The Science and Technology Entry Program

SUMMER APPLICATION DEADLINE:
Friday, June 7, 2019
Barnard STEP Overview

The Barnard College Science and Technology Entry Program (STEP) offers an exciting and rigorous academic enrichment program designed to assist 7th – 12th grade students acquire the skills and knowledge necessary to pursue post-secondary education leading to careers in scientific, technical or health-related fields, or the licensed professions. STEP seeks to increase the representation of historically underrepresented or economically disadvantaged students in those fields.

Program Eligibility Requirements

To be eligible for Barnard STEP, a student must:

- Be a New York State resident in 7th Grade – 12th Grade
- Minimum grade point average (GPA) of an 80% (B) or above. If you do not meet the GPA requirement but are interested in the program, please provide an explanation of your grades in your essay.
- Have an interest in scientific, technical, health, or licensed profession (see list of STEM careers)
- Identify as African American/Black, Latino/Hispanic, Native American, or Alaskan American OR
- Meet the State of New York’s established income eligibility requirement for STEP. The student’s household income must be equal to or less than the income level indicated below. Income tax forms as proof are required.

<table>
<thead>
<tr>
<th>Number of Household Dependents</th>
<th>2019 – 2020 Eligible Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$22,459</td>
</tr>
<tr>
<td>2</td>
<td>$30,451</td>
</tr>
<tr>
<td>3</td>
<td>$38,443</td>
</tr>
<tr>
<td>4</td>
<td>$46,435</td>
</tr>
<tr>
<td>5</td>
<td>$54,427</td>
</tr>
<tr>
<td>6</td>
<td>$62,419</td>
</tr>
<tr>
<td>7</td>
<td>$70,411</td>
</tr>
<tr>
<td>8</td>
<td>$78,403</td>
</tr>
</tbody>
</table>

Add $7,992 for each family member in excess of 8

How to Submit Your Application

If you have any questions, please contact the STEP Office at (212) 854-1314

Email: STEP@Barnard.edu

Mail/Drop off to: Please see below

Attn: Admissions Committee
Science and Technology Entry Program
Lefrak 1st Floor, Barnard Hall
Barnard College
3009 Broadway
New York, NY 10027
STEP Summer Program

Barnard College is a great place to be in the summer! You can take advantage of the many summer experiences Barnard STEP has to offer. From academic courses in math and science and lunch in the dining halls, the College is yours to explore! In addition, we have plenty of on-campus and off-campus events for you to enjoy. Each Friday, in the 4-week program, students will be visiting different educational organizations. Our summer 2019 program will run weekdays Monday - Friday between 10:00am – 4:00pm from July 8th, 2019 – August 2nd, 2019.

### Daily Schedule

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:00am-10:20am</td>
<td>Welcome/Announcement</td>
</tr>
<tr>
<td>10:20am-11:20am</td>
<td>Class #1</td>
</tr>
<tr>
<td>11:20am-11:25pm</td>
<td>Passing</td>
</tr>
<tr>
<td>11:25pm-12:25pm</td>
<td>Class #2</td>
</tr>
<tr>
<td>12:25pm-1:15pm</td>
<td>Lunch</td>
</tr>
<tr>
<td>1:15pm-1:30pm</td>
<td>Energize/Icebreaker</td>
</tr>
<tr>
<td>1:30pm-2:30pm</td>
<td>Class #3</td>
</tr>
<tr>
<td>2:30pm-2:45pm</td>
<td>Snack/Passing</td>
</tr>
<tr>
<td>2:45pm-3:45pm</td>
<td>Class #4</td>
</tr>
<tr>
<td>3:45pm-4:00pm</td>
<td>Wrap Up/Dismissal</td>
</tr>
</tbody>
</table>

### Course Descriptions

The courses offered this summer are:

- **CSI STEP**: This course will introduce students to the various methodologies and applications used in a forensic context. Topics discussed will include organic and inorganic chemical analyses of physical evidence, principles of serology and DNA analysis, fingerprint analysis and document examination. *(Middle school students only)*

- **Science in Movies**: Focusing on the scientific principles that are manipulated in cinematic universes, students will analyze designated films and discuss the science underlying the world in the movie like nuclear technology in Iron Man’s suit, or wormholes in Thor’s Bifrost. *(Both Middle and High School Students)*

- **Food Chemistry and Nutrition Science**: Food Chemistry and Nutrition Science is a hands-on, experiential-based, and multidisciplinary course. It introduces students to the nutrients that are essential for good health, growth and development. In addition, it introduces students to the carbon footprint of their diet and its effect on the environment. *(Both Middle and High School Students)*

- **Geometry of the Arts**: Students will use geometric concepts and explore how they are applied to real life situations. Using similarity, scaling, and factoring students will create ideal apartments/dorms rooms, tiled picture patterns through tessellation and much more. *(Both Middle and High School Students)*

- **Trauma 101**: This course is designed to provide hands-on exposure to medical applications used to treat trauma sustained to the human body. Students will be introduced to a variety of different presentations of trauma and investigate how medical clinicians treat each case. *(High School Students only)*

### Commitment Requirements

Accepted students are required to attend the summer program every day. **No more than 2 tardies and 1 absence will be allowed**. We understand things happen, emergencies occur, and an absence may be unavoidable due to sickness, family issues, or unforeseen circumstances. All STEP participants must let us know on this application if any days will be missed. Excessive tardies and/or absences will result in dismissal of the program.
Student Application Checklist

Please make sure to provide:

- Completed application with dates and signatures
- Income Documentation (Family’s current federal income tax form 1040, 1040A, or 1040EZ) see financial information on Page 5
- Student Academic Profile (School official/counselor must complete)
- Transcript (Most recent official or unofficial with standardized test scores if available)
- Letter of Recommendation (Optional)
- Student Essay

The Admissions Committee does not review incomplete Applications. Students cannot be accepted into the summer program until all requested/required documents and information has been received.
Student Information

Full name: ____________________________
Last                      First                      MI
Mailing address: ________________
Street Address            City                      State                      Zip Code
Student’s Phone Number: ____________________________
Student’s Email address: ____________________________ Other email: ____________________________
Student ID#: ____________________________
Date of Birth: __________/________/_________ Age: _______ Gender: ☐ Male ☐ Female

Source of referral (how did you learn about Barnard STEP): ____________________________

New York State Resident: ☐ Yes ☐ No If yes, since when? _______

Ethnicity: ☐ African American/Black ☐ Alaskan Native      ☐ Asian/Pacific Islander*
☐ Latino/Hispanic         ☐ Native American       ☐ Caucasian*     ☐ Other: ____________________________

*Financial Information: If the student is not African American/Black, Latino/Hispanic, Native American, or Alaskan Native, please review the household income eligibility requirements on the previous page and provide a copy of the most recent income tax returns (federal income tax form 1040, 1040A, or 1040EZ)

Number of Household Members: ___________ Household Annual Income: ____________________________

Does the student have any allergies? ☐ Yes ☐ No

If yes, please describe? ________________________________________________________________
Parent/Guardian Information:

Parent/Guardian 1:
Full name: ___________________________________________ Relation to student: __________
Last            First            MI

Cell phone number: __________________________ Work phone number: __________________________

Email address: ___________________________________________________

Parent/Guardian 2:
Full name: ___________________________________________ Relation to student: __________
Last            First            MI

Cell phone number: __________________________ Work phone number: __________________________

Email address: ___________________________________________________

School Information:

Full name of school: __________________________

School Address: __________________________________________________________
Street Address City State Zip Code

Grade (2019-2020): 7th  8th  9th  10th  11th  12th

Counselor’s name: __________________________

Grade point average (GPA): __________________________

Do you have an IEP or 504? (Individual Education Program): ☐ Yes ☐ No

If yes, what for: __________________________

Do you receive or are eligible for free or reduced lunch: ☐ Yes ☐ No

Do you currently have or anticipate having other summer commitments during the month of July? (Work, travel, special events, programs, sports, etc.) ☐ Yes ☐ No

If yes, please describe what and when. __________________________________________________________
STUDENT AGREEMENT

I, ____________________________, agree to participate in the Science and Technology Entry Program (STEP) at Barnard College. As a participant, I will attend the activities as scheduled, I will arrive on time, and I will put forth my best effort as a participant. I understand that the overall goal of the program is to assist me in my pursuit of academic excellence. I expect STEP to provide me with support to prepare me for admission to a college/university, and a career in a math, science, technology, or health-related field and/or the licensed-professions. I understand that my signature on this document constitutes an agreement between parent/guardian, my Barnard College STEP, and me.

______________________________________________________________________________

Student Signature

Date

PARENT/GUARDIAN AGREEMENT

I, ____________________________, give permission for my son/daughter ____________________________ to participate in the Science and Technology Entry Program (STEP) at Barnard College. As a parent, I will attend activities as scheduled. I also authorize the administrative staff of Barnard College STEP access to my child’s school records. I understand that this information will be kept confidential. I understand that the overall goal of the program is to assist my child in the pursuit of academic excellence. I expect STEP to provide my child with support to prepare him/her for admission to a college/university, and a career in a math, science, technology, or health-related field and/or the licensed-professions. I understand that my signature on this document constitutes an agreement between child, my Barnard College STEP, and me.

______________________________________________________________________________

Parent Signature

Date
Student Full Name: __________________________________________

Last __________  First __________  MI __________

MEDIA AND PICTURES AGREEMENT

Please be aware that photographers and media representatives may be present during program activities and special events, both on and off campus. In some cases, they may photograph, interview, or video students who participate in these activities and events. The resulting images may be used for purposes of the program to promote STEP in printed and electronic media, such as brochures, flyers, newsletters, and websites. I understand my child may be photographed, interviewed, or video recorded during program activities and give my permission for my child to be a participant for the purposes of STEP.

________________________________________________________________________

Parent Signature

________________________________________________________________________

Date

Special Event/Field Trip Consent Form

I acknowledge that during his or her enrollment in “Barnard’s STEP Summer Program,” the above named student will be involved in activities at both on-and off-campus locations including, but not limited to various sports activities, trips, outdoor excursions, and outreach programs. I am aware of the risks associated with such activities and in transportation to and from these activities. In consideration of the above named student being allowed to participate in such activities, I agree to hold Barnard College harmless against any liability arising as a result of his or her participation in these activities.

If illness or injury should occur during his or her participation in this activity, I authorize medical treatment at an appropriate medical facility. I understand Barnard College will make a reasonable attempt to contact me prior to such medical treatment using the information I have provided on the Emergency Information Form.

________________________________________________________________________

Parent Signature

________________________________________________________________________

Date

________________________________________________________________________

Parent Name (Please Print)
MEDICAL TREATMENT AUTHORIZATION FORM

In consideration of my child being permitted to participate in the Barnard's College Science and Technology Entry Program (STEP), I hereby authorize emergency medical treatment for my child, __________________________, (Student’s name)

if illness or injury should occur during my child’s participation. I understand that Barnard College will make a reasonable attempt to contact me prior to such medical treatment. In addition, I agree to hold harmless and indemnify Barnard College, its officers and employees, against any and all claims and damages, which relate in any manner to medical treatment of my child. I also understand that I am responsible for any and all costs incurred in the providing of this medical treatment.

__________________________________________  __________________________
Student Signature                              Date

__________________________________________  __________________________
Parent Signature                               Date

Please indicate primary emergency contact number during programming:

Contact person: ____________________________ Relationship: ____________________________

Cell phone number: __________________________ Other phone number: ____________________________
Student Academic Profile

(To be completed by School Official/School Counselor)

Student’s full name: ____________________________ Current grade: __________

Name of school: ________________________________________________

Class: ____________________ Advisor/Counselor: ________________

Overall GPA: __________ Overall math average: __________ Overall science average: __________

School Profile

Grade levels served: ____________________ School senate district: ____________________

Percentage of minority composition of student body: ____________________

Is the student eligible for free/reduced price lunch through the USDA Income Eligibility Guidelines: ☐ Yes ☐ No

Please provide the following documents:

☐ Transcript: Please attach a copy of official or unofficial transcript with all available standardized test scores

☐ Course Schedule: Please attach a copy of student’s current term courses

☐ Recommendation (Optional): On official letterhead, please provide us with a brief recommendation of this student. Please discuss his/her academic motivation, leadership skills and interpersonal skills.

School office printed name: ____________________________ Title: ____________________________

School official signature: ____________________________ Date: ____________________________

Please email to step@barnard.edu or mail/drop off to:

Attn: Admissions Committee
Science and Technology Entry Program
Lefrak 1st Floor, Barnard Hall
Barnard College
3009 Broadway
New York, NY 10027
Essay Questions

Please type a short essay (no more than one typed, double spaced page) in response to the question that follow. Responses should be clear, concise and thoughtful.

1. Tell us about yourself. What are your interests, hobbies, and pass times?

2. What are your expectations of this program, and what do you hope to gain from it. How do you envision it helping you pursue your educational and professional goals?