flip) and in

Butler Library for an entire semester. Students may also consult with their professors, the Dean of Studies, and the Financial Aid Office about additional affordable alternatives for having access to course texts. Visit the guide and talk to your professors and your librarian for more details.

Wellness Statement:

Please include the following statement verbatim on your syllabus:

"It is important for undergraduates to recognize and identify the different pressures, burdens, and stressors you may be facing, whether personal, emotional, physical, financial, mental, or academic. We as a community urge you to make yourself—your own health, sanity, and wellness—your priority throughout this term and your career here. Sleep, exercise, and eating well can all be a part of a healthy regimen to cope with stress. Resources exist to support you in several sectors of your life, and we encourage you to make use of them. Should you have any questions about navigating these resources, please visit these sites:

- Barnard Students: https://barnard.edu/wellwoman/about
- Columbia Students: http://www.college.columbia.edu/resources (Click on Health-Wellness)
- Columbia GS Students: https://gs.columbia.edu/health-and-wellness
- Columbia SEAS Students: http://gradengineering.columbia.edu/campus-resources

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