COURSE CATALOG
2025-26

Syracuse University
Project Advance

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SYRACUSE UNIVERSITY COURSE DETAILS

Course Eligibility and Registration

Syracuse University courses offered through Project Advance are regularly catalogued, credit-bearing courses. These University courses are open to qualified high school seniors. Some courses are also open to select juniors. Sophomores and ninth graders are not eligible to enroll. Please contact the SUPA course administrator if you have specific eligibility questions.

For Syracuse University courses with prerequisites, students must complete all prerequisite coursework prior to registering. Prerequisites are noted in the course descriptions.

Course Structure and Credit Hours

- Linked course sequences, e.g., PHY 101 - PHY 102, run full year.
- 3-credit courses typically run as single-semester courses.
- 4-credit courses, e.g., ACC 151, are generally offered as full-year courses by partner schools to meet required contact hours.
- Schools seeking to structure courses differently, e.g., offering a 3-credit course over the full academic year, should consult with the SUPA course administrator or Enrollment Services Coordinator first to confirm departmental approval.

SUPA course administrators are also available to provide guidance regarding pairing or sequencing courses to support curricular pathways, provide integrated learning, etc.

Class Size and Composition

The minimum class size refers to the number of students who must be enrolled for Syracuse University credit to offer a particular course section.

The maximum enrollment refers to total class size, including any students not registered for Syracuse University credit. To maintain academic rigor and student engagement, the number of non-enrolled students in any course section is restricted.

Course sections with low or over-enrollments may be subject to cancellation. Additional requirements for individual courses may be adopted in conformance with actions taken by academic departments at the University. If you have any questions concerning these policies, please contact the Project Advance administrator for the course in question.

Co-seating with AP or other dual/concurrent enrollment programs is prohibited.

Full course descriptions are available at projectadvance.syracuse.edu/courses.

Tuition

Tuition for classes is $115 per credit hour.

AAS 112 Intro to African American Studies

Faculty Liaison: Joan Bryant, Ph. D., Associate Professor, Syracuse University

SUPA Administrator: Melanie Nappa-Carroll, Ed.D., Associate Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 15 to 24

Official Catalog Description: Historical and sociopolitical materials. Approaches to studying the African American experience, antecedents from African past, and special problems.

AAS 112: This course explores key themes in African American Studies, also known as Africana or African Diaspora Studies, by examining the experiences of people of African descent across the Americas, Africa, and the Caribbean. It focuses on two major historical encounters: the Atlantic slave trade and European colonialism, analyzing how these events shaped Black identities and cultures. Students investigate shared and differing experiences of oppression and resistance among African-descended populations. Course materials emphasize scholarly research methods, including the use of primary sources. Through essays, exams, and a final research project, students develop critical thinking, analytical, and presentation skills.

Additional Comments: Open to seniors only

ACC 151 Introduction to Financial Accounting

Faculty Liaison: Michael Chin, Ph.D., Assistant Teaching Professor of Accounting, Syracuse University

SUPA Administrator: Eric Young, Senior Associate Director, Syracuse University Project Advance

Syracuse University Credit: 4 Credits Class Size: 15 to 25

Official Catalog Description: Financial accounting concepts that aid entrepreneurs, managers, investors, and creditors in planning, operating, and analyzing a business. Emphasis is on interpretation of financial statements.

ACC 151: An introductory financial accounting course at Syracuse University's Martin J. Whitman School of Management designed for students with strong high school math backgrounds. The course introduces fundamental financial accounting concepts essential for entrepreneurs, managers, investors, and creditors, with particular emphasis on interpreting financial statements and understanding the accounting information system. Students develop practical analytical skills through traditional coursework including lectures, quizzes, and exams, while also completing a comprehensive project that requires analyzing publicly traded companies' financial statements to make informed investment decisions. By the end of the course, students will be able to read and interpret financial statements, understand current accounting issues and their organizational impact, and gain awareness of accounting career opportunities.

BIO 121 General Biology I

Faculty Liaison: Jason R. Wiles, Ph.D., Associate Professor, Syracuse University

SUPA Administrator: Eric Young, Senior Associate Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 10 to 20

Official Catalog Description: First course in a survey of biological concepts ranging from the molecular level to global ecology. Units include the nature of science, life chemistry, cell structure and function, photosynthesis and respiration, genetics, and evolution.

BIO 121 & 123: This comprehensive two-semester, eight-credit biology sequence offered through Syracuse University provides students with a thorough foundation in modern biological concepts, from molecular mechanisms to ecological systems. The curriculum is structured into four interconnected components: BIO 121 covers fundamental topics including microscopy, cell biology, biodiversity, evolution, chemistry of life, and animal development, while BIO 123 explores genetics, energy flow in living systems, and the structure and function of both plants and animals. Students develop essential scientific skills through hands-on laboratory courses (BIO 122 and 124) that emphasize inquiry-based exploration, experimental design, data interpretation, and dissection techniques. The course's distinctive approach combines theoretical knowledge with practical application, requiring students to conduct experiments, analyze results, and document observations, thereby preparing them to understand life's complexity at multiple levels of biological organization.

Additional Comments: First course of a two-course biology sequence. It is offered in the fall. Must register for both Bio 121/122 and BIO 123/124 in the fall.

BIO 122 General Biology I Laboratory

Faculty Liaison: Jason R. Wiles, Ph.D., Associate Professor, Syracuse University

SUPA Administrator: Eric Young, Senior Associate Director, Syracuse University Project Advance

Syracuse University Credit: 1 Credit Class Size: 10 to 20

Official Catalog Description: Laboratory associated with BIO 121. Includes inquiry-based exploration and practical application of concepts discussed in BIO 121.

Additional Comments: Co requisite: BIO 121 (Lecture)

BIO 123 General Biology II

Faculty Liaison: Jason R. Wiles, Ph.D., Associate Professor, Syracuse University

SUPA Administrator: Eric Young, Senior Associate Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 10 to 20

Official Catalog Description: Second course in a survey of major biological concepts ranging from the molecular level to global ecology. Units include biodiversity, plant structure and function, human and comparative animal anatomy and function, ecology, and evolution.

Additional Comments: Second course of a two-course biology sequence. It is offered in the spring. Prerequisite: BIO 121/122. (See above.) Co-requisite: BIO 124 (Lab)

BIO 124 General Biology II Laboratory

Faculty Liaison: Jason R. Wiles, Ph.D., Associate Professor, Syracuse University

SUPA Administrator: Eric Young, Senior Associate Director, Syracuse University Project Advance

Syracuse University Credit: 1 Credit Class Size: 10 to 20

Official Catalog Description: Laboratory course associated with BIO 123. Includes inquiry-based exploration and practical application of concepts discussed in BIO 123. One laboratory session per week. Includes inquiry-based exploration and practical application of concepts discussed in BIO 123.

Additional Comments: Co-requisite: BIO 123 (Lecture)

CAR 102 Art and Craft of Animation

Faculty Liaison: Heath Hanlin, Associate Professor, Syracuse University

SUPA Administrator: Christina Parish, Ph.D., Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 10 to 14

Official Catalog Description: Introductory studio course explores animation history and practice, with a strong emphasis on practice. Students will learn important animation techniques and modalities and build a foundation for further coursework or personal exploration of animation.

CAR 102: Art and Craft of Animation offers you hands-on experience with diverse animation techniques and modalities, from hand-drawn flipbooks to cut paper and stop-motion clay animation, while also introducing you to professional workflows including character design, storyboarding, asset creation, and animatics production. You'll learn some of the basics of industry-standard post-production using Adobe Creative Cloud and create your own original animated short film. This dynamic, project-based course builds both artistic and technical skills and provides an excellent foundation for further study in animation or other creative fields.

Additional Comments: Open to seniors, juniors. Contact admin re:sophomores.

CHE 106 General Chemistry Lecture I

Faculty Liaison: James T. Spencer, Ph. D., Professor, Syracuse University

SUPA Administrator: David Tate, Associate Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 15 to 24

Official Catalog Description: Fundamental principles and laws underlying chemical action, states of matter, atomic and molecular structure, chemical bonding, stoichiometry, properties of solutions, chemical equilibria, and introductory thermochemistry.

CHE 106 (lecture) & 107 (lab): Form a comprehensive four-credit general chemistry sequence at Syracuse University, combining lecture and laboratory components to explore chemistry's fundamental role in our world. The course provides students with a rational basis for interpreting and predicting chemical phenomena through examples of chemical behavior observed in nature, covering essential topics including atomic and molecular structure, chemical bonding, states of matter, stoichiometry, gas laws, intermolecular forces, and solution properties. Laboratory work emphasizes hands-on mastery of techniques in volumetric analysis, thermochemistry, and qualitative analysis. By understanding fundamental chemical processes, students develop the scientific inquiry skills and conceptual foundation necessary to solve new problems in chemical behavior across medicine, biology, engineering, and related disciplines.

Additional Comments: First course of a two-course sequence in general chemistry. Offered in the fall. Must register for CHE 106/107 and CHE 116/117 in the fall. Co-requisite: CHE 107 (Lab).

CHE 107 General Chemistry Laboratory I

Faculty Liaison: James T. Spencer, Ph. D., Professor, Syracuse University

SUPA Administrator: David Tate, Associate Director, Syracuse University Project Advance

Syracuse University Credit: 1 Credit Class Size: 15 to 24

Official Catalog Description: Experimental study of basic principles and techniques of chemistry. States of matter, determination of formulas and molecular weights, simple volumetric and gravimetric analysis, heats of reaction. Equilibrium, rates of reactions, and qualitative analysis.

Additional Comments: Co-requisite: CHE 106 (Lecture).

Official Catalog Description: Experimental study of basic principles and techniques of chemistry. States of matter, determination of formulas and molecular weights, simple volumetric and gravimetric analysis, heats of reaction. Equilibrium, rates of reactions, and qualitative analysis.

Additional Comments: Co-requisite: CHE 106 (Lecture).

CHE 113 Forensic Science

Faculty Liaison: James T. Spencer, Ph. D., Professor, Syracuse University

SUPA Administrator: David Tate, Associate Director, Syracuse University Project Advance

Syracuse University Credit: 4 Credits Class Size: 15 to 24

Official Catalog Description: Introduction to forensic science with focus upon the application of scientific methods and techniques to criminal justice and law. Methods specifically relevant to crime detection and analysis will be presented. Laboratory included.

CHE 113: Forensic Science is a 4 credit course that examines how scientific methods are transforming the criminal justice system, as law enforcement and legal prosecution increasingly rely on complex forensic evidence analysis. The course provides students with a foundation for understanding the science behind crime detection and interpreting forensic analysis through a rational, evidence-based approach. Topics include DNA typing, toxicology, fingerprinting, bloodstain analysis, firearms examination, and trace evidence evaluation, supplemented by relevant case studies that illustrate real-world applications. Laboratory exercises offer hands-on experience with techniques commonly employed in forensic investigations, bridging theoretical knowledge with practical skills. Students will gain the scientific literacy necessary to understand how modern forensic science shapes criminal investigations and legal proceedings.

CHE 116 General Chemistry Lecture II

Faculty Liaison: James T. Spencer, Ph. D., Professor, Syracuse University

SUPA Administrator: David Tate, Associate Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 15 to 24

Official Catalog Description: Builds upon the fundamental chemical principles learned in CHE 106 and introduces chemical kinetics and thermodynamics, intermolecular forces, advanced chemical equilibria, oxidation/reduction, and modern materials.

CHE 116 (lecture) & 117 (lab): A four-credit continuation course in general chemistry that combines lecture and laboratory components to build upon foundational chemical principles. The course explores chemical kinetics, thermodynamics, and equilibrium systems while examining reaction rates, energy changes, and factors affecting chemical processes. Students investigate acid-base chemistry, electrochemistry, and solubility equilibria through both theoretical study and hands-on laboratory experiments involving volumetric analysis, calorimetry, and qualitative analysis techniques. The curriculum concludes with applications in nuclear chemistry, organic chemistry fundamentals, and polymer science, providing students with a comprehensive understanding of modern chemical principles and their real-world applications.

Additional Comments: Second course of a two-course sequence in general chemistry. Must complete CHE 106 with a grade of “D” or better. Offered in the spring. Must register for CHE 106/107 and CHE 116/117 in the fall. Co-requisite: CHE 117 (Lab).

CHE 117 General Chemistry Laboratory II

Faculty Liaison: James T. Spencer, Ph. D., Professor, Syracuse University

SUPA Administrator: David Tate, Associate Director, Syracuse University Project Advance

Syracuse University Credit: 1 Credit Class Size: 15 to 24

Official Catalog Description: Noncovalent chemistry, understanding symmetry and chirality, empirical and rational aspects of thermodynamics of dissolving salts equilibrium of buffers and solubility and redox potentials, separation and identification of metal cations.

Additional Comments: Co-requisite: CHE 116 (Lecture).

CLS 105 College Learning Strategies

Faculty Liaison: Janine Nieroda-Madden, Ph. D., Associate Teaching Professor, Syracuse University

SUPA Administrator: Kennia Delafe, Assistant Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 15 to 25

Official Catalog Description: Study and application of learning strategies in the context of lectures, reading, recitations and independent learning situations.

CLS 105: Teaches practical approaches to learning—such as reading, note-taking, exam prep, and task management—through hands-on practice in lectures, readings, and independent study, including online formats. The course emphasizes not just what studnets learn, but how they learn, exploring strategies by examining what they are, how and when to use them, why they work, and how to adapt them. Unique to this course is its focus on stress management and wellness, providing tools to overcome procrastination and thrive academically. By the end, students will be equipped with intentional strategies to maximize your success in college and beyond.

Additional Comments: Must take another college-level or AP course in the same semester as CLS 105 for applied learning.

CPS 155 Introduction to Cyber Security

Faculty Liaison: Ehat Ercanli, Ph. D., Associate Teaching Professor, Syracuse University

SUPA Administrator: Tavish Van Skoik, Assistant Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 10 to 25

Official Catalog Description: Introductory concepts of: network organization and operation security. Differentiate among physical, organizational and personal security. Introduce mechanisms and history of software, hardware and OS security. Significant hands-on laboratory component with demonstrations and projects.

CPS 155: This foundational course introduces students to network security, exploring its functions, vulnerabilities, and defenses against modern threats.
Students will distinguish between physical, organizational, and personal security, investigating software, hardware, and operating system security mechanisms and evolution. CPS 155 focuses on network security and cyberattacks.

Additional Comments: Please contact tvanskoi@syr.edu if interested in this course.

CRS 325 Presentational Speaking

Faculty Liaison: Christopher Perrello, Assistant Teaching Professor, Syracuse University

SUPA Administrator: Christina Parish, Ph.D., Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 10 to 20

Official Catalog Description: Conceptual and practical dimensions of formal presentations in organizational settings. Analysis, adaptation, strategic arrangement and development of ideas, verbal and nonverbal presentational skills.

CRS 325: Presentational Speaking teaches you how to command attention and communicate with confidence in any setting—from class presentations to job interviews to advocating for causes you care about. Through hands-on practice with informative, persuasive, and ceremonial speeches, you'll develop skills that go far beyond the classroom. You'll learn by doing—delivering real speeches, receiving constructive feedback, and building your skills with each presentation. By the end, you'll have mastered a skill that sets you apart: the ability to stand up, articulate your ideas clearly, and genuinely connect with your audience.

Additional Comments: Open to seniors and select juniors.

CSE 283 Introduction to Object-Oriented Design

Faculty Liaison: Ehat Ercanli, Ph. D., Associate Teaching Professor, Syracuse University

SUPA Administrator: Tavish Van Skoik, Assistant Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 10 to 25

Official Catalog Description: Present fundamental software design concepts of functional decomposition and object-oriented design. Use both C++ and Java to implement design projects which will be completed to demonstrate the design concepts.

CSE 283: This course introduces students to professional software engineering principles through functional decomposition and object-oriented design. It teaches core design principles like modularity, reusability, and extensibility. Students gain hands-on experience in C++ and Java through project-based learning. They analyze real-world problems, develop design solutions, and implement complete applications demonstrating industry-standard practices.

Additional Comments: Should have completed ECS 102 or an equivalent C++ course.

DES 203 Design Thinking

Faculty Liaison: James W.R. Fathers, Ph. D., Professor, Syracuse University

SUPA Administrator: Melanie Nappa-Carroll, Ed.D., Associate Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 20 to 25

Official Catalog Description: This course will introduce students to the principles and practices of Design Thinking. We will focus on the application of design strategies to problems in businesses, organizations in a creative and strategic manner.

DES 203: This course introduces the principles and practices of Design Thinking, with a focus on its application to complex societal challenges. Students learn to approach problems empathetically and systemically, using research and analysis to develop clear design briefs. The course highlights that Design Thinking is a cyclical, not linear, process requiring continuous reassessment to ensure solutions meet real user needs. Through ideation, prototyping, and feedback, students refine their ideas into functional models. The skills taught are applicable to diverse fields, including healthcare, transportation, product design, and service design.

EAR 203 Earth System Science

Faculty Liaison: Gregory Hoke, Ph. D., Department Chair, Syracuse University

SUPA Administrator: Kennia Delafe, Assistant Director, Syracuse University Project Advance

Syracuse University Credit: 4 Credits Class Size: 10 to 24

Official Catalog Description: An integrated view of interactions among Earth's systems (lithosphere, biosphere, hydrosphere, atmosphere) and the timescales over which they operate. Topics covered in this course include: plate tectonics, atmospheric circulation, oceanic circulation, the greenhouse effect, the carbon cycle, the origin of the earth and life, and climate.

EAR 203: Explores how Earth's biologic, hydrologic, atmospheric, and geologic systems interact to shape our planet. This integrated approach helps students understand the interconnectedness of Earth's processes and their relevance to today's environmental challenges. The course covers topics such as plate tectonics, climate regulation, energy balance, and global change, while emphasizing the scientific method and critical thinking. Students will develop skills in data analysis, problem-solving, and scientific research, gaining the knowledge needed to evaluate environmental issues and make informed decisions about our planet's future. By the end, students will have a comprehensive view of how Earth operates as a system, from the core to the atmosphere, and be prepared to apply these insights in real-world contexts.

Additional Comments: Typically offered as a full-year course. For seniors and select juniors. May be offered as a one-semester course if additional lab periods are scheduled. Recommended for students with a strong science background who have already successfully completed courses in Calculus, Chemistry, Biology.

ECN 203 Economic Ideas and Issues

Faculty Liaison: Jerry Evensky, Ph.D., Professor Emeritus, Economics Department

SUPA Administrator: Melanie Nappa-Carroll, Ed.D., Associate Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 15 to 25

Official Catalog Description: Foundation of modern Western economic thought. The model economists have built on this foundation as applied to current issues facing individuals and society.

ECN 203: This course offers an introduction to modern Western economic thought, covering key concepts in labor, markets, microeconomics, and macroeconomics. It provides a foundational understanding of how economies function and how individuals and institutions make economic decisions. Students will explore both theoretical frameworks and real-world applications. A basic knowledge of introductory algebra and geometry is recommended for success in the course.

Additional Comments: Not accepting new schools.

ECN 305 The Economics of Personal Finance

Faculty Liaison: Donald H. Dutkowsky, Ph.D., Professor Emeritus, Syracuse University

SUPA Administrator: Christina Parish, Ph.D., Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 10 to 25

Official Catalog Description: This introductory course applies fundamental economic and financial concepts qualitatively to cover aspects of consumer personal finance, including record keeping, banking, saving, borrowing, using credit, investing, insurance, doing taxes, retirement, and end-of-life considerations.

ECN 305: The Economics of Personal Finance equips students with essential financial literacy skills they'll use throughout their lives. This applied economics course teaches practical money management—from budgeting and banking to investing, insurance, and retirement planning—all while developing a "Millionaire Mindset" grounded in responsibility, intentionality, and goal-setting. Students gain real-world tools to make informed financial decisions, build wealth responsibly, and achieve long-term financial security. Whether pursuing any career path, students will leave empowered to navigate the financial world with confidence and purpose.

Additional Comments: Open to seniors and juniors.

ECS 102 Introduction to Computing

Faculty Liaison: Ehat Ercanli, Ph. D., Associate Teaching Professor, Syracuse University

SUPA Administrator: Tavish Van Skoik, Assistant Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 10 to 25

Official Catalog Description: Computing concepts. Principles of programming. Applications of computing concepts to problem solving in engineering and computer science. Laboratory topics will include problem solving projects from various disciplines within the college.

ECS 102: Computational thinking, the foundation of major innovations in AI and sustainable engineering, is introduced in this course. Students learn programming principles and problem-solving strategies essential across engineering, computer science, and beyond. They'll learn to break down complex problems, develop algorithmic solutions, and implement working programs in C++ or Java.

ECS 104 Engineering Computational Tools (PILOT)

Faculty Liaison: Douglas Yung, Ph.D. Associate Teaching Professor, Biomedical Engineering Undergraduate Program Director

SUPA Administrator: Tavish Van Skoik, Assistant Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 10 to 25

Official Catalog Description: This course introduces students to engineering problem-solving through computational tools, electronics, and design. They'll learn Python, CircuitPython, CAD, and physical computing with the Circuit Playground Express. The capstone project integrates coding, electronics, and CAD to solve a real-world problem.

ECS 104: Students explore hands-on engineering problem-solving by working with programming, electronics, and design technologies. Throughout the course, they develop skills in Python and CircuitPython, create models using computer-aided design (CAD), and experiment with physical computing on the Circuit Playground Express. The experience concludes with a final project in which they combine their coding, hardware, and design abilities to address a practical challenge.

Additional Comments: Pilot Course: Please see tvanskoi@syr.edu for information on applying. Co-requisite: MAT 295 (Calculus I) Students must have completed or be enrolled in MAT 295 at the same time.

EEE 370 Introduction to Entrepreneurship and Emerging Enterprises

Faculty Liaison: Mirza Tihic, Ph.D., Assistant Teaching Professor, Syracuse University

SUPA Administrator: Eric Young, Senior Associate Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 10 to 25

Official Catalog Description: Course focuses on what it takes to start, grow, and sustain new ventures. Topics include: understanding entrepreneurs and their teams, evaluating opportunities, creating a venture plan, securing resources. Readings and guest lecturers emphasized.

EEE 370: An introductory course that explores the vital role of entrepreneurs and entrepreneurship in the 21st century global economy, approaching entrepreneurship as both a mindset and a manageable process applicable across diverse organizational settings. The curriculum emphasizes sustainable entrepreneurship throughout career lifecycles and organizational evolution, with primary focus on new venture creation, launch strategies, and success factors. Students engage with an interdisciplinary framework that integrates sociology, psychology, economics, finance, marketing, and human resource management to critically assess and celebrate entrepreneurial phenomena. Through a blend of theory and practice, students develop their ability to apply entrepreneurial principles and frameworks to real-world situations while formulating and defending their own conclusions about key entrepreneurial issues.

ENG 181 Class and Literary Texts

Faculty Liaison: Sean M. Conrey, Ph.D., Associate Director, Syracuse University Project Advance

SUPA Administrator: Sean M. Conrey, Ph.D., Associate Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 10 to 25

Official Catalog Description: Construction and representation of "class," especially as it affects the production and reception of literary and other cultural texts.

ENG 181: Class and Literary Texts examines how social class shapes the production and reception of literary and cultural texts, treating class as a social construction that intersects with other systems of power like race and gender to stratify society and influence identity. Through concepts such as inequality, privilege, capitalism, and labor, students develop critical reading lenses to analyze how texts construct, reflect and reify differences of class, race, and gender. The course strengthens the skills of interpretive reading, close analysis, evidence-based argumentation, and independent inquiry while fostering awareness of students' own positions within systems of power. Coursework includes required theoretical anchor texts, an optional full-length novel or play, shorter written responses to course readings, and four major writing assignments, with grades based on class participation, reading responses, and major assignments.

Additional Comments: ENG 181 is typically paired with WRT 105 as a required full-year course sequence for schools' senior English offering.

ENG 192 Gender and Literary Texts

Faculty Liaison: Carol W.N. Fadda, Ph. D., Associate Professor, Syracuse University

SUPA Administrator: Sean M. Conrey, Ph.D., Associate Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 10 to 25

Official Catalog Description: Construction and representation of "gender," especially as it affects the production and reception of literary and other cultural texts.

ENG 192: Gender & Literary Texts examines how gender is constructed and represented in literary and cultural works, treating gender as a social construction that intersects with other systems of power like race and social class to stratify society and influence identity. Students explore how literature participates in the social reproduction of gender and how gender influences both the creation and interpretation of texts. Through extensive close reading, evidence-based analysis, and independent inquiry, students develop critical skills to analyze how texts construct categories of

difference, including gender, race, and social class. The course emphasizes an intersectional approach to interpretive practice that raises awareness of how meaning-making shapes our understanding of identity and difference in literature.

Additional Comments: ENG 192 is typically paired with WRT 105 as a required full-year course sequence for schools' senior English offering.

FMA 158 Intro to Film and Media Arts: Digital Photography

Faculty Liaisons: Susannah Sayler, Associate Professor, Syracuse University and Doug DuBois, Associate Professor, Syracuse University

SUPA Administrator: Melanie Nappa-Carroll, Ed.D., Associate Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 20 to 25

Official Catalog Description: This course introduces the basic skills required in digital photography: shooting camera RAW files; adjusting images in photoshop and making inkjet prints. In addition, we will work with flash and strategies to deal with a variety of lighting situations.

FMA 158: This introductory course examines how contemporary artists use photography to explore and reflect on modern life. It presents various artistic approaches to photography as tools for description, critique, and interpretation. Students use digital cameras to experiment with techniques and create original work.

FRE 201 French III

Faculty Liaison: Christa Wirth, French Instructor, Syracuse University

SUPA Administrator: Kennia Delafe, Assistant Director, Syracuse University Project Advance

Syracuse University Credit: 4 Credits Class Size: 10 to 20

Official Catalog Description: Continuing proficiency-based course which refines and expands previously acquired linguistic skills in culturally authentic contexts. Activities are conducted in French. Students cannot enroll in FRE 201 after earning credit for FRE 202 or higher.

FRE 201: An intermediate course designed to strengthen students speaking, listening, reading, and writing skills while deepening your understanding of Francophone cultures. Students will review essential grammar, build conversational confidence, and engage with authentic texts. By the end of the course, studnets will be able to describe complex relationships, narrate events in multiple tenses, draw cultural connections, and communicate effectively at a mid-intermediate level in both written and spoken French.

Additional Comments: This is a full-year course. Open to seniors and juniors by petition. Students are expected to have completed a minimum of four French courses before enrolling in this course.

HEB 101 Hebrew I

Faculty Liaison: Michal Downie, Hebrew Instructor, Syracuse University

SUPA Administrator: Kennia Delafe, Assistant Director, Syracuse University Project Advance

Syracuse University Credit: 4 Credits Class Size: 10 to 20

Official Catalog Description: Introductory proficiency-based course which prepares students to understand, speak, read, and write in culturally authentic contexts. Activities are conducted in Hebrew. No prior experience or admission by placement testing.

HEB 101: A beginner-level, course designed for studnets with little or no prior experience in Hebrew. This proficiency-based course develops listening, speaking, reading, writing, and cultural understanding, introducing students to the Modern Hebrew alphabet and script, and fostering curiosity about Israeli and Jewish culture. Students will learn to read and write in Hebrew, recognize key grammatical structures, and communicate in everyday situations relevant to life in Israel and the university. The course emphasizes practical language skills, cultural context, and the history of Hebrew's evolution into a modern spoken language. By the end, students will be able to understand, speak, read, and write at a novice-high level, preparing them for further study in Hebrew and fulfilling language requirements for various academic programs.

Additional Comments: This is a full-year course. Open to juniors and seniors. No petition is requeried.

HFS 202 Development of Children

Faculty Liaison: Matthew Mulvaney, Ph.D., Undergraduate Program Director and Associate Professor, Syracuse University

SUPA Administrator: Eric Young, Senior Associate Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 10 to 20

Official Catalog Description: Principles and patterns of child development. Influence of biological and experiential factors. Extra-familial and intra-familial relationships as they influence child development. Fieldwork or equivalent required.

HFS 202: The Development of Children, provides a comprehensive overview of developmental principles from infancy through youth, examining the biological, physical, cognitive, language, social, and personality factors that contribute to optimal child development. The curriculum integrates developmental theories, research methodology, and developmental milestones while exploring how societal, cultural, and contextual influences—including families, peers, and media—shape children's growth and the development of self-concept, gender roles, and moral behavior. Students gain practical skills by applying classroom knowledge to real-world settings through tailored exercises and written assignments, preparing them for professional contexts and certifications such as the Child Development Associate (CDA) credential. Through quizzes and applied experiences, students develop both theoretical understanding and practical competencies essential for working with children across diverse developmental stages and environments.

HST 101 American History to 1865

Faculty Liaison: Mark Schmeller, Ph. D., Associate Professor, Syracuse University

SUPA Administrator: Melanie Nappa-Carroll, Ed.D., Associate Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 15 to 25

Official Catalog Description: Founding and development of institutions. The Revolution and the new nation. Problems of growth and sectionalism. Challenge to the union.

HST 101: This course surveys U.S. history from 1492 to 1865, focusing on major developments from European colonization through the Civil War. It explores four key themes: global convergence through trade and exploration; the influence of Enlightenment ideals and technological progress; the rise of revolutions and modern nation-states; and the evolution from slavery to free labor. Students will engage with lectures, readings, films, and discussions to understand history as a way of thinking, not just memorization. The course emphasizes interpreting evidence, constructing arguments, and recognizing the relevance of historical understanding to active citizenship.

Additional Comments: HST 101 is offered in the fall as part of a two-course sequence. Must register for both HST 101 and HST 102 in the fall semester.

HST 102 American History Since 1865

Faculty Liaison: Mark Schmeller, Ph. D., Associate Professor, Syracuse University

SUPA Administrator: Melanie Nappa-Carroll, Ed.D., Associate Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 15 to 25

Official Catalog Description: Reconstruction. Industrialization and its effects. Emergence as a world power. Economic and social problems, reforms. Global war and global responsibilities.

HST 102: This course examines pivotal themes in U.S. history from the post-Civil War era to the present, concentrating on how power, identity, and innovation have shaped the nation. It examines the unresolved tensions around liberty, democracy, and regional divides after the Civil War, alongside America's growing role in global conflicts and imperial expansion. The course also addresses ongoing struggles for racial and gender equality, highlighting the resistance to a more inclusive society. Finally, it considers how rapid advancements in science, technology, and media transformed everyday life and redefined modern American identity and power.

Additional Comments: HST 102 is offered in the spring as part of a two-course sequence. Must register for both HST 101 and HST 102 in the fall semester.

IST 256 Introduction to Python for the Information Profession

Faculty Liaison: Michael Fudge, DPS, Professor of Practice, Syracuse University

SUPA Administrator: Tavish Van Skoik, Assistant Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 10 to 25

Official Catalog Description: Computational literacy and learning to code are critical skills of the 21st century. Students are introduced to Python programming language with emphasis on practical applications relevant to everyday lives and common within the information field.

Additional Comments: Not accepting applications at this time. Please contact tvanskoi@syr.edu if interested in this course.

IST 263 Introduction to Front-End Web Development

Faculty Liaison: Laurie Ferger, Assistant Teaching Professor, Syracuse University

SUPA Administrator: Tavish Van Skoik, Assistant Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 10 to 25

Official Catalog Description: Learn to create a website from scratch with HTML, CSS and JavaScript. Topics like responding to different screen sizes, accessibility and layout will be covered. We also examine the project management side of the web with wireframes, site maps, copy documents, and more.

IST 263: This hands-on course teaches students to build professional, responsive websites from the ground up using HTML, CSS, and JavaScript. Students will master both the technical and strategic sides of web development. This course pairs well with DES 203, EEE 370, MAR 301. Designed for students with no prior web development experience.

IST 323 Introduction to Information Security

Faculty Liaison: Joon S. Park, Ph. D., Professor, Syracuse University

SUPA Administrator: Tavish Van Skoik, Assistant Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 10 to 25

Official Catalog Description: Basic concepts and technologies of information security, including security properties, vulnerabilities, cryptography, security policies, access control, authentication, firewalls, wireless security, internet security protocols, real life cases, hands on labs, and other related topics.

IST 323: Networks are critical infrastructure (as explored in CPS 155), but information security protects data, systems, and people across digital and physical contexts. This course examines security from the iSchool perspective, focusing on policies, authentication, cryptography, and organizational security posture.
Students will implement encryption, configure authentication systems, analyze security protocols, and evaluate real-world security incidents from technical and organizational perspectives through customized online laboratory exercises. IST 323 covers the broader information security landscape including cryptography, authentication, policies, and organizational security management.

Additional Comments: Custom online lab environment required.

IST 387 Introduction to Applied Data Science

Faculty Liaison: Preeti Jagadev, Ph. D., Assistant Teaching Professor, Syracuse University

SUPA Administrator: Tavish Van Skoik, Assistant Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 10 to 25

Official Catalog Description: Basic concepts and technologies of information security, including security properties, vulnerabilities, cryptography, security policies, access control, authentication, firewalls, wireless security, internet security protocols, real life cases, hands on labs, and other related topics.

IST 387: Data science literacy transforms raw data into actionable insights. This course introduces students to the data science workflow, from cleaning and transforming data to building predictive models with R, a powerful open-source language for statistical analysis. Students apply data science responsibly to real-world problems across diverse domains. Hands-on projects develop skills in data wrangling, visualization, statistical analysis, and machine learning fundamentals, while critically examining the ethical implications of data-driven decision-making.Designed for students with no prior programming experience.

Additional Comments: R Studio or Positcloud is required.

ITA 201 Italian III

Faculty Liaison: Stefano Giannini, Ph. D., Associate Professor, Syracuse University

SUPA Administrator: Kennia Delafe, Assistant Director, Syracuse University Project Advance

Syracuse University Credit: 4 Credits Class Size: 10 to 20

Official Catalog Description: Continuing proficiency-based course which refines and expands previously acquired linguistic skills in culturally authentic contexts. Activities are conducted in Italian.

ITA 201: Designed to strengthen students speaking, listening, reading, and writing skills in Italian while deepening your understanding of Italian culture. Through engaging with authentic texts, audio, and video, students will build conversational confidence and learn to communicate effectively about everyday topics and cultural themes. The

course emphasizes real-world language use, enabling you to participate in conversations, write short paragraphs, and give brief presentations in Italian. Students will also explore Italian history, geography, and contemporary life, comparing cultural practices and perspectives with your own. By the end, you'll be able to interact comfortably in Italian in a variety of non-complex situations, demonstrating both linguistic proficiency and cultural competence.

Additional Comments: This is a full-year course. Open to seniors and juniors. No petition is required. Students are expected to have completed a minimum of four Italian courses before enrolling in this course.

LAT 201 Latin III

Faculty Liaison: Jeffrey S. Carnes, Ph. D., Associate Professor, Syracuse University

SUPA Administrator: Kennia Delafe, Assistant Director, Syracuse University Project Advance

Syracuse University Credit: 4 Credits Class Size: 10 to 20

Official Catalog Description: Continuing course with review of morphology and syntax and further study of idioms, rhetorical figures, and syntactic peculiarities. Reading and study of representative prose authors.

LAT 201: A four-credit course designed for students with prior Latin experience, focusing on the transition from adapted to unadapted Latin texts. Through review of morphology, syntax, idioms, and rhetorical figures, students will read both medieval and classical Latin, deepening their appreciation for Roman prose style and culture. The course emphasizes reading comprehension, discussion of classical themes, and connections to modern cultures. By the end, students will demonstrate mastery of core Latin grammar, read original texts with support, and engage thoughtfully with the literature's historical and cultural context.

Additional Comments: This is a full-year course.

LAT 310 Latin Prose Authors

Faculty Liaison: Jeffrey S. Carnes, Ph. D., Associate Professor, Syracuse University

SUPA Administrator: Kennia Delafe, Assistant Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 10 to 20

Official Catalog Description: Readings from selected authors. Review of grammar and syntax.

LAT 310: Continues to build advanced Latin skills through the study of Catullus and other selected Roman authors, with readings chosen in collaboration with instructors. The course explores the history of the late Republic and Early Empire, featuring works such as Sallust's De Catilinae Coniuratione and Cicero's Catilinarian Orations. Students will engage in translation, sight-reading, and analysis of prose, deepening their understanding of Latin literature and Roman historical context. Required texts are planned with Syracuse University faculty.

Additional Comments: May be offered as a one-semester course. It is suggested to link LAT 310 with LAT 320 after students complete LAT 210.

LAT 320 Latin Poets

Faculty Liaison: Jeffrey S. Carnes, Ph. D., Associate Professor, Syracuse University

SUPA Administrator: Kennia Delafe, Assistant Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 10 to 20

Official Catalog Description: Readings from selected Latin poets. Review of grammar and syntax. Latin metrics and prosody.

LAT 320: Focuses on developing advanced Latin reading and analytical skills through the study of poetry and prose. Students will read selections from Vergil's Aeneid and Catullus, then move to prose by Cicero and Apuleius, with additional authors introduced for sight-reading. The course emphasizes translation, analysis of figures of speech, and scansion of dactylic hexameter. Students will translate 60-100 lines of Latin per week and engage in class discussions and written analysis, deepening their appreciation for Latin literature and culture.

Additional Comments: May be offered as a one-semester course. It is suggested to link LAT 310 with LAT 320 after students complete LAT 210.

MAR 301 Essentials of Marketing

Faculty Liaison: Gerard Athaide, Ph. D., Adjunct Faculty, Syracuse University

SUPA Administrator: Eric Young, Senior Associate Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 10 to 25

Official Catalog Description: Principles of marketing as a major business function and social process. Analysis of marketing forces. Marketing opportunities. Determination of price, product, distribution , promotion and organizational policies required.

MAR 301: An introductory marketing course that develops students' understanding of how companies use marketing frameworks to create value for customers, shareholders, and employees through strategic decision-making. The curriculum covers essential marketing concepts and terminology, consumer purchase behavior analysis, and the integrated marketing mix (Product, Promotion, Pricing, and Place) as tools for building competitive advantage. Students gain both theoretical knowledge and practical insights into marketing's impact on business and society through diverse pedagogical approaches including lectures, class discussions, hands-on exercises, and sharing real-world customer experiences. By course completion, students will be able to analyze consumer decision-making processes, recognize how marketing strategies influence behavior, and understand the philosophy and process underlying effective marketing practice.

MAT 221 Elementary Probability and Statistics I

Faculty Liaison: Thomas T. John, Ph. D., Assistant Teaching Professor, Syracuse University

SUPA Administrator: Tavish Van Skoik, Assistant Director, Syracuse University Project Advance

Syracuse University Credit: 4 Credits Class Size: 10 to 25

Official Catalog Description: First of a two-course sequence. For students in fields that emphasize quantitative methods. Probability, design of experiments, sampling theory, introduction of computers for data management, evaluation of models, and estimation of parameters.

MAT 221: Introduces students to the foundational principles of probability and statistics, covering descriptive statistics, data collection methods, probability models, random variables, and the connection between probability and statistical inference. This course prepares students for MAT 222, which expands these foundations into a broad set of inferential techniques used to draw meaningful conclusions from data.

Additional Comments: Can be offered without MAT 222; contact program administrator for details.

MAT 222 Elementary Probability and Statistics II

Faculty Liaison: Thomas T. John, Ph. D., Assistant Teaching Professor, Syracuse University

SUPA Administrator: Tavish Van Skoik, Assistant Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 10 to 25

Official Catalog Description: Continuation of MAT 221. Further methods of statistical analysis emphasizing statistical reasoning and data analysis using statistical software. Basic concepts of hypothesis testing, estimation and confidence intervals, t-tests and chi-square tests, linear regression, analysis of variance.

MAT 222: Students learn confidence intervals, significance testing, inference for distributions and proportions, regression methods, and one- and two-way ANOVA. The curriculum emphasizes both conceptual understanding and applied analysis, culminating in a team-based data analysis project. Together, the sequence equips students with the quantitative tools and analytical skills essential for data-driven fields.

Additional Comments: Must have D or better in MAT 221 to be eligible; must register for MAT 221 in Fall semester.

MAT 295 Calculus I

Faculty Liaison: Pawel Grzegrzolka, Ph. D., Assistant Teaching Professor, Syracuse University

SUPA Administrator: Tavish Van Skoik, Assistant Director, Syracuse University Project Advance

Syracuse University Credit: 4 Credits Class Size: 10 to 25

Official Catalog Description: Limits, continuity, derivatives, related rates, maxima and minima of functions, optimization problems, L'Hospital's Rule, integration, the Fundamental Theorem of Calculus, integration by substitution. For science majors.

MAT 295: Calculus, the mathematics of change, is essential for understanding planetary motion, population dynamics, and optimization in engineering. This rigorous first course is designed for students in mathematics, physical sciences, engineering, or other technical fields requiring deep quantitative fluency. Students master foundational concepts like limits, continuity, differentiation, and integration, applying them to solve real problems from physics, engineering, and the sciences. Curve sketching develops geometric intuition, while applications span optimization, related rates, motion analysis, and area calculations.

Additional Comments: Students should possess Algebra competency or pre-calculus.

MAT 296 Calculus II

Faculty Liaison: Duane T. Graysay, Ph. D., Associate Professor, Syracuse University

SUPA Administrator: Tavish Van Skoik, Assistant Director, Syracuse University Project Advance

Syracuse University Credit: 4 Credits Class Size: 10 to 25

Official Catalog Description: Applications of the definite integral, integration by parts, partial fractions, trigonometric substitutions, improper integrals, series, power series, parametric equations, polar coordinates.

MAT 296: Expands students' understanding of fundamental calculus concepts. The course develops the calculus of exponential, logarithmic, and inverse trigonometric functions while introducing differential equations, particularly those modeling growth and decay. Students learn a wide range of integration techniques, explore improper integrals, and work with polar coordinates and parametric curves. A significant portion of the course focuses on infinite sequences and series, including convergence tests, power series, and Taylor expansions. By the end, students gain the analytical tools necessary for advanced study in mathematics and its applications across the sciences and engineering.

Additional Comments: Must pass MAT 295 with a D or better or have a 4 or better on the AP, AB Calculus exam.

MAT 397 Calculus III

Faculty Liaison: Dan Zacharia, Ph. D., Professor Emeritus, Syracuse University

SUPA Administrator: Tavish Van Skoik, Assistant Director, Syracuse University Project Advance

Syracuse University Credit: 4 Credits Class Size: 10 to 25

Official Catalog Description: Vectors and geometry of space, vector functions, functions of more than one variable, partial derivatives, multiple integrals, line and surface integrals, Green's, Stokes', and Divergence Theorems.

MAT 397: This course completes the calculus sequence by teaching techniques for analyzing functions of multiple variables, essential for modeling electromagnetic fields, fluid flow, heat distribution, and other physics and engineering phenomena. Students work with vectors in three-dimensional space, analyze motion along curves, optimize functions of several variables, and evaluate integrals over regions and surfaces. The course culminates in vector calculus, unifying concepts through fundamental theorems connecting different types of integrals.

Additional Comments: Must pass MAT 296 with a D or better or have a 4 or better on the AP, BC Calculus exam or have a qualifying score on the department exam (MAT 295 + MAT 296).

MAT 414 Introduction to Ordinary Differential Equations

Faculty Liaison: Dan Zacharia, Ph. D., Professor Emeritus, Syracuse University

SUPA Administrator: Tavish Van Skoik, Assistant Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 10 to 25

Official Catalog Description: First order differential equations. Second order linear differential equations. Power series solutions. Bessel's equations, Laplace transforms. Systems of first order differential equations. Applications.

MAT 414: Differential equations describe how quantities change over time, from modeling spring oscillations to predicting population dynamics and analyzing electrical circuits. This course introduces essential mathematical techniques for science and engineering applications where rates of change govern system behavior. Students master analytical and qualitative methods for solving first-order equations, second-order linear systems, and systems of equations. Advanced techniques like power series solutions, Laplace transforms, and special functions extend problem-solving capabilities.

Additional Comments: MAT 296 (Calculus II) with grade of D or better AND MAT 397 (Calculus III) with grade of D or better, OR AP Calculus BC score of 4 or 5 AND MAT 397 with D or better.

PHY 101 Major Concepts of Physics I

Faculty Liaison: Carl Rosenzweig, Ph. D., Professor Emeritus, Syracuse University

SUPA Administrator: Eric Young, Senior Associate Director, Syracuse University Project Advance

Syracuse University Credit: 4 Credits Class Size: 10 to 20

Official Catalog Description: Explores the fundamental laws which govern the universe with emphasis on the concept of energy as a unifying principle. No science prerequisites. Knowledge of elementary algebra required. Includes Laboratory.

PHY 101 & 102: A two-semester, algebra-based introductory physics sequence at Syracuse University designed for health professionals and students not requiring calculus-based physics, combining traditional lecture instruction with hands-on laboratory work that comprises 25% of the course grade. The first semester (PHY 101) covers fundamental mechanics topics including kinematics, Newton's Laws, energy, momentum, rotational motion, and kinetic theory, while the second semester (PHY 102) explores electricity, magnetism, electromagnetic waves, optics, and introductory modern physics. Throughout both courses, students develop strong problem-solving skills and conceptual understanding of physical principles through comprehensive examinations and regular laboratory exercises. This sequence provides essential physics knowledge and analytical skills necessary for careers in healthcare and other applied fields while emphasizing both theoretical understanding and practical application.

Additional Comments: Includes lab. Must register for both PHY 101 and PHY 102 in the fall.

PHY 102 Major Concepts of Physics II

Faculty Liaison: Carl Rosenzweig, Ph. D., Professor Emeritus, Syracuse University

SUPA Administrator: Eric Young, Senior Associate Director, Syracuse University Project Advance

Syracuse University Credit: 4 Credits Class Size: 10 to 20

Official Catalog Description: Explores the fundamental laws which govern the universe. Presents overview of basic ideas and contemporary research in physics. No science prerequisites. Knowledge of elementary algebra required. Includes Laboratory.

Additional Comments: Includes lab. Must register for both PHY 101 and PHY 102 in the fall. Must complete PHY 101 with a grade of "D" or better.

PHY 211 General Physics I

Faculty Liaison: Carl Rosenzweig, Ph. D., Professor Emeritus, Syracuse University

SUPA Administrator: Eric Young, Senior Associate Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 10 to 20

Official Catalog Description: First half of a two semester introduction to classical physics including mechanics and thermal physics. Uses calculus. Knowledge of plane trigonometry required.

PHY 211: Introduces students to the foundational principles of mechanics, including kinematics, forces, motion in one and two dimensions, and rotational dynamics. The course develops students' ability to describe and analyze physical motion using core laws of physics. Each lecture course is paired with its respective laboratory (PHY 221 and PHY 222), where students reinforce concepts through hands-on experimentation and strengthen essential laboratory skills. Together, these courses provide a comprehensive grounding in the fundamental areas of classical physics.
Additional Comments: First half of a two-semester introduction to classical physics including mechanics and thermal physics. Uses calculus. Knowledge of plane trigonometry required. (221 is required 1 credit lab)

PHY 221 General Physics Laboratory I

Faculty Liaison: Carl Rosenzweig, Ph. D., Professor Emeritus, Syracuse University

SUPA Administrator: Eric Young, Senior Associate Director, Syracuse University Project Advance

Syracuse University Credit: 1 Credit Class Size: 10 to 20

Official Catalog Description: Techniques of laboratory work: treatment of random errors, graphical representation of data. Experimental demonstration of principles of mechanics, thermodynamics, and waves (of vector forces, conservation of momentum and energy, thermal properties of gases).

Additional Comments: (221 is required 1 credit lab)

PHY 212 General Physics II

Faculty Liaison: Carl Rosenzweig, Ph. D., Professor Emeritus, Syracuse University

SUPA Administrator: Eric Young, Senior Associate Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 10 to 20

Official Catalog Description: Second half of a two semester introduction to classical physics including electricity, magnetism and light.

PHY 212: Continues the sequence with an exploration of electricity, magnetism, and their unification in electromagnetism, emphasizing both conceptual understanding and quantitative problem-solving. Each lecture course is paired with its respective laboratory (PHY 221 and PHY 222), where students reinforce concepts through hands-on experimentation and strengthen essential laboratory skills. Together, these courses provide a comprehensive grounding in the fundamental areas of classical physics.

Additional Comments: Second half of a two-semester introduction to classical physics including mechanics and thermal physics. Uses calculus. Knowledge of plane trigonometry required. (222 is required 1 credit lab). Must complete PHY 211 with a grade of "D" or better.

PHY 222 General Physics Laboratory II

Faculty Liaison: Carl Rosenzweig, Ph. D., Professor Emeritus, Syracuse University

SUPA Administrator: Eric Young, Senior Associate Director, Syracuse University Project Advance

Syracuse University Credit: 1 Credit Class Size: 10 to 20

Official Catalog Description: Experimental study of principles of electromagnetism and their application in electrical circuits. Use of electronic instruments, such as the oscilloscope.

Additional Comments: (222 is required 1 credit lab)

PST 101 An Introduction to the Analysis of Public Policy

Faculty Liaison: Richard Barton, Ph. D., Assistant Teaching Professor, Syracuse University

SUPA Administrator: Eric Young, Senior Associate Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 15 to 25

Official Catalog Description: Develop research and problem solving skills to create government policies that address current social and economic problems facing the United States. Students study policy problems of their choice.

PST 101: Introduction to the Analysis of Public Policy, equips students with essential research, communication, and decision-making skills necessary for effective citizenship and professional careers in public policy contexts. The curriculum develops applied social science competencies through five structured modules that progress from basic policy analysis concepts through information acquisition, policy formulation, evaluation, and implementation strategies. Students gain practical experience by analyzing current newspaper articles on local, state, and federal policies, while selecting and developing their own policy proposals complete with benefit-cost analysis, impact

forecasting, and political implementation strategies. Through hands-on engagement with data analysis tools including graphs, tables, statistics, surveys, and collaborative teamwork, students learn to define policy issues, communicate findings effectively, and make informed decisions as citizens, workers, and consumers in an increasingly complex policy environment.

PSY 205 Foundations of Human Behavior

Faculty Liaison: Meredith Martin, Ph. D., Associate Teaching Professor, Syracuse University

SUPA Administrator: Sean M. Conrey, Ph.D., Associate Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 10 to 25

Official Catalog Description: Fundamental principles of mental life and human behavior. Significance of psychology in human relationships and self-understanding.

PSY 205: Foundation of Human Behavior is an introductory psychology course that provides a broad overview of the field, with an emphasis on scientific reasoning and the applications of psychological research real-world contexts. Students will build foundational knowledge of psychological theory and methods through readings, lectures, class discussion, and hands-on activities, including active engagement in student-led research. The course emphasizes both information literacy and practical academic skill development, including the application of psychology to improve organization and planning, study techniques, wellness, and oral and written communication skills essential for college success. Assessments include multiple choice and short answer exams, applications activities, reading and evaluating primary source research, and conducting a student-led research project. Wayne Weiten's Psychology Themes and Variations textbook is required.

Additional Comments: Open to seniors and select juniors.

SOC 101 Introduction to Sociology

Faculty Liaison: Andrew S. London, Ph.D., Professor, Syracuse University

SUPA Administrator: Christina Parish, Ph.D., Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 10 to 25

Official Catalog Description: Principal concepts, methods, and findings in sociology. Societal structures, processes, institutions, and social roles from both macro- and microanalytic human behavior perspectives.

SOC 101: Introduction to Sociology invites students to explore the ways in which society shapes how we experience the world around us. Through examining real-world issues like inequality, family dynamics, media influence, and social change, students develop critical thinking skills and learn to see beyond individual experiences to understand larger social patterns and systems. Students will learn to think like social scientists, by engaging with evidence-based, data-informed research and analyses, and to craft sophisticated arguments about contemporary social problems.

Additional Comments: Open to seniors and select juniors.

SPA 201 Spanish III

Faculty Liaison: Elizabeth Juarez-Cummings, Ph. D., Associate Teaching Professor, Syracuse University

SUPA Administrator: Kennia Delafe, Assistant Director, Syracuse University Project Advance

Syracuse University Credit: 4 Credits Class Size: 10 to 20

Official Catalog Description: Continuing proficiency-based course which refines and expands previously acquired linguistic skills in culturally authentic contexts. Activities are conducted in Spanish.

SPA 201: An intermediate, proficiency-based course designed to strengthen students speaking, listening, reading, and writing skills in Spanish while deepening their understanding of Spanish-speaking cultures. Through authentic texts, film, and media, students will build practical vocabulary, refine their grasp of grammar, and develop the ability to communicate effectively in a variety of real-world situations. The course emphasizes creative expression, critical thinking, and cultural awareness, preparing studnets to narrate, describe, support opinions, and interact confidently in Spanish. By the end of the course studnets will be able to engage comfortably in conversations, comprehend diverse materials, and appreciate the cultural richness of the Spanish-speaking world.

Additional Comments: This is a full-year course. Open to seniors and juniors by petition. Students are expected to have completed a minimum of four Spanish courses before enrolling in this course.

SPM 200 Principles of Esports

Faculty Liaison: Joey Gawrysiak, Ph. D., Professor of Practice, Syracuse University

SUPA Administrator: Eric Young, Senior Associate Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 10 to 25

Official Catalog Description: Exploration of a topic (to be determined) not covered by the standard curriculum but of interest to faculty and students in a particular semester.

SPM 200: This course introduces the student to the esports ecosystem including areas such as games, developers, events, leagues, facilities, and history. Students will receive a broad understanding of various areas of esports through lectures and class projects.

SPM 205 Principles and Contemporary Issues in Sport Management

Faculty Liaison: Gina Arlene Pauline, Ed. D, Associate Professor, Syracuse University

SUPA Administrator: Eric Young, Senior Associate Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 10 to 25

Official Catalog Description: Overview of the sport industry through examination of problems and issues faced by contemporary sport managers. Unique characteristics of sport and resulting social and ethical responsibilities of sport managers are discussed using case study method.

SPM 205: Principles and Contemporary Issues in Sport Management is an introductory course offered through Syracuse University's David Falk College of Sport and Human Dynamics that examines fundamental sport management concepts across various industry sectors while addressing contemporary problems and challenges facing sport managers. The curriculum explores the unique characteristics of sport as a business and the resulting social and ethical responsibilities required of sport management professionals in today's dynamic environment. Students develop comprehensive understanding through traditional instructional methods combined with a hands-on project that demonstrates mastery of different sport industry sectors covered throughout the semester. This integrated approach prepares students to navigate the complexities of sport management while fostering critical thinking about ethical decision-making and professional responsibility in the field.

URP 150 Undergraduate Research I

Faculty Liaison: James T. Spencer, Ph. D., Professor, Syracuse University

SUPA Administrator: David Tate, Associate Director, Syracuse University Project Advance

Syracuse University Credit: 4 Credits Class Size: Max 25

Official Catalog Description: Research or other academic work in conjunction with faculty-generated and sponsored research or professional work project as administered through the Undergraduate Research Program.

URP 150: Provides students with comprehensive, mentored experience in scientific research through a multiyear curriculum that progresses from foundational concepts to independent inquiry. Students explore the scientific method, research processes, and communication practices while developing critical thinking skills and scientific literacy through literature analysis, experimental design, and hands-on laboratory work. The program guides participants through formulating research questions and testable hypotheses, executing carefully designed experiments, and effectively presenting their findings through written reports and oral presentations. Offered as URP 150 for juniors and URP 250 for seniors (with many students beginning in their sophomore year), the course emphasizes both the theoretical foundations and practical applications of modern scientific research, preparing motivated students for science-based careers.

Additional Comments: Students often have taken a research centric course in their sophomore year within their high school program, though this is not a requirement.

URP 250 Undergraduate Research Program II

Faculty Liaison: James T. Spencer, Ph. D., Professor, Syracuse University

SUPA Administrator: David Tate, Associate Director, Syracuse University Project Advance

Syracuse University Credit: 4 Credits Class Size: Max 25

Official Catalog Description: Research or other academic work in conjunction with faculty-generated and sponsored research or professional work project as administered through the Undergraduate Research Program.

URP 250: Provides students with comprehensive, mentored experience in scientific research through a multiyear curriculum that progresses from foundational concepts to independent inquiry. Students explore the scientific method, research processes, and communication practices while developing critical thinking skills and scientific literacy through literature analysis, experimental design, and hands-on laboratory work. Offered as URP 150 for juniors and URP 250 for seniors (with many students beginning in their sophomore year), the program emphasizes both theoretical foundations and practical applications of modern scientific research. In URP 250, students focus on reanalysis and refinement as they continue projects toward completion, gaining experience in advanced journal searches, data collection, statistical analysis, and computational tools such as ChatGPT, Python, and R. The course culminates in students completing a significant research project with primary experimental data, presenting findings in a public forum, preparing a publication-ready manuscript, and participating in peer review to provide constructive feedback, thereby preparing motivated students for science-based careers.

Additional Comments: Students must have completed URP 150 course to be eligible. Seniors that have significant research experience or are continuing their research from a previous year with the rigor expected of a credit bearing course but have not yet taken URP 150 may be appropriately placed in URP 250. Contact SUPA course administrator for clarification.

WGS 101 Introduction to Women's and Gender Studies

Faculty Liaisons: Gwendolyn D. Pough, Ph. D., Associate Dean of Strategic Initiatives, Syracuse University; and Dana Olwan, Ph.D, Associate Professor, Syracuse University

SUPA Administrator: Sean M. Conrey, Ph.D., Associate Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 10 to 25

Official Catalog Description: Introduces the interdisciplinary field of women's and gender studies; gender as a social construct shaped by race, social class, sexuality, disability, and nation; and feminist theories of oppression, power, and resistance.

WGS 101: Introduction to Women's and Gender Studies is an interdisciplinary course that introduces students to foundational concepts in women's and gender studies, exploring how gender is constructed, experienced, and expressed across different historical periods and geographical contexts through the lens of power, domination, and patriarchy. Using a critical intersectional feminist approach, the course examines the interconnections between race, class, gender, and sexuality while engaging diverse texts including films, documentaries, music, poetry, and novels. Students develop skills in reading feminist theory, implementing feminist methods in their research, critically analyzing primary and secondary sources, and practicing interpretation skills by reading historical issues, cultural products, and contemporary debates from feminist perspectives. Through collaborative learning, students gain familiarity with multiple forms of feminism and recognize various sites of knowledge production, from conventional academic texts to creative work, activism, and popular culture.

Additional Comments: Open to seniors and select juniors.

WRT 105 Studio 1: Practices of Academic Writing

Faculty Liaison: Jonna Gilfus, Ph. D., Associate Teaching Professor, Syracuse University

SUPA Administrator: Sean M. Conrey, Ph.D., Associate Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 15 to 20

Official Catalog Description: Study and practice of writing processes, including critical reading, collaboration, revision, editing, and the use of technologies. Focuses on the aims, strategies, and conventions of academic prose, especially analysis and argumentation.

WRT 105: Practices of Academic Writing is Syracuse University's required first-year writing course where students join a community of writers to develop as critical readers, writers, and thinkers through various genres including analysis, argument, and researched writing. The course teaches students to develop ideas through deliberate writing choices—from invention and claim-making to sentence-level editing and designing print and digital texts—while understanding how power, history, difference, and community shape every rhetorical context. Students explore the perspectives that inform their own writing positions and those of diverse audiences, recognizing that authentic communication can transform both writer and reader. Through active, collaborative learning, students develop writing skills that extend beyond the classroom to prepare them for effective engagement in the workplace, local community, and as global citizens.

Additional Comments: Maximum 20 students, seniors only; Note: WRT 105 is typically paired with ENG 181 or ENG 192 as a required full-year course sequence for schools' senior English offering.

WRT 114 Writing Culture: Introduction to Creative Nonfiction

Faculty Liaison: Ivy Kleinbart, Professional Writing Instructor, Syracuse University

SUPA Administrator: Sean M. Conrey, Ph.D., Associate Director, Syracuse University Project Advance

Syracuse University Credit: 3 Credits Class Size: 15 to 20

Official Catalog Description: Nonacademic writing; creative nonfiction, memoir, the essay. Students write texts experimenting with style, genre, and subject; read contemporary nonfiction texts by varied authors; attend lectures/readings of visiting writers.

Course Overview: WRT 114: Writing Culture: Introduction to Creative Nonfiction introduces students to creative nonfiction (CNF), a wide genre that explores the tensions between individuals and the world around them through the lens of culture. Students study the structure and focus of diverse texts such as memoir, biography, travel writing, science writing, and literary journalism, and compose their own essays, learning to blend fiction techniques—such as description, scene construction, characterization, and dialogue—with poetic approaches like imagery and metaphor to craft compelling true stories with minimal embellishment. The course emphasizes the relationship between research and creative writing while encouraging students to experiment broadly with voice, style, form, and audience awareness. Through intensive writing workshops, brainstorming activities, freewriting exercises, and structured peer critiques, students develop their craft and reflect on their writing processes with the freedom to pursue diverse topics and perspectives.

Additional Comments: Maximum 20 students, open to seniors and select juniors.

Project Advance

Syracuse University courses in your high school.