International Credit Program at Elmira College
Winter 2026 Course Listing as of 09/18/2025

Course Code	Course Title	Credits	Course Description
ACCT 1060	Principles of Financial Accounting	3	This course introduces fundamental principles and concepts of financial accounting, providing students with a comprehensive understanding of the financial reporting process. Topics covered include the accounting cycle, preparation of financial statements, and analysis of financial information. Students will develop the skills necessary to analyze, interpret, and communicate financial information to support decision-making.
ACCT 2034	Financial Accounting Analysis Conspectus	3	This course introduces the basic understanding of accounting requirements, concepts and principles of financial accounting. Students will learn how to prepare financial reports, evaluate managing financial information records, interpret financial information for economic decisions, accrual accounting principles, financial statement preparation and analysis, assets and liabilities measurement. Students will gain the knowledge and skills necessary to prepare, present, and analyze financial information. In analyzing case studies and practices, students fully appreciate the pervasive impact of accounting as both a technical and a social practice in the real world.
ARTH 1050	Histories of World Art I	3	This course offers a comprehensive survey of artistic movements, architectural styles, and cultural ideas from the Paleolithic era to the Early Renaissance. Through a global lens, students will explore the evolution of art and its significance in shaping societies and civilizations. The course emphasizes critical analysis, contextual understanding, and appreciation of diverse artistic expressions across different regions and periods.
ARTH 1060	The History of Art II	3	Managerial accounting is a foundational course designed to provide students with an understanding of the principles and techniques used in managerial decision-making and performance evaluation. The course focuses on the use of accounting information for planning, controlling, and decision-making within organizations. Topics covered include cost behavior, cost-volume-profit analysis, budgeting, variance analysis, performance measurement, and relevant costing.
ARTH 1230	Objects and Identity	3	This course explores how material culture shapes our understanding of identity and history. Through careful examination of objects, students will learn to analyze their visual characteristics, origins, uses, and the contexts in which they exist. From prehistoric tools to modern technology, we will investigate how objects connect past and present, fostering a critical discourse on the value and interpretation of art and design across cultures and time periods.
ARTH 1350	Fashion History	3	This course provides an overview of the history of Western dress and fashion from the ancient world to the present. Students will examine how costume reflects cultural, social, economic, political, and technological changes across civilizations. The course emphasizes the interrelationship between fashion and identity, as well as the influence of historical styles on modern design.
ARTH 2235	African American Voices in Literature	3	This course serves as an introduction to the rich and diverse tradition of African American literature. Through the exploration of various genres, including poetry, fiction, drama, and nonfiction, students will examine the historical, cultural, and social contexts in which African American literary works were produced. The course aims to foster a critical understanding and appreciation of African American literary voices, themes, and contributions to American literature.
ARTH 3105	Fundamentals of Theatrical Design	3	This course introduces students to the essential principles and practices of theatrical design, focusing on how visual and auditory elements contribute to storytelling in live performance. Students will explore the core areas of scenic, costume, lighting, and sound design, developing an understanding of the design process from concept to execution. Through lectures, case studies, and creative projects, the course emphasizes collaboration, script analysis, research, visual communication, and the integration of design elements to support dramatic action and emotional impact. No prior experience in theatre is required.
BIOL 1244	Exploration to General Biology I	4	This course provides an introduction to the fundamental principles of biology, emphasizing the structure and function of living organisms, cellular processes, genetics, and evolution. Topics include the chemical and molecular basis of life, cell structure and function, metabolism, heredity, and the mechanisms of evolution. The course integrates scientific inquiry, experimental design, and data analysis to develop a foundational understanding of biological systems. This course is designed for students pursuing life sciences and related fields, preparing them for advanced biological studies.
BIOL 3250	Developmental Biology and Physiology	4	This course comprehensively explores the principles of development and comparative physiology. It enables students to deeply study the intricate processes of organism growth, development, and the physiological mechanisms maintaining life, fostering a holistic understanding.

BIOL 3321	Cancer Biology	3	Cancer is a diverse set of diseases driven by genetic and environmental factors, affecting nearly every tissue in the body. This course explores the molecular and cellular basis of cancer, including oncogenes, tumor suppressor genes, signaling pathways, and tumor progression. We will examine experimental models, diagnostic methods, and treatment strategies such as chemotherapy, targeted therapies, and immunotherapies. Clinical aspects, including pathology and ethics in cancer research, will also be discussed.
BUSI 1004	Calculus for Business	3	Calculus for Business is a course designed to provide students with a solid foundation in calculus concepts and their applications in business and economics. The course explores various types of relations and functions, including linear, polynomial, logarithmic, and exponential functions. Additionally, students will delve into the principles of differential calculus for functions of one and two variables, as well as integration techniques, including indefinite and definite integrals. Emphasis will be placed on applying calculus concepts to solve real-world business and economic problems.
BUSI 2621	Business and Commerical Law	3	Designed to help students gain an advanced understanding of legal principles governing corporations and corporate finance, and the regulatory environment that shapes corporate activities and financial markets.
CHEM 2055	Introductory Inorganic Chemistry	4	This course introduces the fundamental principles, theories, and applications of inorganic chemistry. Topics covered include the periodic table, chemical bonding, coordination chemistry, main group and transition metal chemistry, solid-state chemistry, and the behavior of inorganic compounds. The course emphasizes the foundational knowledge necessary for understanding the properties and reactivity of inorganic substances. (Laboratory)
CHEM 2310	Organic Chemistry I	4	Organic Chemistry I serves as an introduction to the foundational principles of organic chemistry. The course focuses on the structures, properties, and chemical reactivity of carbon atoms in different hybridization states, particularly in alkanes (including cycloalkanes), alkenes, and alkynes. Additionally, various aspects of isomerism in organic compounds and reaction mechanisms (substitution, elimination, and addition) will be covered with an emphasis on electron flow.
CHEM 2320	Organic Chemistry II	4	Organic Chemistry II is the continuation of Organic Chemistry I, focusing on advanced topics in organic chemistry. The course delves into the structure and reactivity of organometallic compounds, radicals, aldehydes, ketones, carboxylic acids and their derivatives, enolates, aromatic systems, amines, heterocyclic compounds, and modern methods and techniques in organic structure elucidation.
COMM 1080	Introduction to Public Speaking	3	This course is designed to develop students' skills in public speaking and to provide a comprehensive overview of the theories and practices that underlie effective communication. The content will be covered include: theory, practice, analysis, and ethics of public speaking. Students will learn how to analyze their audience and tailor their messages accordingly, how to organize their thoughts effectively, and how to do rhetorical choice and use various delivery techniques to engage and persuade their listeners.
COMM 1100	Introduction to Media Studies	3	This course offers a comprehensive introduction to media's role, function, and impact in contemporary society. Students explore print, broadcast, digital, and social media, analyzing their influence on culture, politics, economics, and daily life. Through theoretical frameworks, case studies, and hands-on projects, the course fosters critical thinking and media literacy, equipping students to navigate and understand the complexities of the modern media landscape.
COMM 2200	Theory of Communication	3	This course is designed to explore the fundamental principles and theoretical frameworks of communication across various contexts. It aims to equip students with the knowledge and skills necessary to navigate diverse communication situations in both personal and professional settings. Students will examine key communication models, the role of verbal and nonverbal communication, the dynamics of interpersonal and group interactions, and the influence of media, culture, and technology on communication processes. Special emphasis will be placed on how communication theories apply to organizational settings, public discourse, and cross-cultural interactions. Through critical analysis and practical applications, students will develop a deeper understanding of how communication shapes human interactions and societal structures, enabling them to analyze and enhance their communication styles for more effective collaboration in different social and work environments.
COMM 3203	Women and Media	3	This course delves into the intricate relationship between women and media, exploring portrayal, representation, and participation across platforms. Students analyze media's construction, perpetuation, and challenging of gender norms, stereotypes, and power dynamics. Using theoretical frameworks, case studies, and contemporary examples, intersections of gender, race, class, sexuality, and identity in media representations are examined. The course emphasizes women's roles in media production, consumption, and activism, promoting discussions on media literacy, diversity, and social change.

COMM 3801	Asia-Pacific Media	3	This course explores the dynamic and rapidly evolving media landscapes in the Asia-Pacific region, focusing on how global, regional, and local forces interact to shape media practices, cultures, and identities. Drawing from the key themes in Asia: Cultural Politics in the Global Age by David Birch, Tony Schirato, and Sanjay Srivastava, the course will critically engage with concepts such as modernity, postcoloniality, globalization, and the information age. Through interdisciplinary readings and discussions, students will gain a nuanced understanding of the media's role in shaping regional identities, the public sphere, and socio-cultural dynamics. The course will emphasize the challenges and opportunities presented by globalization, technological advancements, and the interconnectedness of the Asia-Pacific media sphere.
COMP 1305	Computer Programming in Python	3	Computer programming in Python and Problem solving techniques using computer programs; fundamental concepts in computer programming and data science include: data types, functions, modules, classes, and methods; testing and debugging of a program.
COMP 2036	Object Oriented Programming	3	This course serves as an introduction introduction to the principles and practices of object-oriented programming (OOP) using Python as the primary language. Students will explore the foundational concepts of OOP such as classes, objects, encapsulation, inheritance, and polymorphism. The course emphasizes problem-solving through software design and implementation, and introduces real-world applications of OOP including modularity, reusability, and abstraction. Learners will develop both conceptual understanding and practical coding skills, enabling them to build efficient, maintainable, and scalable applications.
COMP 3370	Digital Communications	3	An introduction to the fundamental principles of digital communications. It covers essential topics such as signals and systems, Fourier transforms, power spectral density, and digital modulation techniques. Students will explore signal sampling and digitization, baseband and carrier modulation schemes, and techniques for detecting signals in the presence of noise. The course also delves into transmitter and receiver architectures, and signal-to-noise ratio (SNR). By the end of the course, students will gain a strong theoretical and practical foundation in digital communication systems.
COMP 3410	Computer Organization	3	This course introduces the principles of computer organization and the hardware and software interface. Students will learn the fundamental abstractions of computer systems, instruction set architectures, data path and control design, memory hierarchy, and parallel processing. Emphasis is placed on both theory and practice, with assignments in performance analysis, assembly programming, simulation, and processor design.
COMP 3691	Artificial Intelligence	4	Starting from many practical situations, this course will provide students with the basic concepts and techniques to help students understand artificial intelligence. The course will also cover ethical considerations and real-world applications of artificial intelligence. Students will learn the fundamentals of artificial intelligence, including problem solving, machine learning and natural language processing, AI programming and development. The goal is to provide students with practical hands-on skills to solve AI problems through programming assignments.
COMP 3960	Systems Programming	4	This course provides a comprehensive introduction to systems-level programming in the C language, emphasizing both fundamental and advanced programming concepts in a Unix environment. Students begin by mastering C syntax, data types, control structures, and formatted input/output. Through hands-on computer labs, they progressively learn about arrays, functions, pointers, strings, and preprocessor directives. The course transitions into the design and organization of larger programs using structures, unions, and enumerations, and explores advanced pointer techniques, low-level memory manipulation, and program modularization. Students will also gain familiarity with the Unix system interface, standard C libraries, and best practices for program design and debugging. Throughout the course, emphasis is placed on understanding how C programs are built and executed, writing efficient and maintainable code, and using system-level featu es for performance and reliability. Regular lab sessions reinforce learning and provide practical experience in building, testing, and troubleshooting C programs in a professional development environment.
ECON 1060	Introduction to Microeconomics	3	This course offers students a fundamental understanding of microeconomic principles. It covers supply - demand, consumer behavior, production, and more. Through lectures, readings, discussions, and exercises, students gain analytical tools to grasp microeconomic concepts and real - world economic issues.
ECON 1080	Introduction to Macroeconomics	3	This course comprehensively imparts principles, concepts, and analytical tools of the broader economic system. Covering aggregate demand, national income, and business cycles, it combines theory, real - world cases, and critical thinking to introduce key macroeconomic factors influencing national and global economies.

ECON 3051	Econometrics	3	This course introduces students to the fundamental concepts and techniques of econometrics, focusing on economic applications of statistical methods. Students will learn how to use simple and multiple regression analysis to analyze economic relationships, test hypotheses, and make economic predictions. By the end of the course, students will be able to critically evaluate economic models and apply econometric techniques to real-world economic problems.
ECON 3650	Financial Markets and Institutions	3	Financial Markets and Institutions provide the foundational knowledge necessary for understanding the structure, functions, and operations of financial systems. This course explores various financial instruments, institutions, and regulatory frameworks that govern modern financial markets. Through a blend of theoretical concepts and practical applications, students will develop a comprehensive understanding of how financial markets operate and their crucial role in the economy.
ECON 4200	Global Development Economics	3	This course provides an in-depth analysis of economic development theories, policies, and practices. It explores the factors influencing economic growth and development in low-income countries, as well as the challenges and opportunities they face. Topics covered include poverty, inequality, education, health, agriculture, industrialization, trade, finance, governance, and sustainable development. The course also examines the role of international organizations, policies for promoting inclusive growth, and the evaluation of development interventions.
ECON 4225	Public Economics and Fiscal Policy	3	This course provides an analytical examination of the economics of the public sector, focusing on equity and efficiency as primary criteria for public decision-making. It encompasses a study of public choice theory, expenditure theory, public goods, externalities, public provision of private goods, theory of taxation including tax incidence and tax neutrality, principles of fiscal policy, economic stabilization, government borrowing, and federal-provincial fiscal relationships. The course emphasizes technical proficiency and covers core topics in public economics, incorporating both classical and frontier research through theoretical models and empirical analysis.
ECON 4579	Monetary Economics	3	Introduction to monetary economics. Investigation of money supply, demand, and the quantity theory. Analysis of interest rate determination, central bank policies, and the impact on inflation and economic growth. Exploration of financial market behavior in the context of monetary policies. Examination of policies aiming to stabilize the economy.
ENGL 2155	Writing Social Science Research	3	This course develops students' ability to write clear, persuasive, and research-based work in the social sciences. Students will practice multiple genres, including journal articles, literature reviews, research proposals, policy briefs, and fieldwork reports, while strengthening skills in argumentation, synthesis, data analysis, and revision.Emphasizing the link between strong research and strong prose, the course prepares students to write for both academic and public audiences. Through an independent research project, workshops, and peer review, students will build sustainable writing habits and prepare for graduate study, publication, and professional applications.
FILM 2100	Introduction to Film Studies	3	This course introduces film study, covering fundamental analysis techniques, vocabulary, and methods. Students explore cinema's aesthetics, forms, and techniques. Through screenings and assignments, they study narrative, cinematography, etc., and enhance analytical skills for film meaning comprehension.
GEOG 4120	Climate Change Communication	3	Exploring how climate change is communicated across audiences, institutions, and media, this course delves into the role of messaging in advancing climate policy, ethical considerations, and the intersection of science, politics, and media. Using theoretical frameworks, case studies, and practical strategies, students examine how climate discourse is shaped by individual, institutional, and cultural contexts, fostering skills to engage effectively in climate communication.
MARK 1300	Introduction to Marketing	3	This course introduces the basic principles of marketing, covering key concepts and processes such as customer relationship management, marketing planning, understanding customers and competitors, developing marketing strategies (segmentation and positioning), and marketing programs (products, pricing, channels, communication). The course will discuss strategic-level marketing concepts and specific analytical methods. Additionally, it will cover topics such as ethical issues in marketing, corporate social responsibility, and the impact of technology on marketing.
MATH 2246	Calculus with Analytic Geometry III	3	This course is the third part of a multi-semester sequence in calculus with analytic geometry. It builds on previous calculus courses by introducing advanced concepts in multivariable calculus, vector analysis, and their applications in real-world problems. Topics include vector algebra, vector-valued functions, partial derivatives, multiple integrals, vector fields, and the fundamental theorems of vector calculus. This course is designed for students pursuing mathematics, physics, engineering, or other fields that require a strong foundation in advanced calculus.

MATH 2423	Probability	3	This course offers an overview of probability theory and its applications in various scientific fields.The course covers the mathematical treatment of random events occurring in natural, physical, and social sciences. Topics include mathematical probability axioms, combinatorial analysis, binomial distribution, Conditional probability and independence, Poisson distribution, normal distribution,random variables, probability distributions,moments, sampling distributions, expectations, and limit theorems.
MATH 2501	Abstract Linear Algebra	3	Dive into fundamental concepts like vector spaces, linear transformations, and matrices. Study properties of linear independence, basis, and dimension. Analyze methods for solving systems of linear equations and diagonalization. Explore applications in computer science, physics, and engineering for data analysis and modeling. This course equips students with crucial algebraic tools for advanced mathematical studies.
MATH 2849	Elementary Differential Equations and Laplace Transformations	3	This course is designed to provide a comprehensive introduction to the theory and application of Ordinary Differential Equations (ODEs) with a special focus on solving them using the powerful Laplace Transform. Throughout the course, students will engage in hands-on exercises and computational assignments using mathematical software to solve ODEs and apply the Laplace Transform to various problems. Topics include First order equations, Linear differential equations of higher order, Differential operators, Laplace transforms and more.
MATH 3006	Abstract Algebra	3	This course explores the foundational concepts and structures of abstract algebra, emphasizing integers, sets, groups, and rings. Topics include properties of integers, group theory (with a focus on permutation and cyclic groups), Lagrange's theorem, subgroups, normal subgroups, quotient groups, and the external direct product of groups. Additionally, the course introduces homomorphisms, isomorphisms, rings, and fields. The focus is on understanding these concepts through rigorous proofs and practical applications in mathematics and related fields.
MATH 3010	Regression Analysis	3	Regression Analysis estimates relationships between independent variables and a dependent variable. This course is intended to introduce the basic ideals and models of regression analysis, including its interpretation and implementation in the statistical software package. Topics of simple linear regression, multiple linear regression, least-squares estimation, hypothesis testing, transformations, generalized and weighted least squares, multicollinearity, variable selection and model building, nonlinear regression model will be included.
MATH 3100	Applied Linear Algebra	3	This Applied Linear Algebra course centers on the practical uses of linear algebra. Starting from fundamental concepts, it uncovers their real - world significance and problem - solving techniques. Students study vector spaces, linear equations, eigenvalue problems, orthogonality, least squares, and more. By the end, they're equipped with the skills to apply linear algebraic methods to analyze and resolve real - life issues, bridging theory and practice.
MATH 3418	Linear Optimization Techniques	3	This quantitative course is designed to provide students with a comprehensive understanding of mathematical techniques for optimizing linear objective functions subject to linear equality and inequality constraints. The course covers essential topics such as linear programming modeling, the simplex method and its variants, duality theory, post-optimality analysis, and applications in various fields. Additionally, students will explore relevant software tools to implement and solve linear optimization problems.
MATH 3500	Applied Machine Learning	3	This course introduces students to a wide range of machine learning techniques and tools used in data analysis, predictive modeling, and pattern recognition. The course covers a comprehensive range of topics, such as multivariate linear and multiple regressions, k-nearest neighbors and bootstrap. And it also introduces some typical Statistical Learning methods, including naive Bayes, cross-validation, tree-based methods and so on. Through a combination of theoretical concepts and practical applications, students will gain a solid foundation in machine learning methods.
MATH 4888	Measure Theory and Integration	3	This course is an introductory-level exploration of Fourier analysis, grounded in the theoretical framework of a key textbook. Fourier analysis is a cornerstone of mathematical analysis, bridging abstract measure theory, functional analysis, and concrete applications in signal processing, partial differential equations, and harmonic analysis. The course starts with foundational concepts from real and complex analysis — including Lebesgue measure, integration, and Hilbert space theory—then builds toward core Fourier analysis topics: Fourier series on the unit circle, Fourier transforms on Euclidean space, and their key properties. Students will develop both theoretical rigor and intuitive understanding, using the text to link abstract analysis to Fourier methods. By the end of the course, students will be able to apply Fourier techniques to solve problems in analysis and interpret their relevance in cross-disciplinary contexts.

MGMT 3701	Operations Management	3	This is a comprehensive course designed to provide students with a deep understanding of the concepts,principles, problems, and practices involved in designing, managing, and improving operations in manufacturing and service organizations. The course covers a wide range of topics including operations strategy, project management, quality management, supply chain management, inventory management,and business analytics modules.