

## CUNY Common Core Course Submission Form

Instructions: All courses submitted for the Common Core must be liberal arts courses. Courses may be submitted for only one area of the Common Core. All courses must be 3 credits/3 hours unless the college is seeking a waiver for a 4-credit Math or Science course (after having secured approval for sufficient 3-credit/3-hour Math and Science courses). All standard governance procedures for course approval remain in place.

<b>College</b>	Hunter College
<b>Course Number</b>	BIOL 100
<b>Course Title</b>	Principles of Biology I
<b>Department(s)</b>	Biological Sciences
<b>Discipline</b>	Biology
<b>Subject Area</b>	Biology
<b>Credits</b>	4.5
<b>Contact Hours</b>	7
<b>Pre-requisites</b>	Math 125
<b>Mode of Instruction</b>	Select only one:  <input checked="" type="checkbox"/> In-person <input type="checkbox"/> Hybrid <input type="checkbox"/> Fully on-line
<b>Course Attribute</b>	Select from the following:  <input type="checkbox"/> Freshman Seminar <input type="checkbox"/> Honors College <input type="checkbox"/> Quantitative Reasoning <input type="checkbox"/> Writing Intensive <input type="checkbox"/> Other (specify): _____
<b>Catalogue Description</b>	The chemical basis of life; basic structure and function of pro- and eucaryotic cells; bioenergetics; Mendelian and molecular genetics; development and mechanisms of control of gene expression at all levels; population genetics and evolution.
<b>Syllabus</b>	Syllabus must be included with submission, 5 pages max
<p><b>Waivers for 4-credit Math and Science Courses</b></p> <p>All Common Core courses must be 3 credits and 3 hours.</p> <p>Waivers for 4-credit courses will only be accepted in the required areas of Mathematical and Quantitative Reasoning and Life and Physical Sciences. Such waivers will only be approved after a sufficient number of 3-credit/3-hour math and science courses are approved for these areas.</p>	
<b>If you would like to request a waiver please check here:</b>	<input checked="" type="checkbox"/> Waiver requested
<b>If waiver requested:</b> Please provide a brief explanation for why the course will be 4 credits.	<i>The course contains a 3 hour lab along with 3 hours of lecture, and 1 hour of discussion</i>
<b>If waiver requested:</b> Please indicate whether this course will satisfy a major requirement, and if so, which major requirement(s) the course will fulfill.	This satisfies the Biological Sciences major

Indicate the status of this course being nominated:

current course    revision of current course    a new course being proposed

CUNY COMMON CORE Location

Please check below the area of the Common Core for which the course is being submitted. (Select only one.)

Required

- English Composition
- Mathematical and Quantitative Reasoning
- Life and Physical Sciences

Flexible

- World Cultures and Global Issues
- US Experience in its Diversity
- Creative Expression
- Individual and Society
- Scientific World

Learning Outcomes

In the left column explain the assignments and course attributes that will address the learning outcomes in the right column.

I. Required Core (12 credits)

A. English Composition: Six credits

A course in this area must meet all the learning outcomes in the right column. A student will:

- Read and listen critically and analytically, including identifying an argument's major assumptions and assertions and evaluating its supporting evidence.
- Write clearly and coherently in varied, academic formats (such as formal essays, research papers, and reports) using standard English and appropriate technology to critique and improve one's own and others' texts.
- Demonstrate research skills using appropriate technology, including gathering, evaluating, and synthesizing primary and secondary sources.
- Support a thesis with well-reasoned arguments, and communicate persuasively across a variety of contexts, purposes, audiences, and media.
- Formulate original ideas and relate them to the ideas of others by employing the conventions of ethical attribution and citation.

B. Mathematical and Quantitative Reasoning: Three credits

A course in this area must meet all the learning outcomes in the right column. A student will:

- Interpret and draw appropriate inferences from quantitative representations, such as formulas, graphs, or tables.
- Use algebraic, numerical, graphical, or statistical methods to draw accurate conclusions and solve mathematical problems.
- Represent quantitative problems expressed in natural language in a suitable mathematical format.
- Effectively communicate quantitative analysis or solutions to mathematical problems in written or oral form.
- Evaluate solutions to problems for reasonableness using a variety of means, including informed estimation.
- Apply mathematical methods to problems in other fields of study.

**C. Life and Physical Sciences: Three credits**

A course in this area must meet all the learning outcomes in the right column. A student will:

Student learn Mendalian genetics and perform genetic crosses	<ul style="list-style-type: none"> <li>Identify and apply the fundamental concepts and methods of a life or physical science.</li> </ul>
Students perform enzyme assays to study enzyme kinetics and make predictions as to how kinetics change when inhibitors are added.	<ul style="list-style-type: none"> <li>Apply the scientific method to explore natural phenomena, including hypothesis development, observation, experimentation, measurement, data analysis, and data presentation.</li> </ul>
Students work in pairs for all laboratory exercises	<ul style="list-style-type: none"> <li>Use the tools of a scientific discipline to carry out collaborative laboratory investigations.</li> </ul>
Students present results from laboratory exercises in laboratory reports	<ul style="list-style-type: none"> <li>Gather, analyze, and interpret data and present it in an effective written laboratory or fieldwork report.</li> </ul>
Students present raw, unaltered data in their reports, and use proper citation when citing sources	<ul style="list-style-type: none"> <li>Identify and apply research ethics and unbiased assessment in gathering and reporting scientific data.</li> </ul>

**II. Flexible Core (18 credits)**

Six three-credit liberal arts and sciences courses, with at least one course from each of the following five areas and no more than two courses in any discipline or interdisciplinary field.

**A. World Cultures and Global Issues**

A Flexible Core course must meet the three learning outcomes in the right column.

	<ul style="list-style-type: none"> <li>Gather, interpret, and assess information from a variety of sources and points of view.</li> </ul>
	<ul style="list-style-type: none"> <li>Evaluate evidence and arguments critically or analytically.</li> </ul>
	<ul style="list-style-type: none"> <li>Produce well-reasoned written or oral arguments using evidence to support conclusions.</li> </ul>

A course in this area (II.A) must meet at least three of the additional learning outcomes in the right column. A student will:

	<ul style="list-style-type: none"> <li>Identify and apply the fundamental concepts and methods of a discipline or interdisciplinary field exploring world cultures or global issues, including, but not limited to, anthropology, communications, cultural studies, economics, ethnic studies, foreign languages (building upon previous language acquisition), geography, history, political science, sociology, and world literature.</li> </ul>
	<ul style="list-style-type: none"> <li>Analyze culture, globalization, or global cultural diversity, and describe an event or process from more than one point of view.</li> </ul>
	<ul style="list-style-type: none"> <li>Analyze the historical development of one or more non-U.S. societies.</li> </ul>
	<ul style="list-style-type: none"> <li>Analyze the significance of one or more major movements that have shaped the world's societies.</li> </ul>
	<ul style="list-style-type: none"> <li>Analyze and discuss the role that race, ethnicity, class, gender, language, sexual orientation, belief, or other forms of social differentiation play in world cultures or societies.</li> </ul>
	<ul style="list-style-type: none"> <li>Speak, read, and write a language other than English, and use that language to respond to cultures other than one's own.</li> </ul>

**B. U.S. Experience in its Diversity**

A Flexible Core course must meet the three learning outcomes in the right column.

- Gather, interpret, and assess information from a variety of sources and points of view.
- Evaluate evidence and arguments critically or analytically.
- Produce well-reasoned written or oral arguments using evidence to support conclusions.

A course in this area (II.B) must meet at least three of the additional learning outcomes in the right column. A student will:

- Identify and apply the fundamental concepts and methods of a discipline or interdisciplinary field exploring the U.S. experience in its diversity, including, but not limited to, anthropology, communications, cultural studies, economics, history, political science, psychology, public affairs, sociology, and U.S. literature.
- Analyze and explain one or more major themes of U.S. history from more than one informed perspective.
- Evaluate how indigenous populations, slavery, or immigration have shaped the development of the United States.
- Explain and evaluate the role of the United States in international relations.
- Identify and differentiate among the legislative, judicial, and executive branches of government and analyze their influence on the development of U.S. democracy.
- Analyze and discuss common institutions or patterns of life in contemporary U.S. society and how they influence, or are influenced by, race, ethnicity, class, gender, sexual orientation, belief, or other forms of social differentiation.

**C. Creative Expression**

A Flexible Core course must meet the three learning outcomes in the right column.

- Gather, interpret, and assess information from a variety of sources and points of view.
- Evaluate evidence and arguments critically or analytically.
- Produce well-reasoned written or oral arguments using evidence to support conclusions.

A course in this area (II.C) must meet at least three of the additional learning outcomes in the right column. A student will:

- Identify and apply the fundamental concepts and methods of a discipline or interdisciplinary field exploring creative expression, including, but not limited to, arts, communications, creative writing, media arts, music, and theater.
- Analyze how arts from diverse cultures of the past serve as a foundation for those of the present, and describe the significance of works of art in the societies that created them.
- Articulate how meaning is created in the arts or communications and how experience is interpreted and conveyed.
- Demonstrate knowledge of the skills involved in the creative process.
- Use appropriate technologies to conduct research and to communicate.

<b>D. Individual and Society</b>	
A Flexible Core course <u>must meet the three learning outcomes</u> in the right column.	
	<ul style="list-style-type: none"> <li>• Gather, interpret, and assess information from a variety of sources and points of view.</li> </ul>
	<ul style="list-style-type: none"> <li>• Evaluate evidence and arguments critically or analytically.</li> </ul>
	<ul style="list-style-type: none"> <li>• Produce well-reasoned written or oral arguments using evidence to support conclusions.</li> </ul>
A course in this area (II.D) <u>must meet at least three of the additional learning outcomes</u> in the right column. A student will:	
	<ul style="list-style-type: none"> <li>• Identify and apply the fundamental concepts and methods of a discipline or interdisciplinary field exploring the relationship between the individual and society, including, but not limited to, anthropology, communications, cultural studies, history, journalism, philosophy, political science, psychology, public affairs, religion, and sociology.</li> </ul>
	<ul style="list-style-type: none"> <li>• Examine how an individual's place in society affects experiences, values, or choices.</li> </ul>
	<ul style="list-style-type: none"> <li>• Articulate and assess ethical views and their underlying premises.</li> </ul>
	<ul style="list-style-type: none"> <li>• Articulate ethical uses of data and other information resources to respond to problems and questions.</li> </ul>
	<ul style="list-style-type: none"> <li>• Identify and engage with local, national, or global trends or ideologies, and analyze their impact on individual or collective decision-making.</li> </ul>
<b>E. Scientific World</b>	
A Flexible Core course <u>must meet the three learning outcomes</u> in the right column.	
	<ul style="list-style-type: none"> <li>• Gather, interpret, and assess information from a variety of sources and points of view.</li> </ul>
	<ul style="list-style-type: none"> <li>• Evaluate evidence and arguments critically or analytically.</li> </ul>
	<ul style="list-style-type: none"> <li>• Produce well-reasoned written or oral arguments using evidence to support conclusions.</li> </ul>
A course in this area (II.E) <u>must meet at least three of the additional learning outcomes</u> in the right column. A student will:	
	<ul style="list-style-type: none"> <li>• Identify and apply the fundamental concepts and methods of a discipline or interdisciplinary field exploring the scientific world, including, but not limited to: computer science, history of science, life and physical sciences, linguistics, logic, mathematics, psychology, statistics, and technology-related studies.</li> </ul>
	<ul style="list-style-type: none"> <li>• Demonstrate how tools of science, mathematics, technology, or formal analysis can be used to analyze problems and develop solutions.</li> </ul>
	<ul style="list-style-type: none"> <li>• Articulate and evaluate the empirical evidence supporting a scientific or formal theory.</li> </ul>
	<ul style="list-style-type: none"> <li>• Articulate and evaluate the impact of technologies and scientific discoveries on the contemporary world, such as issues of personal privacy, security, or ethical responsibilities.</li> </ul>
	<ul style="list-style-type: none"> <li>• Understand the scientific principles underlying matters of policy or public concern in which science plays a role.</li> </ul>