# Sample B Scope and Sequence

Sophomore Year/2022-2023				Junior Year/2023-2024						Senior Year/2024-2025				Total CR	
Cohort taught at ABC High School by Professor				Cohort/transition taught at XYZ College						Non-cohort, taught at XYZ College					
Fall	CR	Spring	CR	Fall	CR	Spring	CR	Summer*	CR	Fall*	CR	Spring*	CR		
										Students take these courses on campus					
COMM 100: Intro to Communication (SB) <u>HS</u> <u>Requirement:</u> Elective <u>MassTransfer</u> : Social and Behavioral Sciences	3	MATH 115: College Algebra (QR) <u>HS</u> <u>Requirement:</u> Mathematics <u>MassTransfer</u> : Mathematics /Quantitative Reasoning	3	ENGL 101: Composition 1 (VRE) <u>HS</u> <u>Requirement:</u> Elective <u>MassTransfer</u> : Verbal Reasoning & Expression	3	ENGL 102: Composition II (VRE) <u>HS</u> <u>Requirement:</u> Elective <u>MassTransfer</u> : Verbal Reasoning & Expression	3	SOC 101: Intro to Sociology (SB) <u>HS</u> <u>Requirement:</u> Elective <u>MassTransfer</u> : Social and Behavioral Sciences	3	BIOL 102: Evolutionary Biology (or) BIOL 111 for STEM focus (NS) <u>HS</u> <u>Requirement:</u> Elective <u>MassTransfer</u> : Natural Sciences	4	Gen Ed Ethnic Studies (Select from Courses listed below)	3	Core=12	Combined= 30+
								PSYCH 100: Intro to Psychology (SB) <u>HS</u> <u>Requirement:</u> Elective <u>MassTransfer</u> : Social and Behavioral Sciences	3	ENVSCI 120: Intro to Environmental Science (NS) <u>HS</u> <u>Requirement</u> : Elective <u>MassTransfer</u> : Natural Sciences	3	Select from EC Course Menu below	3		

## Table Color Key:

- Green = Core Courses (These are recommended courses for EC partners to offer to their students as they are critical to college success)
- Yellow = Choice Courses (Theses are courses where students and partners have flexibility to choose based on pathways and interest)

## XYZ College Requirements Key:

- SB: Social Behavioral
- QR: Quantitative Reasoning
- VRE: Verbal Reasoning & Expression
- NS: Natural Sciences

The below courses are highly transferable for students, and all meet a core requirement for MassTransfer.

# NATURAL SCIENCES

- Introduction to Environmental Science (ENVSC 120): This course offers a broad overview of the physical, chemical, biological, and geological principles underlying the environmental sciences. Students are introduced to natural processes and interactions in the atmosphere, in the ocean, and on land-primarily through case studies at the coastal ocean-watershed interface. Majors must also take the co-requisite lab, EEOS 121. Both courses will lay the foundation for understanding the key concepts required for the major in Environmental Science. (HS distribution Science)
- Basis of Life (BIO 101): The uniqueness of life within the physical universe. The matter and energy of life, the genetic code, molecular biology, and the origin and evolution of life. An overview for students in the humanities and social sciences of those features which distinguish living organisms from non-living things. No background in the natural sciences is required. (*HS distribution Science*)
- General Biology (BIO 111): An integrated course stressing the principles of biology. Life processes are examined primarily at the molecular and cellular levels. An integrated course stressing the principles of biology. Life processes are examined primarily at the molecular and cellular levels. Intended for students majoring in biology or for non-majors who wish to take advanced biology courses. Intended for students majoring in biology who wish to take advanced biology courses. (HS distribution Science)
- Evolutionary Biology (BIOL 102): Designed for students in the social sciences and humanities. Those areas of genetics, ecology, and evolution that form a unified approach to the study of organisms and populations. No background in the natural sciences is required. (HS distribution Science)
- Nature of Environmental Problems (ENVSTY 101): An introduction to environmental issues and analysis emphasizing comparisons between the sustainable characteristics of ecosystems, both natural and human, and the human impacts on the Earth's life support systems. Topics include human population growth, food production, use of natural resources, pollution, loss of bio-diversity, and conservation strategies. (HS distribution Science)
- Introduction to Biological Anthropology (ANTH 105): The study of human biological evolution and human population variation. This course introduces the history, theory, and methods of research in biological anthropology through lectures and hands-on exercises. Major topics include: geological time, classification, and the place of humans in the animal world; evidence for primate and human evolution; evolutionary theory and genetics; and discussion of the evolutionary forces involved in producing human population variation. This course addresses, in assignments and during class time, the following general education capabilities: critical thinking; using technology to further learning; quantitative reasoning; collaborative work; and effective communication. Students who have taken ANTH 102 may not receive credit for ANTH 105. (HS distribution Science)

## SOCIAL AND BEHAVIORAL SCIENCES

- Introduction to Sociology (SOCIOL 101): This course provides a broad overview of sociology and how it applies to everyday life. Major theoretical perspectives and concepts are presented under the following broad sections: sociological imagination, social inequality, and social institutions. Applying C. Wright Mills; notion of the 'sociological imagination,' this course will seek to find ways to connect an understanding of ourselves with broad dynamics of national and global social structures and forces of social change. (HS distribution History and Social Science)
- Introduction to Psychology (PSYCH 100): A general survey of selected content areas in psychology, including personality and human development, physiological psychology, learning, intelligence, heredity and environment, and motivation and emotion. Please note: Students who have already earned credits for PSYCH 101 may not register for this course. (HS distribution History and Social Science)

Introduction to Cultural Anthropology (ANTH 106): An introduction to the anthropological study of cultures, based on ethnographic descriptions and analyses of tribal, developing, and modern state societies. The course explores a variety of

concepts and approaches to the study of culture, and participants acquire experience in critical reading, critical thinking, and analytic writing. Students who have taken ANTH 103 may not receive credit for ANTH 106. (HS distribution - History and Social Science)

#### MATHEMATICS

• Introductory Statistics (MATH 125): This course is a concept-driven introduction to statistics and statistical reasoning. It covers descriptive statistics, including histograms, the normal curve, and linear correlation and regression; probability sufficient to enable development of inferential statistics; and topics in statistical inference. The latter will include sampling theory, confidence intervals and their interpretation, tests of hypotheses, and chi-square tests. *Pre-req* = *MATH* 114Q or 115 or 129 or 130 or 140 or appropriate scores on the Math Placement Test (HS distribution - Mathematics)

• Pre-Calculus (MATH 130): Preparation for first-year calculus. Covers symmetry, graphs, functions, lines, parabolas and max-min problems, exponential and logarithm functions, exponential growth, and trigonometric functions and their inverses. Note: No student will receive graduation credits for MATH 130 if it is taken after successful completion of any higher math course. Students who have successfully completed MATH 130 may not subsequently take MATH 129 for credit. Students may take MATH 130 after MATH 129 only with the explicit permission of the department, and then only for two credits. *Pre Requisites: Pre-req = appropriate scores on the Math Placement Test or MATH 115 with a grade of B or better. Note: Students with grades lower than B in the pre-requisite course will be dropped from the class.* (HS distribution - Mathematics)

**Calculus I (MATH 140):** The first in the sequence of calculus courses for science and math majors. Starts with the basic concepts of functions and limits. Topics covered include derivatives and their applications, definite and indefinite integrals with applications to geometric and physical problems, and a discussion of algebraic and transcendental functions. Note: Math 134 or Math 135 does NOT satisfy the prerequisites for Math 140. Therefore, students who complete Math 134 or 135 will have to take and pass the math placement test to get into Calculus I. Additionally, students who have received credit for either MATH 134 or MATH 135 may not take MATH 140 for credit without the explicit permission of the department and then only for two credits. *Pre Requisites: Pre-req = MATH 130 with a grade of B or better, or appropriate scores on the Math* 

Placement Test Note: Students with grades lower than B in the pre-requisite course will be dropped from the class. (HS distribution - Mathematics)

## CULTURALLY AFFIRMING COURSES W/ TRANSFERABILITY

- Introduction to Urban Education (EDCU 241). This course focuses on understanding the complexities of teaching in urban schools. We will explore the strengths, problems and issues that affect urban schools and examine how teachers can effectively respond to the issues that impact their students in this environment. The course covers four major topics. Understanding the Strengths and Challenges of the Urban Environment; Community Building and School Climate; Achievement Motivation: Working from a Strengths Based Perspective; Language Development as a Foundation of Learning. (*HS distribution - Core Elective*)
- Introduction to African American Literature (AFRSTY 100) = International Diversity. This survey course examines the writings of African-Americans who have made unique contributions to the African-American literary tradition. The course explores these writings in terms of their sociohistorical context, making use of analyses of character, plot, and symbolism. It gives particular attention to the writers' roles as social critics. Among the writers whose work may be considered are Frederick Douglass, Jean Toomer, Zora Neale Hurston, Richard Wright, Leroi Jones, Ernest Gaines, George Jackson, Alice Walker, and Toni Morrison. (HS distribution - Core Elective)
- Introduction to Africana Studies (AFRSTY 101) = World Culture and International Diversity. This course presents an overview of the major theories in the field of Africana studies. It seeks to explore the Africana experience in a way that is orderly, systematic, and structurally integrated; and to convey an understanding of the cultural, historical, and political roots of this experience. The course focuses chronologically on major historical episodes through a study of ancient African civilizations, slavery, colonialism, and African liberation movements. (HS distribution Core Elective)
- Introduction to Native American and Indigenous Studies (ANTH 278L) = US Diversity. This course is an introduction to key issues and themes in Indigenous Studies and to issues of concern to native peoples today. The majority of the case studies used will refer to Native American/Indigenous Nations from North America, as these nations have the closest relationships with the modern U.S. and are those to whom we have the greatest responsibilities. Other case studies will be drawn from South and Central America, the Pacific (particularly Hawaii, Aotearoa/New Zealand, and Australia) and Asia.

ANTH 278L and NAIS 278L and HIST 278L are the same course. (HS distribution - Core Elective)

Latinos in the US (AMST 201) = US diversity and Humanities distribution (ENGL102 prereq) This course seeks to examine the development of people of Hispanic descent, and to understand how this history intersects important junctures in US history. The course explores such topics as the formation of Latino groups; emigration, migration, and settlement; the impact of Latinos on US culture; and the development of pan-ethnic identities. (HS distribution - Core Elective

Asians in the US (ASAMST 223) = US diversity and Humanities distribution (ENGL102 prereq) Its important that it is in Spring of Sr Yr b/c a few have English 2 pre-req. This multidisciplinary course examines the social, historical, and structural contexts defining the Asian American experience from 1850 to the present. Topics include immigration, labor, community settlement, ethnicity, stereotypes, and race relations. AMST 223L and ASAMST 223L are the same course. (HS distribution - Core Elective)