## CORE CURRICULUM

## Core Curriculum

The Core Curriculum forms the center of NYU Shanghai's globallyoriented liberal arts and sciences education. Through Core courses, students deepen their intellectual engagement with diverse perspectives from the past and present; they gain increased awareness of distinct disciplinary approaches to problem-posing and analysis; and they develop skills to ethically and effectively respond to global challenges.

## Core Curriculum Components

| Core Component | Required Courses |
| :---: | :---: |
| Social and Cultural Foundations | Global Perspectives on Society (4 credits) |
|  | Perspectives on the Humanities (4 credits) (also fulfills Writing) |
|  | Interdisciplinary Perspectives on China (2 courses/8 credits total) |
| Writing | Writing as Inquiry (4 credits) |
|  | Perspectives on the Humanities (4 credits) (also fulfills Social and Cultural Foundations) |
| Language | Chinese (through Intermediate II or equivalent competency) |
|  | or |
|  | English for Academic Purposes (8 credits in a two-semester course sequence or equivalent competency) |
| Mathematics | Mathematics course (4 credits) |
| Science | Experimental Discovery in the Natural World course (4 credits) |
|  | Science, Technology and Society course (4 credits) |
| Algorithmic Thinking | Algorithmic Thinking course (4 credits) |

## Social and Cultural Foundations

Courses in the Social and Cultural Foundations sequence will provide students with a thematic framework within which to study influential works of diverse cultures, from the beginnings of history to the present, and from global and interdisciplinary perspectives. Students will reflect on fundamental and enduring questions about what it means to be human and how we as individuals live in society. These courses will teach students to take a global perspective as they read and interpret great works and ideas of the past and present; to ask critical questions, find unstated assumptions, and assess evidence presented in empirical and theoretical scholarship; to deepen their understanding of the history and development of contemporary China; and to communicate complex ideas with clarity.

The Social and Cultural Foundations component includes four required courses:

## - A survey course called Global Perspectives on Society

- A writing course called Perspectives on the Humanities
- Two courses from the category Interdisciplinary Perspectives on China


## Global Perspectives on Society (GPS)

In the survey course Global Perspectives on Society, students will engage in the comparative study of primary works of social thought from across the globe. The course addresses ways that writers in different times and cultures have sought to situate humans within the universe, and to promote ideal standards for human behavior. Each week, students will be expected to engage one or more central texts by an important thinker on a given topic. The expectation is that Global Perspectives on Society will be taken in the first semester of students' first year at NYU Shanghai.

## Perspectives on the Humanities (PoH)

Perspectives on the Humanities is a content-based writing seminar, which introduces students to the questions asked and methods used by a variety of disciplines in the humanities, including philosophy, history, and literature. In the fall of their second year at NYU Shanghai, students choose from a variety of Perspectives on the Humanities topics. Perspectives on the Humanities is also designed to reinforce and advance the writing and thinking skills learned in the first-year Writing as Inquiry workshop. In addition to satisfying one Social and Cultural Foundations requirement, this course satisfies one of two writing requirements (see Writing).

## Interdisciplinary Perspectives on China (IPC)

By completing two Interdisciplinary Perspectives on China courses, students will be able to identify basic dimensions of China's current and historical contexts, and they will be able to combine this knowledge with disciplinary theory to analyze past and present issues confronting Chinese society. Through their ability to identify important dimensions of Chinese culture and society and their familiarity with relevant theoretical approaches, students will develop an analytically engaged perspective on their own immediate context in Shanghai and China, in all of its cultural richness, social diversity, and political and economic complexity.

Interdisciplinary Perspectives on China courses cover a wide range of disciplinary and interdisciplinary approaches. They include history, philosophy, culture, art, and literature disciplines that use critical methods and primarily take a comparative and historical approach. They may also engage in both qualitative and quantitative analyses, using a range of analytical, interpretive, and experimental tools from anthropology, economics, sociology, political science, and psychology. Interdisciplinary Perspectives on China courses may be taken at any point in a student's undergraduate experience.

## Interdisciplinary Perspectives on China Courses

| Code | Title | Credits |
| :--- | :--- | ---: |
| ART-SHU 9077 | Contemporary Art \& New Media in China | 4 |
| CCCF-SHU 110 | Introduction to Shanghai Cinema Legacy and <br> Contemporary Chinese Film/Media Industry | 4 |
| CCSF-SHU 123 | Contemporary Chinese Political Thought | 4 |
| ECON-SHU 221 | China's Financial System | 4 |
| ECON-SHU 238 | History of Modern Economic Growth: Exploring | 4 |
|  | China From a Comparative Perspective | 4 |
| ECON-SHU 239 | China's Economic Transition | 4 |
| GCHN-SHU 101 | Introduction to Chinese Civilization | 4 |
| GCHN-SHU 110 | The Concept of China | 4 |
| GCHN-SHU 156 | History of Chinese Art | 4 |
| GCHN-SHU 164 | The History of the Silk Road | 4 |
| GCHN-SHU 165 | China and the Islamic World, c.600AD-Present | 4 |


| GCHN-SHU 185 | China in Ten Soundtracks: The Sonic World of Modern Chinese Culture | 4 |
| :---: | :---: | :---: |
| GCHN-SHU 205 | Hong Kong Cinema | 4 |
| GCHN-SHU 207 | 20th-century Chinese Writers in Global Context | 4 |
| GCHN-SHU 208 | Chinese Science Fictions | 4 |
| GCHN-SHU 211 | Chinese Architecture | 4 |
| GCHN-SHU 225 | Cultural (Mis)translations: China and the West | 4 |
| GCHN-SHU 226 | Queer China | 4 |
| GCHN-SHU 232 | From Qing to the Republic: Social Debates in China | 4 |
| GCHN-SHU 233 | Foreign Societies in Classical Chinese Writing | 4 |
| GCHN-SHU 234 | Dunhuang and Its Global Connections | 4 |
| GCHN-SHU 236 | Immersive Narrative of Chinese Monuments | 4 |
| GCHN-SHU 243 | China and the Environment | 4 |
| GCHN-SHU 246 | Youth and Consumer Culture in China | 4 |
| GCHN-SHU 248 | Animals and Chinese Religion | 4 |
| GCHN-SHU 250 | Geographies of China | 4 |
| GCHN-SHU 252 | 20th-Century East Asia-U.S. Relations | 4 |
| GCHN-SHU 255 | Eat, Pray, Ponder. Chinese Intellectual Culture through the Ages | 4 |
| GCHN-SHU 264 | Chinese Migrant and Diasporic Networks | 4 |
| GCHN-SHU 265 | Women in China: From May 4th to Me Too \& Beyond | 4 |
| GCHN-SHU 283 | Reading and Viewing Modern China | 4 |
| GCHN-SHU 351 | Buddhism, Nature and Technology in the Chinese World | 4 |
| HIST-SHU 145 | Food in Chinese History | 4 |
| HIST-SHU 153 | History of Modern China Since 1840 | 4 |
| HIST-SHU 155 | Chinese American History: From the California Gold Rush to the Cold War | 4 |
| HIST-SHU 179 | History of Modern China in a Global Context | 4 |
| HIST-SHU 250 | Tianxia: Traditional China and the World | 4 |
| HIST-SHU 312 | China Encounters the World | 4 |
| HIST-SHU 313 | China Goes Global: How China and the World Changed Each Other | 4 |
| HUMN-SHU 366 | Shanghai Stories | 4 |
| INTM-SHU 267 | The Cultivated City | 4 |
| LIT-SHU 226 | History of Chinese Cinemas | 4 |
| MCC-SHU 9451 | The Media in China | 4 |
| PHIL-SHU 105 | Introduction to Chinese Philosophy | 4 |
| PHIL-SHU 110 | Traditional Chinese Political and Legal Philosophy | 4 |
| RELS-SHU 9270 | Religion and Society in China: Ghosts, Gods, Buddhas and Ancestors. | 4 |
| SCA-SHU 9634 | Global Connections: Shanghai | 4 |
| SOCS-SHU 236 | The Chinese Family | 4 |
| SOCS-SHU 254 | Ethnographies of Change in China | 4 |
| SOCS-SHU 270 | Social Change in Contemporary China | 4 |
| SOCS-SHU 275 | US-China Relations | 4 |
| SOCS-SHU 278 | Finding Sociology in Chinese Cities: Shanghai and Hong Kong | 4 |
| SOCS-SHU 331 | Politics in China | 4 |
| SOCS-SHU 341 | Cross-Strait Relations | 4 |
| SOCS-SHU 370 | China's Foreign Policy | 4 |

demonstrate equivalent proficiency by applying to take and scoring an 80 or higher on a placement exam.

| Course | Title | Credits |
| :--- | :--- | ---: |
| CHIN-SHU 101 | Elementary Chinese I | 4 |
| CHIN-SHU 102 | Elementary Chinese II | 4 |
| CHIN-SHU 201 | Intermediate Chinese I | 4 |
| CHIN-SHU 202 | Intermediate Chinese II | 4 |

## English for Academic Purposes

Core English for Academic Purposes (EAP) courses prepare students who did not attend an English-medium high school to engage communicatively at the high level demanded by the university's liberal arts context.

Required courses or proficiencies for English: Chinese speakers who did not attend an English-medium high school are required to complete up to 8 credits of EAP in the first two years, following a two-semester course sequence from EAP 100 to EAP 101. EAP 100 must be completed in the first year. Most students will complete a four-credit EAP seminar in the fall term and an EAP 101 seminar in the spring term. A small number of students taking course sequences in the sciences will be eligible to take two two-credit EAP 100 seminars in the first year and to complete EAP 101 in the following year. Academic advisors will notify students if they are eligible for the two-credit seminar. Students must successfully complete EAP 101 before the end of their second year and before they study away. Students who demonstrate exceptionally strong competence on all learning outcomes as they complete EAP 100 may be recommended by faculty for exemption from EAP 101. Exemptions are rare and most students should expect to complete the full eight credits of EAP.

| Course | Title | Credits |
| :--- | :--- | ---: |
| EAP-SHU 100 | English for Academic Purposes I | 4 |
| EAP-SHU 101 | English for Academic Purposes II | 4 |

## Mathematics

Math core courses are an initiation to the use of mathematics to model and understand natural phenomena. Students are expected to acquire basic computational skills and the understanding of foundational mathematical notions. In addition, students are exposed to proofs and logical operations in mathematics.

Students may fulfill their math requirement by taking Precalculus or Great Ideas in Mathematics, by taking other courses designated as fulfilling the Mathematics component, or by placing out of the requirement.

The relevant exam scores which may be used to fulfill the core curriculum mathematics requirement are listed below. No corresponding credit is awarded and test scores cannot be used to fulfill a prerequisite for an upper-level course in that area.

| Mathematics Courses \& Relavant Exam Scores |  |  |
| :--- | :--- | ---: |
| Code | Title | Credits |
| MATH-SHU 9 | Precalculus | 4 |
| MATH-SHU 10 | Quantitative Reasoning: Great Ideas in <br>  <br>  <br>  Mathematics |  |


| AP Examination | Score | Core Requirement <br> Satisfied |
| :--- | :--- | :--- |
| AP Calculus AB or BC | Score of 4 or higher | Mathematics |
| IB Mathematics HL | Score of 6 or higher | Mathematics |
| A Level Mathematics | Score of B or higher | Mathematics |
| NYU Shanghai  <br> Placement into  <br> Calculus  | Mathematics |  |

## Science

Scientific knowledge and inquiry are central to human society, and science and technology play an increasingly important role in our lives. At the heart of the natural sciences is a quest to understand the universe, the biosphere, and who we humans are. The special feature of science is that its hypotheses can be tested under controlled conditions by appealing to evidence external to the inquirer. Thus, science provides a consistent framework for proposing ideas and testing potential answers to these questions. NYU Shanghai students will become conversant with the fundamental concepts and applications, intellectual methods and analytical techniques that define modern science.

The science component has two required courses:

1. One lab-based course to fulfill Experimental Discovery in the Natural World;
2. One non-laboratory-based course to fulfill Science, Technology, and Society.

In Experimental Discovery in the Natural World (ED) courses, students are introduced to the foundations and frontiers of scientific investigation in the physical and life sciences. Through the laboratory experience, students develop the ability to use experimental methods to understand the world.

In Science, Technology, and Society (STS) courses, students study science and/or technology in their wider context. This may involve thinking about science and technology from a different disciplinary perspectivephilosophical, historical, sociological, economic or political, for example. But it may also involve taking science and technology themselves as the focus of scientific investigation, as for example in a course that focuses on the limits of statistical methods, or on formal approaches to the social structure of science. Alternatively, STS courses may examine a single topic from a range of perspectives that include, but are not limited to, scientific and technological perspectives, such as in a course that focuses on environmental politics, global health, bioinformatics, or smart cities. What unites STS courses is a reflective attitude to the nature of science and technology, and taking science and technology themselves as the primary objects of study.

ED and STS courses cover a wide range of disciplinary and interdisciplinary approaches; these courses may be taken at any point in a student's undergraduate experience.
Students who pursue degrees in some STEM disciplines ${ }^{1}$ will complete the Science core requirements by fulfilling the requirements in those majors.

The relevant exam scores which may be used to fulfill the Core Curriculum Experimental Discovery in the Natural World requirement are listed below. No corresponding credit is awarded and test scores cannot be used to fulfill a prerequisite for an upper-level course in that area.

## Experimental Discovery in the Natural World Courses and Relevant Exams

| Code | Title | Credits |
| :--- | :--- | ---: |
| BIOL-SHU 5 | Nutrition, Fitness and Health | 4 |
| BIOL-SHU 21 | Foundations of Biology I | 3 |
| BIOL-SHU 123 | Foundations of Biology Lab | 2 |
| CCEX-SHU 1 | Principles of Life-From Cells to Organisms | 2 |
| CCEX-SHU 3 | Explore the Cell: from Gene to Protein | 2 |
| CCEX-SHU 115 | Experiments in Food Science | 4 |
| CCEX-SHU 116 | Where the City Meets the Sea: Studies in Coastal | 4 |
|  | Urban Environments |  |
| CCEX-SHU 120 | Biology for a Changing World | 4 |
| CCEX-SHU 122 | Perception and the Brain | 4 |
| CCEX-SHU 136 | Human Genetics: Genes in Human Health \& | 4 |
|  | Disease | 2 |
| CCEX-SHU 137 | Human Genetics: Genes in Human Health \& | 2 |
|  | Disease Lab | 4 |
| CCEX-SHU 170 | While You Were Sleeping | 4 |
| CCEX-SHU 203 | Energy and the Environment | 4 |
| CCEX-SHU 214 | How Things Work | 4 |
| CENG-SHU 201 | Digital Logic | 3 |
| CHEM-SHU 125 | Foundations of Chemistry I | 2 |
| CHEM-SHU 127 | Foundations of Chemistry I Lab | 4 |
| EENG-SHU 251 | Circuits | 4 |
| INTM-SHU 130 | Working with Electrons | 4 |
| INTM-SHU 222 | Introduction to Robotics | 4 |
| INTM-SHU 244 | Bio-Inspired Robot Systems | 4 |
| NEUR-SHU 160 | Introduction to Brain and Behavior | 3 |
| PHYS-SHU 11 | General Physics I | 2 |
| PHYS-SHU 71 | Foundations of Physics Lab I | 3 |
| PHYS-SHU 91 | Foundations of Physics I Honors | 4 |
| PSYC-SHU 101 | Introduction to Psychology | 4 |


| AP Examination | Score | Core Requirement Satisfied |
| :---: | :---: | :---: |
| A Level Psychology | Score of $B$ or higher fulfills core; score of A fulfills core and course equivalency for PSYCHSHU 101 | Experimental Discovery (ED) |
| AP Psychology | Score of 4 or higher fulfills core; score of 5 fulfills core and course equivalency for PSYCHSHU 101 | Experimental Discovery <br> (ED) |
| IB Psychology HL (Higher Level) | Score of 6 or higher fulfills core; score of 7 fulfills core and course equivalency for PSYCHSHU 101 | Experimental Discovery (ED) |
| AP Physics C- Mech or AP Physics C- E\&M | Score of 4 or higher | Experimental Discovery (ED) |
| IB Biology HL, Chemistry HL, or Physics HL | Score of 6 or higher | Experimental Discovery <br> (ED) |


| A Level Biology, <br> Chemistry, or Physics Score of B or higher |
| :--- |
| AP Physics $1 \& 2$ (must <br> Experimental Discovery <br> have both), Chemistry, <br> (ED) <br> or Biology or higher |

## Science, Technology, and Society Courses

| Code | Title | Credits |
| :--- | :--- | ---: |
| BIOL-SHU 30 | Genetics | 4 |

BIOL-SHU 261 Genomics and Bioinformatics 4
CCST-SHU 129 Information Societies 4

CCST-SHU 130 Animals, Nature, Environment 4
CCST-SHU 133 Water Energy Food Nexus 4

CCST-SHU 141 Innovation in/of Daily Spaces 2
CCST-SHU 142 Environment Connections: Water, Waste, and 4
Wellness
CENG-SHU 352 Emerging Technologies for Smart Cities 4
ECON-SHU 232 Blockchain, Cryptocurrency, and Money 4
GCHN-SHU 216 Psychology and Modernity in China 4
GCHN-SHU 243 China and the Environment 4
HIST-SHU 205 History of Modern Medicine 4
HIST-SHU 225 The Global Space Age 4
HIST-SHU 239 New York: History of the City and its People 4
HIST-SHU 3024
HIST-SHU 305 When Science Goes Wrong 4
HIST-SHU 310 The Birth of Psychology 4
HIST-SHU 330 Popular Culture and the Scientific Revolution 4
HUMN-SHU 110 What is Science and Technology Studies 4
INTM-SHU 10J Neighborhood, Map, Phone 4
INTM-SHU 124 Emerging Technologies \& Computational Arts 4
INTM-SHU 195 After Us: Post-human Media 4
INTM-SHU 240 Solar Solutions: Considering The Sun in our Digital 4 Future
INTM-SHU 291 Solar Contraptions 2
INTM-SHU 294 History of Human Computer Interaction 4
LIT-SHU 245 Literature and Science in the Renaissance 4
MATH-SHU 5 Chance 4

NEUR-SHU 10 Free Will and the Brain 4
NEUR-SHU 265 Neural Bases of Speech and Language 4
NEUR-SHU 303 Introduction to Linguistics: The Science of Human 4

|  | Language |
| :--- | :--- | :--- |
| PHIL-SHU 90 | Philosophy of Science |

PHIL-SHU 91 Philosophy of Biology 4
PHIL-SHU 130 Philosophy of Technology: Thinking Machines 4
PHIL-SHU 230 Philsophy of Physics 4
PSYC-SHU 329 Parenting and Culture 4
PSYC-SHU 344 Psychology of Human-Machine Communication 4
and Relationships
PSYC-SHU 360 Evolutionary Psychology 4
SOCS-SHU 135 Environment and Society 4
SOCS-SHU 170 Introduction to Global Health 4
SOCS-SHU 199 Global Transportation 4
SOCS-SHU 204 Environmental System Science 4

| SOCS-SHU 208 | Cities at Crossroads: Environmental Challenges <br> and Opportunities in Cities | 4 |
| :--- | :--- | :--- |
| SOCS-SHU 248 | Fraud | 4 |
| SOCS-SHU 306 | Pestilence: Critical Perspectives in Global Health | 4 |
| SOCS-SHU 332 | Global Mental Health | 4 |
| SOCS-SHU 333 | Global Environmental Politics | 4 |
| SOCS-SHU 334 | Legal Psychology | 4 |

Biology, Chemistry, Physics, Neural Science, Computer Systems Engineering, Electrical Systems, Engineering, Math, or Honors Math.

## Algorithmic Thinking

In Algorithmic Thinking (AT) courses, students acquire an understanding of the nature of computation, by studying the formal or mathematical properties of computation, by applying the concrete forms computation has taken, either historically or in the present, or by learning how to program. Students also will learn to critically engage with computation, by studying at least one context in which computation is embedded, whether historical, social, political, philosophical, mathematical or creative.

AT courses cover a wide range of disciplinary and interdisciplinary approaches; the AT course may be taken at any point in a student's undergraduate experience.

The relevant exam scores which may be used to fulfill the Core Curriculum Algorithmic Thinking requirement are listed below. No corresponding credit is awarded.

## Algorithmic Thinking Courses \& Relevant Exams

| Code | Title | Credits |
| :--- | :--- | ---: |
| BUSF-SHU 210 | Business Analytics | 4 |
| CHEM-SHU 752 | Computational Chemistry | 4 |
| CSCI-SHU 11 | Introduction to Computer Programming | 4 |
| CSCI-SHU 101 | Introduction to Computer and Data Science | 4 |
| HUMN-SHU 170 | Algorithmic Cultures around the Globe | 4 |
| INTM-SHU 101 | Interaction Lab | 4 |
| INTM-SHU 103 | Creative Coding Lab | 4 |
| INTM-SHU 204 | Critical Data and Visualization | 4 |
| MATH-SHU 252 | Numerical Analysis | 4 |
| PHIL-SHU 70 | Logic | 4 |


| AP Examination | Score | Core Requirement <br> Satisfied |
| :--- | :--- | :--- |
| AP Computer Science | Score of 4 or higher | Algorithmic Thinking |
| IB HL (Higher Level) <br> Computer Science | Score of 6 or higher | Algorithmic Thinking |
| NYU Shanghai |  | Algorithmic Thinking |

Placement into
Introduction to
Computer Science

## Exam Scores At-A-Glance

The following exam scores may be used to fulfill Core Curriculum requirements. No corresponding credit is awarded and test scores cannot be used to fulfill a prerequisite for an upper-level course in that area.

Core curriculum requirement can be fulfilled by these exams (though no credit is given)

| AP Examination | Score | Core Requirement <br> Satisfied |
| :--- | :--- | :--- |
| AP Calculus AB or BC | Score of 4 or higher | Mathematics |
| IB Mathematics HL | Score of 6 or higher | Mathematics |
| A Level Mathematics | Score of B or higher | Mathematics |
| NYU Shanghai <br> Placement into <br> Calculus |  | Mathematics |

