

# STEM Research Academy

## Spring / Summer 2017 Program

The **Baruch College Now STEM Research Academy** is a **two semester program** designed to provide students with an opportunity to build essential literacy and numeracy skills by engaging in 'authentic inquiry' activities.

### **Spring 2017: Introduction to Research**

**(non college-credit course)**

*February to May / Mon & Wed / 4:10pm-5:50pm*

### **Summer 2017: Paid Research Internship**

A six week structured laboratory internship where students will be matched with a Baruch College faculty member and lab team. Students must complete and pass the spring course to participate.

*July to August / Mon - Thurs / approx. 9:30am – 4:00pm*



### **Eligibility:**

In order to be considered a student must meet all of the following requirements:

- Be a NYC Public H.S. junior
- Overall H.S. average of 80+
- 75+ English Language Arts (ELA) Regents OR 480+ PSAT/SAT Verbal Section
- 80+ on any Math Regents Exam AND 75+ on the Living Environment Regents Exam

Students taking any of the above **Regents Exams in January 2017** are encouraged to apply and will be considered pending their Regents Exams results.

**\*\*Students in our partner high schools have priority\*\***

### **Deadline:**

**December 1st, 2016**

### **Application:**

**[www.baruch.cuny.edu/collegenow/STEMResearchAcademy.htm](http://www.baruch.cuny.edu/collegenow/STEMResearchAcademy.htm)**



@BaruchCNow

# College Now STEM Research Academy @ Baruch College



## **Introduction**

The College Now STEM Research Academy @ Baruch College is designed to provide high school students an opportunity to develop the essential skills to be strong scientific thinkers by engaging in authentic science inquiry and research activities. Selected students will be enrolled in a spring research course and a summer research internship.

The program is **FREE** to students. College Now covers the cost of tuition, books and supplies. Students who participate will receive a Baruch College ID card that will give them access to many resources at the college.

## **Program Description and Schedule**

### **SPRING 2017 (February to May / Mon & Wed / 4:10pm-5:50pm) –**

**Introduction to Research / DNA Detectives Course:** Modern technology has enabled the discovery of the nature of heredity, powerfully demonstrating how all organisms are related no matter how different in appearance. In fact, DNA is so well understood and so widely studied that it forms the basis for whole fields of science and medicine. This course focuses on one application of “the genomic revolution”, the use of DNA in solving forensic mysteries and its role to conserve biodiversity and enforce conservation laws. For example, illicit wildlife goods can be “fingerprinted” using modern DNA sequencing techniques, leveraging the nature of heredity in ways only recently made possible. The objective of this course is to learn about the nature of DNA and genetic variation, deepen students’ appreciation of biodiversity by providing opportunities for the students to develop, and practice sterile lab techniques, good record keeping habits, and proper measurement skills. Students may be eligible to receive one high school elective credit in science for successful completion (subject to approval by your high school).

**SUMMER 2017 (July to August) -** Students who successfully complete the DNA Detectives course for HS credit will have the opportunity to apply for a more advanced STEM project.

**Research Internship** – a six week structured laboratory internship program where they will be matched with a Baruch College faculty member and lab team, based on the student’s area of interest.

- Students will be required to work in a research lab four days a week (from approximately 9:30 am – 4:00 pm)
- Participate in a once-weekly college seminar and discussion group
- Complete a short project and presentation.
- Students who successfully complete the research internship and project will receive a **monetary stipend of \$750** at the end of the program.

## **Eligibility**

In order to be eligible for the College Now STEM Research Academy @ Baruch College, you must meet the following requirements:

- Be a New York City Public High School **junior during spring 2017 semester**
- Have an **overall HS average of 80+**
- Received a **75 or above on the English Language Arts (ELA) Regents or 480+ on SAT Verbal/Critical Reading or 50 on PSAT Verbal/Critical Reading**
- Received an **80+ on any Math Regents Exam AND 75+ on the Living Environment Regents Exam**
- **Note:** Students who are taking any of the above **Regents Exams in January 2016** are encouraged to apply and will be accepted pending their Regents Exams results.

## **Application Requirements:**

1. Fill out the attached **application**
2. Obtain the required parental and school staff **signatures**
3. **Complete a one-page, typed essay** introducing yourself, discussing your areas of interest in science, and explaining what you hope to gain from STEM Academy participation and what makes you a great candidate for the program
4. Attach your most recent **high school transcript**
5. By **Thursday, December 1st** submit by mail, email or fax to the address below

### **Address:**

Baruch College Now  
55 Lexington Ave. VC 5-237  
New York, NY 10010

### **Fax:**

646-312-4296

### **Email:**

[collegenow@baruch.cuny.edu](mailto:collegenow@baruch.cuny.edu)

# COLLEGE NOW STEM RESEARCH ACADEMY@ BARUCH COLLEGE



PLEASE **PRINT** CLEARLY:

LAST NAME		FIRST NAME		MI
OSIS NUMBER	SOCIAL SECURITY NUMBER	SEX (Circle) M or F	DATE OF BIRTH (mm/dd/yy)	
ADDRESS				APT. #
CITY		STATE	ZIP	
HOME TELEPHONE #		CELL #		
EMAIL ( <i>applicants will receive an email confirming receipt of application – EMAIL ADDRESS MUST BE LEGIBLE</i> )				
HIGH SCHOOL		HS COUNSELOR		
OVERALL HS AVERAGE	ELA REGENTS	MATH REGENTS	MATH AVERAGE	
LIVING ENVIRONMENT REGENTS		P/SAT VERBAL/CRITICAL READING		

\_\_\_\_\_  
Student signature

\_\_\_\_\_  
Date

**I have read the information and this application completely, and I understand that if I am accepted into the Baruch College Now STEM Research Academy, I am expected to complete the high school credit course in spring 2016 and participate in the Baruch College Now STEM research internship in summer 2016.**

\_\_\_\_\_  
Parent/Guardian signature

\_\_\_\_\_  
Date

**I have read the information and this application completely, and I recognize that if my child is accepted into the Baruch College Now STEM Research Academy, s/he is expected to complete the high school credit course in spring 2016 and participate in the Baruch College Now STEM research internship or summer science program in summer 2016.**

\_\_\_\_\_  
Guidance counselor signature

\_\_\_\_\_  
Date

**I have read the information on this application completely. I recommend this student to participate in the STEM Academy and agree to follow up with the student as necessary to support his/her success in the program.**