2023 Pre-College Summer Session Course List

This course list was updated on 03-31-2023. *See the last page of this document for changelog.*

Courses meet daily unless otherwise noted. Full courses at Carnegie Mellon carry 9 to 12 units, corresponding to 3 to 4 credits at other U.S. colleges and universities.

Pre-College Summer Session students are allowed to enroll in **24 or fewer units**, because the courses in this six-week summer term cover material from the longer fall and spring semesters and we have found students who enroll in excessive units cannot experience everything Pre-College Summer Session has to offer. Students who enroll in 24 units may be expected to study challenging Carnegie Mellon academic material for at least 57 hours every week. For more information, contact the Pre-College Summer Session Director, Dr. Gillian Ryan (gryan@andrew.cmu.edu).

Newly listed or revised courses for the Pre-College Summer Session in 2023 include:

03-133 Neurobiology of Disease

03-232 Biochemistry I

03-124 Modern Biology Lab

15-122 Principles of Imperative Computing

Up to date information on course availability can be found via the Enrollment Portal.

Some of the courses in the following list are especially designated for Pre-College Summer Session, while some enroll both Pre-College Summer Session students and undergraduate students. In either case, all Summer Session courses offer the same quality of instruction and expectation of work as during the fall or spring at Carnegie Mellon.

After reviewing these course descriptions and, if needed, consulting with the Pre-College Summer Session Director about course choices, select your courses using the Pre-College Summer Session Course Request Form in the Pre-College Enrollment Portal. Students will have access to the form through this portal after they are admitted to the Pre-College Summer Session program.

Courses fill in the order that deposits and forms are received by the University, including when the course request form is completed. For Computer Science courses that require the completion of an assessment test for placement, the date of completion of that assessment also factors into the order in which students are enrolled in those courses.

Pre-College Summer Session students do not enroll themselves in courses. They are enrolled based on their course availability and their course selections on the Pre-College Summer Session Course Request forms. Enrollment is subject to completion of any required assessments and meeting required placement scores as well as course availability. To view your course schedule once you are enrolled in classes, visit Student Information Online on the HUB's website (www.cmu.edu/hub/sio) using your Carnegie Mellon University Andrew ID and password. Please allow time for the receipt and processing of your payment and enrollment forms.

Students may request schedule changes until the end of the second day of classes by contacting the Pre-College Summer Session Director. Family members should not contact the Summer Session Director regarding course selection; students are responsible for communicating with their family about any changes to their academic plans.

Units	Course #	Course Title ***	Meeting Times
9	03-121E	Modern Biology	MTWRF 9:30a-10:50a
9	03-124E	Modern Biology Lab***	MW 12:30p-3:20p
9	03-132E	Basic Science to Modern Medicine	MTWRF 2:00p-3:20p
9	03-133E	Neurobiology of Disease	MTWRF 11:00a-12:20p
9	03-232E***	Biochemistry I	MTWRF 12:30p-1:50p
10	09-105E	Introduction to Modern Chemistry I	MTWRF 11:00-12:20p and T 2:00p-2:50p
10	15-110E*	Principles of Computing	MTWRF 9:30a-10:50a and MTWRF 3:30p-4:20p
12	15-112E*	Fundamentals of Programming and Computer Science	MTWRF 11:00-12:20p and MTWRF 5:00p-5:50p
12	15-122E*	Principles of Imperative Computing	MTWRF 9:30a-10:50a and MTWRF 12:30p-1:50p
12	21-127E**	Concepts of Mathematics	MTWRF 9:00a-10:20a
9	27-052E	Introduction to Nanoscience and Technology	MWF 2:00p-3:20p
9	33-124E	Introduction to Astronomy	MTWRF 2:00p-3:20p
12	33-141E***	Physics I for Engineering Students	MTWRF 12:30p-2:50p
9	36-200E	Reasoning with Data	MTWRF 12:30p-1:50p
9	36-202E***	Methods for Statistics & Data Science	MTWRF 11:00a-12:20p
9	57-341E	Sound Recording Workshop	MWF 2:00p-3:30p and MW 6:30p-7:50p
9	73-102E	Principles of Microeconomics	MTWRF 12:30p-1:50p
9	76-101E	Interpretation and Argument	MTWRF 9:00a-10:20a
9	80-100E	Introduction to Philosophy	MTWRF 2:00p-3:20p
9	80-130E	Introduction to Ethics	MTWRF 11:00a-12:20p
~~12~~	~~82-171E~~	~~Elementary Japanese I~~ **Section Canceled**	MTWRF 8:00a-9:20a
~~12~~	~~82-172E~~	~~Elementary Japanese II~~**Section Canceled**	MTWRF 11:00a-12:20p
~~9~~	~~82-283E~~	~~Language Diversity & Cultural Identity~~ **Section Canceled**	MTWRF 9:30a-10:50a
9	85-102E	Introduction to Psychology	MTWRF 12:30p-1:50p
9	85-241E	Social Psychology	MTWRF 2:00p-3:20p

If you sign up for a course with multiple times (indicated by “and”), you must be available during all of those times.

* Placement into 15-110, 15-112, or 15-122 requires an appropriate score on the CS Placement test. Details are in the course description. **Note that students may only take <u>one</u> of these courses**.

** 21-127 has prerequisites, which are typically satisfied by demonstrable college-level knowledge in calculus or computer science. Details are in the course description.

*** Please see each individual course description for any additional prerequisites or corequisites.

03-121 Modern Biology (9 units)
This is an introductory course that provides the basis for further studies in biochemistry, cell biology, genetics and molecular biology. This course emphasizes the chemical principles underlying biological processes and cell structures as well as the analysis of genetics and heredity from a molecular perspective. This is the introductory biology course for all science and non-science majors.

03-124 Modern Biology Lab (9 units)
This laboratory is designed to introduce students to modern concepts in the biological sciences. The experiments illustrate many of the principles covered in 03-121. Experimentation using living organisms and/or their tissues, cells or molecules is an essential component of this course. The course will cover current techniques in biological research and how to design experiments using these techniques: manipulations of microorganisms, viable count, plasmid DNA isolation, UV spectroscopy, DNA and protein gel electrophoresis, restriction enzyme digests and mapping, bacterial transformations, Bradford assay, western blot analysis, modeling UV exposure, nucleosome fragmentation assay. Corequisite: 03-121 Modern Biology . This lab can only be taken by students also taking 03-121, or who have successfully completed 03-121 in the past.

03-132 Basic Science to Modern Medicine (9 units)
The goal of this course is to give students an understanding of the biology that impacts their everyday lives. Disease can be a tragic part of human life, a fact that is even more apparent during a global pandemic. To understand how specific diseases like COVID-19 or cancer affect the human body, and how modern medicine can tackle them, this course includes a fundamental study of the basic molecular biology, genetics, and cell biology that underlies disease. This is a topics-based course, with topics chosen to cover aspects of biology and health that students are likely to encounter in their daily lives. The topics for summer 2023 will include COVID-19, genome editing, and cancer. We will explore these topics from both a basic science and a modern medicine perspective. Students will gain the expertise to critically evaluate media reports about biology and health, and to ask the questions that will help them to make educated decisions in their lives. Key topics: The course will cover at least COVID-19, cancer, and genome editing, in addition to the essential aspects of molecular biology, cell biology, and genetics needed to understand those topics.

03-133 Neurobiology of Disease (9 units)
This course will explore the biological basis of several neurological and neuropsychiatric diseases, with an emphasis on medical diagnostic tools and techniques. It will include discussions of the anatomical basis of neurological diseases as well as recent research into understanding the mechanisms of disease. This course is intended to broaden students' understanding of how diseases are diagnosed and studied. Students will also learn how basic neurological and psychiatric evaluations are conducted. We will discuss neurobiological research to serve as a basis for understanding brain structures and functional alterations in a variety of developmental, degenerative, neurological, and psychiatric disorders.

03-232 Biochemistry I (9 units)
This course provides an introduction to the application of biochemistry to biotechnology. The functional properties of amino acids, nucleotides, lipids, and sugars are presented. This is followed by a discussion of the structural and thermodynamic aspects of the organization of these molecules into higher-order structures, such as proteins, nucleic acids, and membranes. The kinetics and thermodynamics of protein-ligand interactions are discussed for non-cooperative, cooperative, and allosteric binding events. The use of mechanistic and kinetic information in enzyme characterization and drug discovery are discussed. Topics pertinent to biotechnology include: antibody production and use, energy production in biochemical systems, expression of recombinant proteins, and methods of protein purification and characterization. Prerequisite: Strong preparation in chemistry (e.g. 5 on AP Chemistry) required. High school biology is very strongly recommended.

09-105 Introduction to Modern Chemistry I (10 units)
This course begins with a very brief survey of some fundamental principles of chemistry and a presentation of chemically interesting applications and sophisticated problems. These will form the basis for introducing the relationships between the structure of molecules and their chemical properties and behavior. The subject matter will include principles of atomic structure, chemical bonding, intermolecular interactions, and molecular structures of organic and inorganic compounds including some transition metal complexes. Relevant examples will be drawn from such areas as environmental, materials, and biological chemistry.

15-110 Principles of Computing (10 units)
A course in fundamental computing principles for students with minimal or no computing background. Programming constructs: sequencing, selection, iteration, and recursion. Data organization: arrays and lists. Use of abstraction in computing: data representation, computer organization, computer networks, functional decomposition, and application programming interfaces. Use of computational principles in problem-solving: divide and conquer, randomness, and concurrency. Classification of computational problems based on complexity, non-computable functions, and using heuristics to find reasonable solutions to complex problems. Social, ethical and legal issues associated with the development of new computational artifacts will also be discussed. ***A placement exam is required to determine eligibility for registration in this class.***

15-112 Fundamentals of Programming and Computer Science (12 units)
A technical introduction to the fundamentals of programming with an emphasis on producing clear, robust, and reasonably efficient code using top-down design, informal analysis, and effective testing and debugging. Starting from first principles, we will cover a large subset of the Python programming language, including its standard libraries and programming paradigms. We will also target numerous deployment scenarios, including standalone programs, shell scripts, and web-based applications. This course assumes no prior programming experience. Even so, it is a fast-paced and rigorous preparation for 15-122. Students seeking a more gentle introduction to computer science should consider first taking 15-110. ***A placement exam is required to determine eligibility for registration in this class.***

15-122 Principles of Imperative Computation (12 units)
For students with a basic understanding of programming (variables, expressions, loops, arrays, functions). Teaches imperative programming and methods for ensuring the correctness of programs. Students will learn the process and concepts needed to go from high-level descriptions of algorithms to correct imperative implementations, with specific application to basic data structures and algorithms. Much of the course will be conducted in a subset of C amenable to verification, with a transition to full C near the end. ***A placement exam is required to determine eligibility for registration in this class.***

****Computer Science Placement Exams**: To ensure students are prepared for requested CS courses, Pre- College Summer Session students who seek to enroll in 15-110 ,15-112, or 15-122 must complete CS placement exams administered by CMU. Because of the fast-paced nature of summer courses this is required even if students have AP credit for computer science. Information about the exam will be sent to students who have listed 15-110, 15-112, or 15-122 on their course request forms. Students will be enrolled in these courses only after their placement exams are scored.* ***Note that students may only take <u>one</u> of these courses.***

21-127 Concepts of Mathematics (12 units)
This course introduces the basic concepts, ideas and tools involved in doing mathematics. As such, its main focus is on presenting informal logic, and the methods of mathematical proof. These subjects are closely related to the application of mathematics in many areas, particularly computer science. Topics discussed include a basic introduction to elementary number theory, induction, the algebra of sets, relations, equivalence relations, congruences, partitions, and functions, including injections, surjections, and bijections. A basic introduction to the real numbers, rational and irrational numbers. Supremum and infimum of a set

Concepts of Mathematics requires prerequisite knowledge of all students, including Pre-College students, before enrolling in the course. This knowledge can be demonstrated by passing grades in CMU courses such as 15-112 (Fundamentals of Programming and Computer Science) or 21-120 (Differential and Integral Calculus). Equivalently, students could have scored 5 on the College Board AP Computer Science A exam, 5 on the Calculus AB or Calculus BC exam; 6 or 7 on the International Baccalaureate Higher Level Computer Science exam, 6 or 7 on the IB Mathematics HL exam; A on the Cambridge International/EdExcel Advanced Level or Singapore H2 level in Computer Science, or A or B in the Mathematics C/Advanced Math. Some courses taken at other colleges may also be considered equivalent.

The course request form will provide you an opportunity to describe your prior background in CS and/or math.

27-052 Introduction to NanoScience and Technology (9 units)
The course is primarily intended to provide an introduction to nanoscience and technology to a wide audience of students at the advanced high school to incoming freshmen level. The course goals are twofold: (1) to provide students with a holistic view of the objectives, opportunities and challenges of the emerging field of nanotechnology and 2) to sensitize students at an early stage of their career to the relevance of the connections among the traditional disciplines as a vital element to the progress in interdisciplinary areas such as nanotechnology. The course will cover: Introduction and fundamental science; Preparation of nanostructures; Characterization of nanostructures; Application examples, Social and ethical aspects of nanotechnology.

33-124 Introduction to Astronomy (9 units)
Astronomy continues to enjoy a golden age of exploration and discovery. This course presents a broad view of astronomy, straightforwardly descriptive and without any complex mathematics. The goal of the course is to encourage non-technical students to become scientifically literate and to appreciate new developments in the world of science, especially in the rapidly developing field of astronomy. Subjects covered include the solar system, stars, galaxies and the universe as a whole. The student should develop an appreciation of the ever-changing universe and our place within it. Computer laboratory exercises will be used to gain practical experience in astronomical techniques. In addition, small telescopes will be used to study the sky. This course is specifically geared toward non-science/engineering majors.

33-141 Physics I for Engineering Students (12 units)
This is a first semester, calculus-based introductory physics course. Basic principles of mechanics and thermodynamics are developed. Topics include vectors, displacement, velocity, acceleration, force, equilibrium, mass, Newton's laws, gravitation, work, energy, momentum, impulse, torque and angular momentum, temperature, heat, equations of state, thermodynamic processes, heat engines, refrigerators, first and second laws of thermodynamics, and the kinetic theory of gases. Prerequisite: one semester of calculus (e.g, 5 on AP Calculus AB or Calculus BC exam); high-school physics very strongly recommended.

36-200 Reasoning with Data (9 units)
This course will serve as an introduction to learning how to "reason with data". While still an introductory-level course in the Statistics Department, the focus will be more on thinking about the relationship between the application and the data set and extracting useful statistical information rather than taking primarily a formula-driven approach. There will be an emphasis on thinking through an empirical research problem from beginning to end. Types of data will include continuous and categorical variables, images, text, and networks. Applications will largely draw from interdisciplinary case studies spanning the humanities, social sciences, and related fields. Methodological topics will include basic exploratory data analysis, elementary probability, hypothesis tests, and empirical research methods. There is no calculus or programming requirement. There will be weekly computer labs for additional hands-on practice.

36-202 Methods for Statistics and Data Science (9 units)
This course builds on the principles and methods of statistical reasoning developed in 36-200 (or its equivalents). The course covers simple and multiple regression, analysis of variance methods and logistic regression. Other topics may include non-parametric methods and probability models, as time permits. The objectives of this course is to develop the skills of applying the basic principles and methods that underlie statistical practice and empirical research. Learning the Data Analysis Pipeline is strongly emphasized through structured coding and data analysis projects. In addition to three lectures a week, students attend a computer lab twice a week for "hands-on" practice of the material covered in lecture; students will learn the basics of R Markdown and related analytics tools. Prerequisite: Reasoning with Data (36-200), or equivalent knowledge (e.g., AP Statistics with score 4 or higher, Cambridge A Level "Further Mathematics C" with grade of B or higher, prior college-credit course with passing grade)

57-341 Sound Recording Workshop (9 units)
Centers around the new recording studio in the School of Music: how the studio works and how to record various types of music, using the recording studio and the Kresge Recital Hall, which has audio and video links to the recording studio. The method of instruction is to learn by doing, and the goal is to achieve professional-sounding results. Equipment includes a complete 24-track Pro-Tools system, professionally designed control room and an interesting array of microphones. All recording is direct to hard disc. The lecture portion will cover the basics of sound, wave propagation, human hearing, psychoacoustics, transducers (microphones and speakers), mixing consoles, signal processors, digital and analog recording systems and signal flow. There are no specific prerequisites for the course, although reading music and/or playing an instrument is helpful.

73-102 Introduction to Microeconomics (9 units)
A one-semester course that teaches the fundamentals of microeconomics. Students will learn how microeconomic analysis can explain market successes, market failures, and how government intervention might improve outcomes. In addition to an investigation of firm behavior and consumer behavior, attention will be paid to: Game Theory, Behavioral Economics, Economics of Time and Risk, Economics of Information, Experimental Economics, and Auctions and Market Design. Students will also learn how to integrate basic data analysis and statistics.

76-101 Interpretation and Argument (9 units)
76-101 introduces first-year students to an advanced, inductive process for writing an argument from sources. Because the course is based upon empirical research about professional academic writers, students will learn expert practices for authoring their own arguments that contribute to an existing community of authors. Because reading and writing are inseparable practices for academic writing, students will read a variety of texts so that they can explore and critically evaluate a single issue from multiple perspectives and from different disciplinary genres. Students will learn methods for summarizing, synthesizing, and analyzing arguments within that issue so that they may contribute an argument of their own. The course is also geared toward helping students understand the requirements of advanced college-level writing. Our students are typically very accomplished readers and writers, and we are eager to push their accomplishments toward greater excellence. For this purpose, students will build upon their composing knowledge by reflecting and thinking strategically as they plan, write, and revise their own texts. Ultimately, they will develop critical reading, rhetorical and linguistic practices for analyzing and producing texts within the context of an academic community. Each section of 76-101 is structured by the same objectives and core assignments. There is a core vocabulary and set of heuristics that all sections teach. This section will focus on Black Social Justice Rhetoric: Past and Futures.

During the Spring of 2021, UNC Board of Trustees denied the NYT writer Nikole Hannah-Jones a tenure appointment. Hannah-Jones, author of the 1619 Project, noted: "I had no desire to bring turmoil or a political firestorm to the university that I love, but I am obligated to fight back against a wave of anti-democratic suppression that seeks to prohibit the free exchange of ideas, silence Black voices and chill free speech."

Hannah-Jones' obligation to "fight back against a wave of antidemocratic" injustices follow in the long tradition of Black rhetorical resistance in the United States. Instead of simply relying on classical rhetoric devices, such as ethos, pathos, and logos, this course will explore and recognize critiques to dominant ideologies and political and social hegemonies that has traditionally marginalized Black people in our society. Our class on Black rhetorical resistance will explore the myriad rhetorical forms and expressions Black speakers and writers have historically and contemporaneously used to stake their claims to American society. In this course, students will read both primary and academic documents to gain a deeper understanding of both the African American experience and their collective response to anti-Black racism. Students will also critically assess the Black lived experience, call and response, repetition, and other rhetorical forms of persuasions in Black literature, speeches and essays, musical art forms, and short films and documentaries. To develop skills of critical reading and academic writing, students will analyze arguments and genres, synthesize perspectives, write an academic proposal, and contribute to the conversation with a research project in the form of a contribution paper.

80-100 Introduction to Philosophy (9 units)
In this introductory course we will explore three major areas of Philosophy: Ethics, Metaphysics, and Epistemology. Accordingly, the course is divided into three sections. In each section we will read primary sources and discuss some of the main philosophic problems associated with that area. These will include moral problems (Ethics), problems rising from the debates about free-will, personal identity or intelligence (Metaphysics), and inquiries about the scope and limits of human knowledge (Epistemology). We will then introduce some theories designed to solve such problems and try to understand the strengths and weaknesses of these theories. We will apply different techniques and theories to issues that we might encounter in the real world. We will use class discussions, homework and papers to learn skills for evaluating arguments. These skills include how to present a philosophic argument, what are the assumptions that justify it, what are its weaknesses and its strengths, whether such weaknesses can be resolved and, if they cannot be resolved, why.

80-130 Introduction to Ethics (9 units)
Philosophical ethics, or moral philosophy, covers a lot of ground. It asks and tries to answer questions like: What's good in life? What matters? What should I (and others) do? How should I (and others) act? What kinds of things out there must be treated ethically? Do we have moral duties to (at least some) non-human animals? Is morality subjective? Are there actually any objective moral truths? Morally speaking, what (if anything) is the difference between killing someone, and simply letting them die? In trying to answer these questions (and others), we'll engage in some wonderfully weird thought experiments, class discussions, smaller group discussions, debates, etc. We'll study and critique several moral theories which try to explain and help guide our moral judgments, and we'll try to apply these theories to real-life moral controversies. Past classes covered topics including drug prohibition, abortion, euthanasia, and physician-assisted suicide. This is an introductory philosophy class, so you'll be learning how to read, critique, do, and write philosophy generally, not just ethics. Considerable time and effort, both in lectures and in recitations, will be spent helping you learn to recognize and evaluate philosophical arguments, as well as empowering you to create, improve, and defend your own arguments in class assignments

Elementary I language courses have no prerequisites. Courses beyond that level require placement through the Modern Languages Department. If interested, contact Dr. Gillian Ryan (gryan@andrew.cmu.edu)

82-171 Elementary Japanese I (12 units) **Section Canceled**
This course is the first part of a two-semester course sequence (82-171, 82-172) for students with no prior experience in Japanese. It emphasizes the development of communicative language proficiency through oral practice, aural comprehension, reading, writing, and the study of cultural aspects of Japanese society. Regular homework, quizzes, tests, presentations, and class participation are mandatory (four in-class hours per week). The elementary level is also designed to help students learn to reflect and draw upon strategies used by good language learners in their second language study. A student with prior experience in Japanese must take the placement exam.

82-172 Elementary Japanese II (12 units) **Section Canceled**
This course is a sequel to Elementary Japanese I (82-171) and continues to further the development of communicative language proficiency through oral practice, aural comprehension, reading, writing, and the study of cultural aspects of Japanese society. Regular homework, quizzes, tests, presentations, and class participation are mandatory (four in-class hours per week). The elementary level is also designed to help students learn to reflect and draw upon strategies used by good language learners in their second language study. A student with prior experience in Japanese must take the placement exam.

82-283 Language Diversity & Cultural Identity (9 units) Section Canceled
Culture, language, and identity are intimately tied together. Individuals, families, communities, and nations identify themselves in relation to the language or languages they speak. Local, national, and international governmental organizations make choices about the language or languages they recognize and use for political and economic affairs. The United Nations even recognizes language as integral to maintaining the cultural heritage of communities and peoples around the world, and the freedom to choose one's language of expression as a universal human right. In this course, we will explore a variety of questions, advantages, and challenges related to language diversity and cultural identity across the globe. Our main focus will be on contexts of multilingualism that is, contexts in which two or more languages may be used. Adopting a comparative case study approach, we will explore the following themes: (i) The historical underpinnings of language diversity and its consequences for cultural identity today (e.g., migration, colonization, conquest); (ii) How language diversity and cultural identity shapes, and is shaped by, local, regional, national, and international politics; (iii) The relationship between language diversity and language use and visibility in public spaces (i.e., the linguistic landscape); (iv) Relations between linguistic communities (e.g., majority and minority language users) and the sense of belonging to a culture. The course is taught in English.

85-102 Introduction to Psychology (9 units)
This course examines major areas of scientific psychology in some depth, the attempt being to develop basic models of our behavior and thought that explain wide areas of our functioning. The primary focus is on the areas of neural and motivational control of behavior, memory and thought, social interaction, and psychological development. Specific topics within these areas include brain function, motivational control systems, learning, cognitive and perceptual information processing, problem solving, obedience and conformity, social interaction, emotion, attitude consistency and change, how our social, cognitive and language functions develop, the importance of childhood to adult functioning, and psychopathology. In addition to the lecture, the course includes a weekly recitation section meeting and weekly short WEB-based laboratory experiences in which students get to perform actual experiments, interpret real data, and experience many psychological phenomena.

85-241 Social Psychology (9 units)
The focus of this course will be on how peoples' behavior, feelings, and thoughts are influenced or determined by their social environment. The course will begin with lectures and readings on how social psychologists go about studying social behavior. Next, various topics on which social psychologists have done research will be covered. These topics will include person perception, prejudice and discrimination, the nature of attitudes and how attitudes are formed and changed, interpersonal attraction, conformity, compliance, altruism, aggression, group behavior, and applications of psychology to problems in health care, law, politics, and the environment. Through readings and lectures on these topics, students will also be exposed to social psychological theories.

If you have questions about courses or scheduling, please contact:
Dr. Gillian Ryan, Pre-College Summer Session Director, Carnegie Mellon University Email: gryan@andrew.cmu.edu

The university reserves the right to add, change, or cancel class times and/or course offerings without notice.

Other courses may become available. Please check the Pre-College Summer Session website regularly for updates to this course listing.

Changelog

03/10/2023: Clarified that only one course in the CS sequence may be taken at once
03/13/2023: Added 03-124 to course offerings
03/15/2023: Corrected 15-122 in table to be 12 units
03/28/2023: 82-171 & 82-172 Pre-College sections are canceled
03/31/2023: 82-283 is canceled