

Stony Brook Summer Session II 2017
Courses Recommended for GSI Option #2 and Option #3
(many more courses listed online for students in Option #2)

ARH 203: Arts of Asia

A general course on Far Eastern art covering India, China, and Japan from its beginnings to the present. Emphasis is on the major arts of painting and sculpture, with some reference to architecture

AFS 102: Themes in Black Experience II

DEC: F SBC: CER; SBS; USA

An historical survey of the experience of black people against the background of a thorough review of American history and the events which impacted upon the black experience in America. This course also examines the responses of African Americans to the changing historical circumstances that they encountered in the United States. Consideration is also given to the similarities and differences among the lifestyles of people of African descent in America. This course treats themes from 1865 to the present.

AMS 151: Applied Calculus I

A review of functions and their applications; analytic methods of differentiation; interpretations and applications of differentiation; introduction to integration. Intended for CEAS majors. Not for credit in addition to MAT 125 or 126 or 131 or 141 or 171. This course has been designated as a High Demand/Controlled Access (HD/CA) course. Students registering for HD/CA courses for the first time will have priority to do so.

AMS 210: Applied Linear Algebra

An introduction to the theory and use of vectors and matrices. Matrix theory including systems of linear equations. Theory of Euclidean and abstract vector spaces. Eigenvectors and eigenvalues. Linear transformations. May not be taken for credit in addition to MAT 211.

ARH 203: Arts of Asia

DEC: J SBC: ARTS; GLO

A general course on Far Eastern art covering India, China, and Japan from its beginnings to the present. Emphasis is on the major arts of painting and sculpture, with some reference to architecture.

ARS 154: Foundations: Drawing

Fundamentals of drawing with a focus on developing technical and perceptual skills in hand-eye coordination and the ability to draw from observation using a variety of media. Conceptual and expressive possibilities of drawing explored within a range of subject matter that includes still life, the figure, landscape, and the study of the drawings of major artists, past and present.

ARS 225: Introduction to Digital Art

DEC: D SBC: ARTS; TECH

A hands-on introduction to the use of computers in the fine arts. Students explore image creation/manipulation, digital publishing and moving image through lecture, lab and discussion. Emphasis is on the expressive potential of the technology. No prior computer experience is required. Study of the history and impact of digital media on the arts and contemporary culture

contextualize practical assignments. This course serves as preparation for further study in electronic media. This course has an associated fee. Please see www.stonybrook.edu/coursefees for more information.

BIO 114: Dinosaur Paleontology

DEC: E SBC: SNW

A study of paleontology that includes evolution of dinosaurs, their classification system, a study of the important dinosaur families, dinosaur behavior, ecology, current controversies, hot topics and the KT extinction. Dinosaur paleontology will also cover the excavation of dinosaurs and the colorful history of the 'dinosaur hunters.' This course will emphasize the science and research involved in studying dinosaurs. Using dinosaurs as a vehicle, students will be exposed to the scientific method of inquiry and will leave this course with a better understanding on how to evaluate science in the real world. Not for Biology major credit.

BUS 111: Intro to Bus for Non-Bus Maj

Introduces students to major business topics that influence today's business practices. Explores contributions over the last century from Henry Ford to Bill Gates, showing how the Industrial Revolution became the Information Revolution. Provides knowledge of how business works and a perspective on its evolution into the next millennium. Integrates both introduction to business and management principles into one course. This course may not be taken for credit in addition to BUS 112.

BUS 337: Entrepreneurship Across Countries (only for students with BUS background, transcript review needed prior to registration)

Starting and managing a business is a risky albeit potentially rewarding undertaking. The complexity and challenges (as well as potential payoffs) facing entrepreneurs and business managers vary across different countries. The origins and development of entrepreneurs and entrepreneurship has similarities and differences across countries. The development of value is common across countries. The way that value is developed differs historically in Great Britain, Europe, Asia, and the Middle East compared to development in the United States. Value is distinguished from financing and taxing.

CCS 204: Film Festival: Films/Contexts

DEC: D SBC: ARTS

Course offered in summer only. We will attend the Stony Brook Film Festival as active participants. Students will be introduced to the history of film festivals and examine issues of film distribution and acquisition and how they relate to both the mainstream and independent film traditions. At the Stony Brook Film Festival, students will see the films, interact with both the organizers and the filmmakers, and engage in lively discussion about the films and the filmmaking process. Students will gain basic cinematic terminology, analytical tools used to interpret cinematic art and a basic understanding of the cinema industry.

CHE 132: General Chemistry II

Introducing the fundamental principles of chemistry, including substantial illustrative material drawn from the chemistry of inorganic, organic, and biochemical systems. The principal topics covered are stoichiometry, the states of matter, chemical equilibrium and introductory thermodynamics, electrochemistry, chemical kinetics, electron structure and chemical bonding, and chemical periodicity. The sequence emphasizes basic concepts, problem solving, and factual material. It provides the necessary foundation for students who wish to pursue further coursework

in chemistry. Three lecture hours and one 80-minute workshop per week. May not be taken for credit in addition to CHE 152.

CSE 214: Computer Science II

An extension of programming methodology to data storage and manipulation on complex data sets. Topics include: programming and applications of data structures; stacks, queues, lists, binary trees, heaps, priority queues, balanced trees and graphs. Recursive programming is heavily utilized. Fundamental sorting and searching algorithms are examined along with informal efficiency comparisons.

EAS 101: Engineering & Applied Science

A course intended to integrate first-semester Stony Brook freshmen into the university community and particularly into the College of Engineering and Applied Sciences. Special emphasis is placed on basic computing skills, internet access, and the programs, laboratories, and library of the college.

EST 104: Projects/ Technology & Society

Introduces students to technological issues in society. A new topic is presented each semester. Explores underlying scientific and engineering concepts, ethical issues, and technological risks. Students complete a project with faculty supervision. May be repeated for up to a limit of 6 credits but only 3 credits of EST 104 may be used for major credit.

LIN 120: Language and Technology

SBC: TECH

An introduction to how computers process language and solve language-related tasks. This course discusses the language technologies of our daily life --- spam filtering, machine translation, and many more --- and shows how they work under the hood. The course explores a variety of issues: Why do computers do well in some areas (spell checking) yet fail miserably in others (essay grading)? Will we ever have perfectly fluent AIs as depicted in science fiction? And how will these technological advances impact the role of language in our society? Students will also acquire basic programming skills and write scripts for simple language tasks. No previous training in mathematics or computer science required.

MAT 125: Calculus A

Differential calculus, emphasizing conceptual understanding, computations and applications, for students who have the necessary background from 12th-year high school mathematics. Differentiation of elementary algebraic, trigonometric, exponential and logarithmic functions; graphing; modeling; and maximization. May not be taken for credit in addition to MAT 131 or 141 or AMS 151. This course has been designated as a High Demand/Controlled Access (HD/CA) course. Students registering for HD/CA courses for the first time will have priority to do so.

PHY 132: Classical Physics II

Second part of a two-semester physics sequence for physical-sciences or engineering majors who have a strong mathematics background and are ready for a fast learning pace. It covers electromagnetism, electric circuit theory, and optics. Calculus is used concurrently with its development in MAT 132. Three lecture hours and one recitation hour per week. The Laboratory component, PHY 134, may be taken concurrently. Not for credit in addition to PHY 122, PHY 127, or PHY 142. This course has been designated as a High Demand/Controlled Access (HD/CA) course. Students registering for HD/CA courses for the first time will have priority to do so.

PHY 122: Physics for Life Sciences II

Second part of an introduction to physics with applications to biology, primarily for students majoring in biological sciences or pre-clinical programs. Topics include electromagnetism, optics, acoustics, and radiation phenomena. Strong algebra skills and knowledge of the ideas of calculus are required. Three lecture hours per week. The Laboratory component, PHY 124, must be taken concurrently; a common grade for both courses will be assigned. PHY 122 may not be taken for credit in addition to PHY 127, 132, or 142. This course has been designated as a High Demand/Controlled Access (HD/CA) course. Students registering for HD/CA courses for the first time will have priority to do so

PSY 103: Introduction to Psychology

DEC: F SBC: CER; SBS

An introduction to research and theory in psychology in such areas as learning, perception, cognition, biopsychology, development, personality, and abnormal and social psychology. As part of the course, students must participate in experiments and/or a library research project.

SOC 105: Introduction to Sociology

DEC: F SBC: SBS

A general introduction to the science of sociology, emphasizing sociological theory and methods. Students are taught what is unique about the way in which sociologists analyze human behavior and society. Differences between the sociological perspective and perspectives of other social sciences are emphasized. There is also a heavy emphasis on the types of methods and data that sociologists use to test the validity of their ideas.

THR 101: Introduction to Theatre Arts

An overview of performance, design, and production in the theatre. Specific texts are explored through lectures, demonstrations, and a close examination of the rehearsal process. Professionals working in the theatre are invited to speak on such topics as stage management, technical production, and direction. Not for theatre arts major credit.

THR 105: Acting I

The basic vocabulary and skills of the actor's craft. Students explore acting techniques through theatre games and improvisation.