

# SCIENCE FOR FORENSICS

Associate in Science Degree | Joint Degree Program  
Department of Chemistry, Earth Sciences, and Environmental Sciences

## Program Description

The Science for Forensics (SFF) Associate in Science (AS) degree program is part of a joint program between Bronx Community College and John Jay College of Criminal Justice for students with a strong interest in science, law and public service. BCC graduates of the Science for Forensics AS program will continue their studies at John Jay College where they will earn a Bachelor of Science in Forensic Science. To enter the Forensic Science program at John Jay, BCC graduates must have a 2.5 or better GPA in foundation coursework. Creation of this 2 + 2 partnership in forensic science opens up a new opportunity for New York City area students to receive an excellent education leading to exciting career paths. The SFF program provides future forensic scientists with the necessary scientific foundation and technical training in general chemistry, organic chemistry, physics, biology, mathematics, data collection and analysis, oral and written communication skills, teamwork and hands-on experience for successful, productive and rewarding careers in local, regional and national forensic science and chemistry based laboratories, major research centers, university facilities, government testing labs and public utilities.

## Learning Outcomes

Upon successful completion of the Science for Forensics program requirements, students will be able to:

1. Demonstrate chemical knowledge to identify, analyze and evaluate chemical components of an unknown specimen.
2. Compare scientific data utilizing learned critical thinking skills and strong science fundamentals in biology, chemistry and physics.
3. Demonstrate the necessary knowledge, laboratory skills and interpersonal skills required of entry-level Forensic Science technicians and general science technicians in related fields in the public and private sectors of commercial and governmental research, institutional, and commercial enterprises.

## SCIENCE FOR FORENSICS CURRICULUM (PATHWAYS)

60 Credits required for AS Degree

Curriculum Coordinator: Dr. John Molina

### Required Core

- A. English Composition (6 Credits)
- B. Mathematical and Quantitative Reasoning<sup>1</sup>
  - MTH 31 Calculus and Analytical Geometry (4 Credits)

- MTH 28<sup>1,2</sup> College Algebra and Elementary Trigonometry *OR* MTH 28.5 College Algebra and Elementary Trigonometry (Corequisite) (3 Credits)

### C. Life and Physical Sciences<sup>1</sup>

- CHM 11 General College Chemistry I (4 Credits)

### SUBTOTAL 13

### Flexible Core

Select two courses from any of the following areas (Flexible Core A-D)<sup>3</sup>, with no more than one course in any area and no more than one course in any discipline or interdisciplinary field (6 Credits):

- A. World Cultures and Global Issues (0-3 Credits)
- B. U.S. Experience in its Diversity (0-3 Credits)
- C. Creative Expression (0-3 Credits)
- D. Individual and Society (0-3 Credits)

The following courses are required:

### E. Scientific World<sup>1</sup>

- CHM 12 General College Chemistry II (4 Credits)
- PHY 31 Physics I (4 Credits)

### SUBTOTAL 14

### Major Requirements

- BIO 11 General Biology I (4 Credits)
- BIO 12 General Biology II (4 Credits)
- CHM 31 Organic Chemistry I (5 Credits)
- CHM 32 Organic Chemistry II (5 Credits)
- CHM 33 Quantitative Analysis (4 Credits)
- MTH 30<sup>2</sup> Pre-Calculus Mathematics (4 Credits)
- MTH 31 Analytic Geometry and Calculus I (4 Credits)
- Restricted Electives<sup>2</sup> (3-10 credits)

### SUBTOTAL 33

- <sup>1</sup> This program has received a waiver to require students to complete specific STEM/STEM Variant courses in Required Area B, Required Area C and Flexible Area E.
- <sup>2</sup> Students who place out of MTH 28 shall complete MTH 32 Analytic Geometry and Calculus II in Restricted Electives. Students who place out of MTH 30 as well shall complete PHY 32 Physics II in Restricted Electives. Students who place out of neither may take a 3-credit flex core course. Note that both MTH 32 and PHY 32 are required in the John Jay Science for Forensics degree.
- <sup>3</sup> To fulfill the two-year degree requirements of this Joint Degree with John Jay College, this program has received an additional waiver to allow students to complete a portion of the Common Core requirements prior to transfer and complete the remaining requirements upon transfer.