Administration of Justice

Division: PATH (Public Safety, Adv. Manufacturing, Transportation, Health & Kinesiology)

Administration of Justice Associate of Arts (AA)

Upon completion of this program, students are able to:

- Be academically prepared for a California Peace Officer Standards and Training Commission basic training academy and prepare for transfer to a four year degree program.
- Compare and contrast the different components and sub-components of the American criminal justice program.
- Interpret criminal law statutes.
- Differentiate between civil law and criminal law.
- Investigate a scenario and create a police report utilizing proper investigative and evidentiary procedures and understand ethical leadership in a law enforcement agency.

Administration of Justice Associate in Science for Transfer (AS-T)

Upon completion of this program, students are able to:

- Be academically prepared for transfer to a four year degree program.
- Explain different components and sub-components of the American criminal justice program
- Interpret criminal law statutes and differentiate between civil law and criminal law.

Modern Policing Associate of Science (AS)

Upon completion of this program, students are able to:

- Analyze the key concepts and theories that shape past and current practices of law enforcement in the criminal justice system.
- Apply ethical reasoning and critical thinking skills to assess law enforcement interactions with multicultural communities and analyze the law's impact on traditionally marginalized or minoritized individuals and communities.
- Identify and articulate the fundamental duties, obligations, and philosophies of a multicultural society, emphasizing the role of social justice in the criminal justice system and the law enforcement profession.

21st Century Policing Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Demonstrate both an understanding and the practical application of the leadership and ethical standards in democratic policing.
- Demonstrate the ability to read, understand, and critically analyze primary documents, scholarly journal articles, and academic texts regarding the geneses and evolution of American policing.
- Describe the major concepts, theoretical perspectives, empirical findings, and evolving strategies of American policing.
- Assume a supervisory leadership position in a state or local law enforcement agency.

Anthropology

Division: BSSL (Business, Social Science, and Learning Resources)

Anthropology Associate in Arts for Transfer (AA-T)

Upon completion of this program, students are able to:

- Describe and discuss differing cultural practices using anthropological theories and terms.
- Describe and discuss the evolution and prehistory of human beings.
- Explain why there is no biological validity to the concept of "race."
- Use the scientific method to test hypotheses and establish empirical facts.

Apprenticeship Construction Laborers

Division: BSSL (Business, Social Science, and Learning Resources)

Norcal Laborers Construction Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Discuss overview of CAL/OSHA regulations.
- Explain the operating procedures for equipment safety.
- Discuss compliance issues with vehicle inspections.

Norcal Laborers LiUNA! Laborers' Construction Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Discuss overview of CAL/OSHA regulations.
- Explain the operating procedures for equipment safety.
- Discuss compliance issues with vehicle inspections.

Norcal Laborers Traffic Control Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Implement CAL/OSHA regulations.
- Describe safety elements of traffic controls.

Apprenticeship Marine Technology

Division: BSSL (Business, Social Science, and Learning Resources)

Marine Technology Boating 101 Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Properly diagnose a marine electrical system.
- Repair common engine issues.
- Perform routine maintenance.

Marine Technology Yachting 101 Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Perform diagnostics on a marine electrical system.
- Perform a cylinder leakdown test.
- Perform an oil change.

Art

Division: A&H (Arts & Humanities

Art: Emphasis in Painting Associate of Arts (AA)

Upon completion of this program, students are able to:

- Apply creative thinking through the production of original artworks.
- Apply the principles of visual design for the communication and expression of ideas.
- Create works of art that synthesize quality technical execution with content and concept.

- Demonstrate technical proficiency in use of art media, tools, processes and technology.

Studio Arts Associate in Arts for Transfer (AA-T)

Upon completion of this program, students are able to:

- Apply the basic principles of observational drawing and how to develop illusionary spatial constructions.
- Demonstrate critical thinking as it applies to critique, evaluation and/or production of works of art.
- Demonstrate knowledge of the science of color perception and how it can be utilized in the creation of works of art.
- Demonstrate the principles and concepts of design.

Art History

Division: A&H (Arts & Humanities)

Art History Associate in Arts for Transfer (AA-T)

Upon completion of this program, students are able to:

- Communicate concepts and ideas effectively through written, oral, and digital media.
- Evaluate the artwork from different cultures and art historical periods.
- Identify and evaluate art historical styles, movements, and concepts.
- Recognize art's relationship to geography, cultural ideologies, and historical periods.
- Research and analyze visual artwork using interdisciplinary theories and methods.

Automotive Technology

Division: PATH (Public Safety, Adv. Manufacturing, Transportation, Health & Kinesiology)

Automotive Alternative Fuels/Hybrid Technology Associate of Science (AS)

Upon completion of this program, students are able to:

- Apply safety procedures relating to alternative fuels and high voltage.
- Diagnose alternative fuel systems.
- Perform high voltage disable procedures.

Automotive Alternative Fuels/Hybrid Technology Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Diagnose alternative fuel systems.
- Perform high voltage disable procedures.
- Apply safety procedures relating to alternative fuels and high voltage.

Automotive Chassis Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Follow safety guidelines while employed in an automotive related job.
- Use automotive knowledge to diagnose various automotive concerns.

Automotive Drivability Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Use automotive knowledge to diagnose various automotive concerns.
- Follow safety guidelines while employed in an automotive related job.

Automotive Electronics Technology Associate of Science (AS)

Upon completion of this program, students are able to:

- Follow safety guidelines while employed in an automotive related job.
- Use automotive knowledge to diagnose various automotive concerns.

PSLOS

Automotive Light Duty Diesel Associate of Science (AS)

Upon completion of this program, students are able to:

- Diagnose electronic diesel systems.
- Repair diesel engine mechanical systems.
- Diagnose and repair diesel turbo systems.

Automotive Light Duty Diesel Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Diagnose electronic diesel systems.
- Repair diesel engine mechanical systems.
- Diagnose and repair diesel turbo systems.

Automotive Master Associate of Science (AS)

Upon completion of this program, students are able to:

- Diagnose engine mechanical issues.
- Diagnose electrical issues.
- Diagnose emission issues.

Automotive Master Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Diagnose engine mechanical issues.
- Diagnose electrical issues.
- Diagnose emission issues.

Automotive Mechanical Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Diagnose engine mechanical issues.
- Measure engine components and compare to specifications.
- Tear down, inspect and reassemble engines.

Automotive Smog Technician Associate of Science (AS)

Upon completion of this program, students are able to:

- Apply for and take the California Smog test.
- Diagnose advanced emission issues using five gas.
- Diagnose high level engine mechanical issues using engine scanners.
- Diagnose high-level engine mechanical issues using engine scanners.

Automotive Smog Technician Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Apply for and take the California Smog test.
- Diagnose emission issues.
- Diagnose engine mechanical issues.

Biological Sciences

Division: STEM (Science, Technology, Engineering & Math

Biology Associate of Arts (AA)

Upon completion of this program, students are able to:

- Explain and apply basic principles and processes of biology at different levels, from the biochemical to the ecological.
- Design, conduct, analyze, and/or report results of investigations and experiments in the laboratory and/or field.
- Be proficient in standard biology lab techniques and lab safety procedures.

Biology Associate in Science for Transfer (AS-T)

Upon completion of this program, students are able to:

- Design, conduct, analyze, and/or report results of investigations and experiments in the laboratory and/or field.

- Explain and apply basic principles and processes of biology at different levels, from the biochemical to the ecological.
- Proficient in standard biology lab techniques and lab safety procedures.

Biology: Allied Health (AS)

Upon completion of this program, students are able to:

- Explain and apply the basic processes of homeostasis in humans from the cellular to the organismal level.
- Conduct, analyze, and report results of experiments.
- Be proficient in standard biology lab techniques and lab safety procedure.

Biology UC Pathway Associate of Science (AS)

Upon completion of this program, students are able to:

- Design, conduct, analyze, and/or report results of investigations and experiments in the laboratory and/or field.
- Explain and apply basic principles and processes of biology at different levels, from the biochemical to the ecological.
- Be proficient in standard biology lab techniques and lab safety procedures.

Biology UC Pathway Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Design, conduct, analyze, and/or report results of investigations and experiments in the laboratory and/or field.
- Explain and apply basic principles and processes of biology at different levels, from the biochemical to the ecological.
- Able to be proficient in standard biology lab techniques and lab safety procedures.

Computational Biology Associate of Arts (AA)

Upon completion of this program, students are able to:

- Demonstrate an understanding of the fundamental concepts in molecular biology, including DNA, genes, proteins and genomes.
- Explain the use of computational techniques to solve biological problems.
- Use online resources such as NCBI (National Center for Biotechnology Information) and bioinformatics applications to research and analyze biological data.

Computational Biology Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Demonstrate an understanding of the fundamental concepts in molecular biology, including DNA, genes, proteins and genomes.
- Explain the use of computational techniques to solve biological problems.
- Use online resources such as NCBI (National Center for Biotechnology Information) and bioinformatics applications to research and analyze biological data.

Business

Division: BSSL (Business, Social Science, and Learning Resources)

Accounting Technician Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Describe the characteristics and personal qualities that are important for an Administrative Medical Assistant and the importance of ethics, customer service and teamwork in the workplace.
- Perform variety of functions in an accounting department including: maintain and update financial records, prepare and analyze financial statements, review bookkeepers' and clerks' work for accuracy and completeness, prepare individual income tax returns containing schedule A, B, C, D and E, maintain cost records and prepare and analyze budgets.

Bookkeeping Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Perform a variety of functions in an accounting department, including; using accounting software to analyze and record financial transactions, analyze payroll transactions, prepare trial balance, file payroll tax returns, prepare and analyze invoices, calculate interest rates, shipping terms and prepare financial statement.

Business Administration Associate of Arts (AA)

Upon completion of this program, students are able to:

- Demonstrate knowledge of business operations, the business organization, business environments, and business procedures.
- Construct a business plan, essential marketing plan, and the basic financial documents needed for a small business.
- Describe the nature and characteristics of successful small businesses.
- Define "Competitive Advantage" and discuss actions a small business should use to achieve it.

Business Administration 2.0 Associate in Science for Transfer (AS-T)

Upon completion of this program, students are able to:

- Compare and contrast ethical standards and best practices of social responsibility to business situations.
- Demonstrate knowledge of business operations, the business organization, business environments, and business procedures.
- Explain the functions of all business operations and identify the resources needed in each area.
- List and explain the factors of production, the external business environments and apply their influence in specific business problems.

Business Entrepreneurship Associate of Arts (AA)

Upon completion of this program, students are able to:

- Construct a business plan, essential marketing plan, and the basic financial documents needed for a small business.
- Define "Competitive Advantage" and discuss actions a small business should use to achieve it.
- Demonstrate knowledge of business operations, the business organization, business environments, and business procedures.
- Describe the nature and characteristics of successful small businesses.

Business Entrepreneurship Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Compare and contrast the impact of the external business environments on small businesses.
- Construct a business plan, essential marketing plan, and basic financial documents for a small business.
- Define and provide concrete examples of the "Competitive Advantage" concept that a small business must achieve in order to succeed.
- Describe the nature and characteristics of successful small business persons.
- Detail key business procedures relevant to a specific problem using appropriate technology.
- Summarize the responsibilities of small business owners in selecting, motivating, training, and supervising employees.

Business Workforce Proficiency Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Apply standard business English to oral and written communications, including grammar, punctuation, mechanics, vocabulary, style, media, and usage.
- Describe the work ethic needed for success in today’s work environment.
- Develop business communications that present information in an organized and concise manner.
- Explain group dynamics as they apply to an individual working effectively within a group and within teams.
- Identify the primary business operations, business organizational options, and business procedures.

Retail Management (WAFC) Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Demonstrate the integration of basic management theories into supervisory and management functions.
- Determine the demand for products and services offered by a firm and identify potential customers.
- Differentiate threshold issues involved in legal, ethical, and social responsibilities of management.
- Identify key business procedures relevant to a specific problem using appropriate technology.
- Integrate basic management theories into supervisor and management functions.
- List current problems related to human behavior in organizations and detail management practices effective in managing those issues.
- List resources and strategies for monitoring trends which help identify the need for new products and services.
- Summarize measures that can be taken by individuals and organizations to correct organizational dysfunctions.

Supervisory Management Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Analyze basic business documents to detect problems within an area of supervision.
- Demonstrate effective strategies for team work, planning, organizing, leading, and controlling human resources.
- Identify appropriate information compilation, reporting, storage and retrieval systems for common business situations.
- List the primary responsibilities of a supervisor in business today.

Chemistry

Division: STEM (Science, Technology, Engineering & Math)

Chemistry Associate of Science (AS)

Upon completion of this program, students are able to:

- Demonstrate proficiency in solving complex problems in and conceptual understanding of General Chemistry as measured by the ACS Full-Year General Chemistry Exam.
- Demonstrate proficiency in solving complex problems in and conceptual understanding of Organic Chemistry as measured by the ACS Full-Year Organic Chemistry Exam.
- Design and conduct laboratory experiments, and analyze and interpret their data.
- Effectively communicate the methods, analysis, results, and conclusions of their experiments.
- Quantitively analyze nature at the atomic scale by applying fundamental chemical concepts, ranging from atomic theory to organic synthesis.
- Skillfully perform experimental measurements, techniques, and protocols, properly use standard laboratory instruments, and adhere to safe laboratory practices.

Chemistry Education Associate of Science (AS)

Upon completion of this program, students are able to:

- Demonstrate proficiency in solving complex problems in and conceptual understanding of General Chemistry as measured by the ACS Full-Year General Chemistry Exam.
- Demonstrate proficiency in solving complex problems in and conceptual understanding of Organic Chemistry as measured by the ACS Full-Year Organic Chemistry Exam.
- Design and conduct laboratory experiments, and analyze and interpret their data.
- Effectively communicate the methods, analysis, results, and conclusions of their experiments.
- Quantitively analyze nature at the atomic scale by applying fundamental chemical concepts, ranging from atomic theory to organic synthesis.
- Skillfully perform experimental measurements, techniques, and protocols, properly use standard laboratory instruments, and adhere to safe laboratory practices.

Communication Studies

Division: A&H (Arts & Humanities)

Communication Studies 2.0 Associate in Arts for Transfer (AA-T)

Upon completion of this program, students are able to:

- Apply ethical communication principles and practices.
- Create and deliver messages appropriate to the audience, purpose, and context.
- Critically analyze messages.
- Describe the Communication discipline and its central questions.
- Employ communication theories, perspectives, principles, and concepts.

- Engage in communication inquiry.
- Utilize communication to embrace difference.

Computer Information Systems

Division: STEM (Science, Technology, Engineering & Math)

Administrative Assistant Associate of Arts (AA)

Upon completion of this program, students are able to:

- Complete business-related documents using the various functions—basic, intermediate, and advanced—of the software programs: Word, Excel, PowerPoint.

Administrative Assistant Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Demonstrate the ability to successfully use basic English language skills (grammar, punctuation, capitalization, etc.) in business documents.
- Create business-related documents using the basic, intermediate, and advanced functions of software programs such as Word, Excel, and PowerPoint.

Administrative Medical Assistant Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Demonstrate an understanding of basic anatomy, physiology, and disease processes of the human body as it relates to patient medical history.
- Describe the characteristics and personal qualities that are important for an Administrative Medical Assistant and the importance of ethics, customer service and teamwork in the workplace.

Cloud Computing Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Host a database and run queries using an interface from a commercial provider and run a file-server service using a provider of their choice.

Computer Applications Software Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Create appropriate business documents including reports, letters, emails, project plans, messages, and websites, and apply standard business English including grammar, punctuation, and mechanics.
- Analyze a business problem and develop a solution using appropriate application software.

Computer Information Systems Associate of Arts (AA)

Upon completion of this program, students are able to:

- Analyze a business problem and develop a solution using appropriate applications software.

Computer Information Technologist Associate of Science (AS)

Upon completion of this program, students are able to:

- Demonstrate a strong foundation of knowledge in computer programming, database design and administration, and computer networking.
- Demonstrate clear, compelling, analytical, and concise writing to professionally describe their programming, database, and networking project and skills.

Data Analytics Certificate of Achievement (CA)

Project Management Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Analyze a business situation and prepare a response using appropriate business documents including reports letters, emails, and project plans that are clear, compelling, analytical, grammatically correct, and concise.
- Develop survey questions to determine client requirements, develop project plans that ensure client satisfaction, and demonstrate clear, concise, and analytical writing.

Web Development Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Create basic web pages that contain text (utilizing different fonts and colors), hyperlinks to other web sites, graphic images and sound.
- Create web pages that incorporate JavaScript controls.

Computer Networking Technology

Division: STEM (Science, Technology, Engineering & Math)

Cybersecurity and Network Administration Associate of Science (AS)

Upon completion of this program, students are able to:

- Design, configure, manage, troubleshoot, and secure networks ethically and efficiently, using the latest concepts, technologies, and techniques.

Cybersecurity Professional Certificate of Achievement (CA)

IT Support Professional Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Achieve the Google IT Support Professional certificate and will be prepared to take the CompTIA A+, Network+, and Security+ certification tests.

Network Support Professional Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Analyze, design and document computer network specifications to meet client needs.
- Demonstrate professional behavior such as working in a team and communicating in a professional manner.
- Install, configure, and manage client and server operating systems.
- Install, configure, and manage computer hardware.
- Configure a LAN with routing, and troubleshoot LAN configuration.
- Configure a WAN with routing, and troubleshoot WAN configuration.

Computer Science

Division: STEM (Science, Technology, Engineering & Math)

Artificial Intelligence Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Analyze a problem, determine which artificial intelligence algorithms are viable and develop an appropriate solution.
- Use existing artificial intelligence and machine learning programming libraries on a data set to create a valid model that justifies their design decisions.

Computer Programming Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Professionally demonstrate the application of their skills in the development and testing of their solution to solve a specific computing project.
- Professionally describe and apply their skills in the design of their solutions as well as alternative technologies or solutions to solve their specific computing project.

Computer Programming for the Web Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Direct computer operations by writing detailed instructions in computer languages.
- Implement interactive web pages using high level programming language instructions to implement specific information internet-based solutions.
- Professionally demonstrate the application of their web development skills in the development of their solution to solve a specific internet-based computer project.

Computer Science Associate of Science (AS)

Upon completion of this program, students are able to:

- Analyze, design, and solve complex computer-based problems using both logical and mathematical methods including the implementation of control and data structures.
- Direct computer operations by writing detailed instructions in computer languages to solve a variety of problems.
- Professionally describe and apply their skills in the design of their complex computer system or algorithm and be able to show how their solution is the most optimal.

Management Information Systems Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Apply their programming skills to solve business related problems in support of both small and medium businesses.

Red Hat Administration Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Apply their programming skills to solve business related problems in support of both small and medium businesses.

Early Care and Education

Division: BSSL (Business, Social Science, and Learning Resources)

Associate Teacher Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Assess children’s development through observation, documentation, reflection and interpretation to guide curriculum and intentional teaching.
- Compare and contrast diverse cultural values, child rearing practices, attitudes towards play and education by developing respectful reciprocal relationships in order to work effectively with children, families, coworkers and community.
- Intentionally design inclusive, culturally and linguistically appropriate curriculum to promote positive development for all young children, based on child development, observation and reflection.
- Synthesize child development research and theories; apply principles with consideration for children's varying characteristics, needs and the multiple interacting influences on children's development.

Child and Adolescent Development Associate in Arts for Transfer (AA-T)

Upon completion of this program, students are able to:

- Assess children’s development through observation, documentation, reflection and interpretation to guide curriculum and intentional teaching.
- Compare and contrast diverse cultural values, child rearing practices, attitudes towards play and education by developing respectful reciprocal relationships in order to work effectively with children, families, coworkers and community.
- Intentionally design inclusive, culturally and linguistically appropriate curriculum to promote positive development for all young children, based on child development, observation and reflection.
- Synthesize child development research and theories; apply principles with consideration for children's varying characteristics, needs and the multiple interacting influences on children's development.

Early Childhood Development Associate of Arts (AA)

Upon completion of this program, students are able to:

- Apply ethical standards of behavior accepted by the profession of early childhood education using ongoing self-reflection to guide practices.
- Assess children's development through observation, documentation, reflection and interpretation to guide curriculum and intentional teaching.
- Compare and contrast diverse cultural values, child rearing practices, attitudes towards play and education by developing respectful reciprocal relationships in order to work effectively with children, families, co-workers and community.
- Demonstrate practices that maintain standards of health, nutrition, and safety in early childhood settings.
- Identify the processes of and contributions to systemic and internalized oppression and privilege. Utilize this information, along with personal reflection, to identify strategies to more effectively educate children in a pluralistic society.
- Intentionally design inclusive, culturally and linguistically appropriate curriculum to promote positive development for all young children, based on child development, observation and reflection.
- Synthesize child development research and theories; apply principles with consideration for children's varying characteristics, needs and the multiple interacting influences on children's development.
- Utilize observation and evaluation processes/tools to apply and implement developmentally appropriate practices in an early care and education setting using knowledge, skills and professional dispositions that promote the development and learning of all young children.

Early Childhood Development Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Apply ethical standards of behavior accepted by the profession of early childhood education using ongoing self-reflection to guide practices.
- Assess children's development through observation, documentation, reflection and interpretation to guide curriculum and intentional teaching.
- Compare and contrast diverse cultural values, child rearing practices, attitudes towards play and education by developing respectful reciprocal relationships in order to work effectively with children, families, co-workers and community.
- Demonstrate practices that maintain standards of health, nutrition, and safety in early childhood settings.
- Identify the processes of and contributions to systemic and internalized oppression and privilege. Utilize this information, along with personal reflection, to identify strategies to more effectively educate children in a pluralistic society.
- Intentionally design inclusive, culturally and linguistically appropriate curriculum to promote positive development for all young children, based on child development, observation and reflection.
- Synthesize child development research and theories; apply principles with consideration for children's varying characteristics, needs and the multiple interacting influences on children's development.
- Utilize observation and evaluation processes/tools to apply and implement developmentally appropriate practices in an early care and education setting using knowledge, skills and professional dispositions that promote the development and learning of all young children.

Early Childhood Education Associate in Science for Transfer (AS-T)

Upon completion of this program, students are able to:

- Apply ethical standards of behavior accepted by the profession of early childhood education using ongoing self-reflection to guide practices.
- Assess children's development through observation, documentation, reflection and interpretation to guide curriculum and intentional teaching.
- Compare and contrast diverse cultural values, child rearing practices, attitudes towards play and education by developing respectful reciprocal relationships in order to work effectively with children, families, co-workers and community.
- Demonstrate practices that maintain standards of health, nutrition, and safety in early childhood settings.
- Intentionally design inclusive, culturally and linguistically appropriate curriculum to promote positive development for all young children, based on child development, observation and reflection.
- Synthesize child development research and theories; apply principles with consideration for children's varying characteristics, needs and the multiple interacting influences on children's development.
- Utilize observation and evaluation processes/tools to apply and implement developmentally appropriate practices in an early care and education setting using knowledge, skills and professional dispositions that promote the development and learning of all young children.

Early Childhood Intervention Associate of Arts (AA)

Upon completion of this program, students are able to:

- Assess children's development through observation, documentation, reflection and interpretation to guide curriculum and intentional teaching.
- Compare and contrast diverse cultural values, child rearing practices, attitudes towards play and education by developing respectful reciprocal relationships in order to work effectively with children, families, co-workers and community.
- Demonstrate practices that maintain standards of health, nutrition, and safety in early childhood settings.
- Identify the processes of and contributions to systemic and internalized oppression and privilege. Utilize this information, along with personal reflection, to identify strategies to more effectively educate children in a pluralistic society.
- Intentionally design inclusive, culturally and linguistically appropriate curriculum to promote positive development for all young children, based on child development, observation and reflection.
- Develop a personal ECE philosophy after reviewing ECE philosophies and program approaches.
- Synthesize child development research and theories; apply principles with consideration for children's varying characteristics, needs and the multiple interacting influences on children's development.
- Utilize observation and evaluation processes/tools to apply and implement developmentally appropriate practices in an early care and education setting using knowledge, skills and professional dispositions that promote the development and learning of all young children.

Early Childhood Intervention Assistant Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Assess children’s development through observation, documentation, reflection and interpretation to guide curriculum and intentional teaching.
- Compare and contrast diverse cultural values, child rearing practices, attitudes towards play and education by developing respectful reciprocal relationships in order to work effectively with children, families, co-workers and community.
- Demonstrate practices that maintain standards of health, nutrition, and safety in early childhood settings.
- Intentionally design inclusive, culturally and linguistically appropriate curriculum to promote positive development for all young children, based on child development, observation and reflection.
- Synthesize child development research and theories; apply principles with consideration for children's varying characteristics, needs and the multiple interacting influences on children's development.
- Utilize observation and evaluation processes/tools to apply and implement developmentally appropriate practices in an early care and education setting using knowledge, skills and professional dispositions that promote the development and learning of all young children.

Elementary Teacher Education Associate in Arts for Transfer (AA-T)

Upon completion of this program, students are able to:

- Demonstrate practices that promote and maintain early Elementary Education teaching standards.
- Successfully transition to a CSU Elementary Education Program by completing required coursework and practicum field work.
- Synthesize child development and education research and theories to support the development and learning modalities of children.

Economics

Division: BSSL (Business, Social Science, and Learning Resources)

Economics Associate in Arts for Transfer (AA-T)

Upon completion of this program, students are able to:

- Explain how market forces of supply and demand lead to efficient allocation of goods, services and factors of production.
- Use key economic indicators, such as GDP, CPI and Unemployment Rate, to analyze the economy and explain how monetary and fiscal policies affect short-term fluctuations of economic activity.
- Use marginal analysis to explain how individuals in the economy make their production and purchasing decisions.

Emergency Medical Services

Division: PATH (Public Safety, Adv. Manufacturing, Transportation, Health & Kinesiology)

Emergency Medical Responder Certificate of Accomplishment (CE)

Upon completion of this program, students are able to:

- Competent as an entry-level Emergency Medical Responder in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains with exit points at the Emergency Medical Responder levels and certified to provide Basic Life Support CPR.
- Be competent and prepared for employment as a Lifeguard, Police Officer, and/or Search and Rescue Squad member.
- Be prepared to become an Emergency Medical Responder (EMR) through registration with the National Registry of EMT's.

Emergency Medical Sciences Associate of Science (AS)

Upon completion of this program, students are able to:

- Use critical thinking skills to confidently and effectively manage emergency situations.
- Select and administer the appropriate drug for an identified emergent condition according to local and national protocol and evaluate the patient's response to the therapy.
- Establish a therapeutic and culturally appropriate patient relationship using professional communication.

Emergency Medical Technologies Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Function at the California State certified level of EMT.
- Become a Nationally Registered Emergency Medical Technician (NREMT).

Paramedic Sciences Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Establish a therapeutic and culturally appropriate patient relationship using professional communication.
- Select and administer the appropriate drug for an identified emergent condition according to local and national protocol and evaluate the patients response to the therapy.
- Use critical thinking skills to confidently and effectively manage emergency situations.

Engineering

Division: STEM (Science, Technology, Engineering & Math)

Civil/Mechanical Engineering Associate of Science (AS)

Upon completion of this program, students are able to:

- Apply fundamental principles from mathematics, science and engineering to solve a civil/mechanical engineering-related problem.
- Apply fundamental principles from mathematics, science and engineering to solve a civil/mechanical engineering-related problem.
- Set up appropriate laboratory equipment, collect and analyze civil/mechanical data, draw conclusions, and clearly communicate results.
- Use a variety of technological tools to solve civil/mechanical engineering problems.

Civil/Mechanical Engineering Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Apply fundamental principles from mathematics, science and engineering to solve an civil/mechanical engineering-related problem.

- Set up appropriate laboratory equipment, collect and analyze civil/mechanical data, draw conclusions, and clearly communicate results.
- Use a variety of technological tools to solve civil/mechanical engineering problems.

Electrical Engineering Associate of Science (AS)

Upon completion of this program, students are able to:

- Apply fundamental principles from mathematics, science and engineering to solve an electrical engineering-related problem.
- Set up appropriate laboratory equipment, collect and analyze electrical data, draw conclusions, and clearly communicate results.
- Students are able to use a variety of technological tools to solve electrical engineering problems.

Electrical Engineering Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Apply fundamental principles from mathematics, science and engineering to solve an electrical engineering-related problem.
- Set up appropriate laboratory equipment, collect and analyze electrical data, draw conclusions, and clearly communicate results.
- Use a variety of technological tools to solve electrical engineering problems.

Electrical Engineering UC Pathway Associate of Science (AS)

Upon completion of this program, students are able to:

- Apply fundamental principles from mathematics, science and engineering to solve an electrical engineering-related problem.
- Set up appropriate laboratory equipment, collect and analyze electrical data, draw conclusions, and clearly communicate results.
- Use a variety of technological tools to solve electrical engineering problems.

Electrical Engineering UC Pathway Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Apply fundamental principles from mathematics, science and engineering to solve an electrical engineering-related problem.
- Set up appropriate laboratory equipment, collect and analyze electrical data, draw conclusions, and clearly communicate results.
- Use a variety of technological tools to solve electrical engineering problems.

Engineering Associate of Science (AS)

Upon completion of this program, students are able to:

- Apply fundamental principles from mathematics, science and engineering to solve an engineering-related problem.
- Set up appropriate laboratory equipment, collect and analyze data, draw conclusions, and clearly communicate results.
- Use a variety of technological tools to solve engineering problems.

Engineering Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Apply fundamental principles from mathematics, science and engineering to solve an engineering-related problem.
- Set up appropriate laboratory equipment, collect and analyze data, draw conclusions, and clearly communicate results.
- Use a variety of technological tools to solve engineering problems.

Engineering Technology Associate of Science (AS)

Upon completion of this program, students are able to:

- Set up appropriate laboratory equipment, collect and analyze data, draw conclusions, and clearly communicate results.
- Use a variety of technological tools to solve engineering problems.
- Use a variety of technological tools to solve software engineering problems.

Engineering Technology Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Apply fundamental principles from mathematics, science and engineering to solve an engineering technology-related problem.
- Set up appropriate laboratory equipment, collect and analyze data, draw conclusions, and clearly communicate results.

- Use a variety of technological tools to solve engineering technology problems.

Mechanical Engineering UC Pathway Associate of Science (AS)

Upon completion of this program, students are able to:

- Apply fundamental principles from mathematics, science and engineering to solve a mechanical engineering-related problem.
- Set up appropriate laboratory equipment, collect and analyze mechanical engineering data, draw conclusions, and clearly communicate results.
- Use a variety of technological tools to solve mechanical engineering problems.

Mechanical Engineering UC Pathway Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Apply fundamental principles from mathematics, science and engineering to solve a mechanical engineering-related problem.
- Set up appropriate laboratory equipment, collect and analyze mechanical engineering data, draw conclusions, and clearly communicate results.
- Use a variety of technological tools to solve mechanical engineering problems.

Software Engineering Associate of Science (AS)

Upon completion of this program, students are able to:

- Apply fundamental principles from mathematics, science and engineering to solve a software engineering-related problem.
- Set up appropriate laboratory equipment, collect and analyze software data, draw conclusions, and clearly communicate results.
- Use a variety of technological tools to solve software engineering problems.

Software Engineering Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Apply fundamental principles from mathematics, science and engineering to solve a software engineering-related problem.
- Set up appropriate laboratory equipment, collect and analyze software data, draw conclusions, and clearly communicate results.
- Use a variety of technological tools to solve software engineering problems.

English

Division: A&H (Arts & Humanities)

Creative Writing Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Analyze and write about a diverse body of published literature.
- Evaluate and critique works of fiction and/or poetry.
- Perform entry-level editorial tasks on a magazine, journal, or newspaper.
- Write and revise fiction and/or poetry, demonstrating proficiency with the elements of fiction and/or poetry.

English Associate of Arts (AA)

Upon completion of this program, students are able to:

- Analyze an author's use of literary techniques to develop a theme.
- Identify and evaluate implied arguments in college-level literary texts.
- Recognize, appreciate, and compare the similarities and differences between authors, characters and self that stem from historical era and cultural tradition.
- Use grammar, vocabulary and style appropriate for academic essays.
- Write a research paper using credible sources and correct documentation.
- Write an academic essay synthesizing multiple texts and using logic to support a thesis.

English Associate in Arts for Transfer (AA-T)

Upon completion of this program, students are able to:

- Analyze an author's use of literary techniques to develop a theme.
- Identify and evaluate implied arguments in college-level literary texts.
- Recognize, appreciate, and compare the similarities and differences between authors, characters and self that stem from historical era and cultural tradition.
- Use grammar, vocabulary, and style appropriate for academic essays.
- Write a research paper using credible sources and correct documentation.
- Write an academic essay synthesizing multiple texts and using logic to support a thesis.

Environmental Science

Division: STEM (Science, Technology, Engineering & Math)

Environmental Science Associate of Science (AS)

Upon completion of this program, students are able to:

- Analyze natural phenomena using appropriate mathematical and computational tools employed in the physical and biological sciences.
- Analyze natural phenomena using fundamental scientific principles in the physical and biological sciences.
- Conduct a literature search, identify and evaluate legitimate sources, and clearly communicate the results.
- Perform scientific experiments, mathematically analyze the data, and evaluate the results.

Environmental Studies

Division: STEM (Science, Technology, Engineering & Math)

Environmental Studies Associate of Arts (AA)

Upon completion of this program, students are able to:

- Analyze natural phenomena using fundamental scientific principles in the physical and biological sciences.
- Conduct a literature search, identify and evaluate legitimate sources, and clearly communicate the results.
- Construct arguments for environmental policy based on a sociopolitical and scientific understanding of human interactions with the environment.
- Perform scientific experiments, analyze the data, and evaluate the results.

Film Studies

Division: A&H (Arts & Humanities)

Film Studies Associate of Arts (AA)

Upon completion of this program, students are able to:

- Analyze film form and content using the major approaches of film criticism.
- Create a short film, incorporating general knowledge of film production (e.g. narrative, mise-en-scene, cinematography, acting, editing, and film sound).
- Describe the historical development of filmmaking and identify major historical film styles.
- Describe the impact of film on modern media and culture.

Film Studies Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Analyze film form and content using the major approaches of film criticism.
- Create a short film, incorporating general knowledge of film production (e.g. narrative, mise-enscene, cinematography, acting, editing, and film sound).
- Describe the historical development of filmmaking and identify major historical film styles.
- Describe the impact of film on modern media and culture.

Fire Service Technology

Division: PATH (Public Safety, Adv. Manufacturing, Transportation, Health & Kinesiology)

Company Officer Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Demonstrate how to implement a plan of action to deploy incident resources completing all operations to suppress a wild land fire incident.
- Demonstrate the ability to teach and deliver instruction from a prepared lesson plan utilizing instructional aids and evaluation instruments.
- Demonstrate the use of human resources to accomplish assignments of a company officer such as personnel professional evaluations and performance reviews.
- Identify conducting incident size-up, developing and implementing an initial plan of action involving single and multi-unit operations for various types of emergency incidents.
- Identify the steps of certification in the Company Officer certification track.

Fire Academy – Fire Suppression Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Define and identify the structure, culture and expectations of entry level firefighting personnel.
- Demonstrate the ability to perform to the standard set forth by State Fire Training Firefighter 2013 skills and examination standards.
- Demonstrate the proper use of equipment, tools, skills and abilities required of an entry-level firefighter.

Fire Officer Leadership and Management Associate of Science (AS)

Upon completion of this program, students are able to:

- Define and identify the structure, culture and expectations of entry level firefighting personnel.
- Demonstrate the ability to perform to the standard set forth by State Fire Training Firefighter 2013 skills and examination standards.
- Demonstrate the proper use of equipment, tools, skills and abilities required of an entry-level firefighter.

Fire Prevention Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Explain the difference between fire codes and building codes and how they apply to different municipalities.
- Use and demonstrate how to properly conduct a fire inspection.
- Recognize hazardous conditions involving equipment, processes, and operations in order to verify that equipment is maintained, and processes and operations are conducted in accordance with applicable codes and standards.

Fire Service Technology Associate of Science (AS)

Upon completion of this program, students are able to:

- Analyze and apply measures to resolve problems in areas of suppression, prevention, and EMS.
- Analyze and evaluate data to solve Fire Technology problems.
- Demonstrate technical, cognitive, and psycho-motor skills necessary to achieve and maintain employment in the fire service.
- Recognize the importance of ethics and professionalism within the Fire Technology field.

Fire Service Technology Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Analyze and apply measures to resolve problems in areas of suppression, prevention, and EMS.

- Analyze and evaluate data to solve Fire Technology problems.
- Demonstrate technical, cognitive, and psycho-motor skills necessary to achieve and maintain employment in the fire service.
- Recognize the importance of ethics and professionalism within the Fire Technology field.

Geography

Division: STEM (Science, Technology, Engineering & Math)

Geography Associate in Arts for Transfer (AA-T)

Upon completion of this program, students are able to:

- Assemble and analyze spatial information (maps, data, surveys, qualitative observations, etc), using traditional and modern mapping technology methods.
- Demonstrate knowledge of global physical and environmental processes, locations and develop an appreciation of landscapes.

Geology

Division: STEM (Science, Technology, Engineering & Math)

Geology Associate in Science for Transfer (AS-T)

Upon completion of this program, students are able to:

- Demonstrate proficiency in basic earth processes (e.g., plate tectonics).
- Demonstrate proficiency in the evaluation and identification of basic earth materials (e.g., rocks and minerals).

Geology Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Demonstrate proficiency in fundamental global earth processes (e.g., plate tectonics, earthquakes, volcanoes, etc.)
- Demonstrate proficiency with geologic analysis and/or geologic tools (e.g., unraveling the chronology of geologic events, earth materials identification/evaluation, etc.)

Geology Major Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Demonstrate proficiency in geologic processes and concepts (e.g., plate tectonics, earthquakes, volcanoes, landslides, hydrology, geochronology, etc.).
- Demonstrate proficiency with geologic analysis and/or geologic tools (e.g., mineralogy, petrology, topography and/or geologic maps and structures, unraveling the chronology of geologic events, earth materials identification/evaluation, etc.).

Global Studies

Division: BSSL (Business, Social Science, and Learning Resources)

Global Studies Associate in Arts for Transfer (AA-T)

Upon completion of this program, students are able to:

- Apply cross-cultural, transnational, and global awareness to analysis of conflicts and challenges involving race, gender, human rights, cultural differences, and economic development.
- Assess the benefits and costs of globalization to various classes, regions, nations, and ethnic groups across the globe.
- Demonstrate knowledge of world's cultures, languages, art, geography, climate, social and political systems.
- Use social scientific and humanist modes of analysis to relate and differentiate between cultures.

Graphic Design & Digital Media

Division: A&H (Arts & Humanities)

Digital Illustration Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Critically evaluate quality and effectiveness of design projects, present one’s work effectively, and incorporate critique and feedback into design iterations.
- Describe the history and application of design and how color, type, and other design elements are used as effective communications tools.
- Effectively conceptualize, create and deliver design solutions for the intended audience.
- Use industry-standard software with technical proficiency and create documents to required specifications for delivery to clients.

Graphic Design Associate of Arts (AA)

Upon completion of this program, students are able to:

- Apply principles of design to effectively conceptualize, create and deliver design solutions for the intended audience.
- Critically evaluate quality and effectiveness of design projects, present one’s work effectively, and incorporate critique and feedback into design iterations.
- Describe the history and application of design and how color, type, and other design elements are used as effective communications tools.
- Use industry-standard software with technical proficiency and create documents to required specifications for delivery to clients.

Graphic Design Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Apply principles of design to effectively conceptualize, create and deliver design solutions for the intended audience.
- Critically evaluate quality and effectiveness of design projects, present one’s work effectively, and incorporate critique and feedback into design iterations.
- Describe the history and application of design and how color, type, and other design elements are used as effective communications tools.
- Use industry-standard software with technical proficiency and create documents to required specifications for delivery to clients.

Web & Interaction Design Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Apply principles of design to effectively conceptualize, create and deliver design solutions for the intended audience.
- Critically evaluate quality and effectiveness of design projects, present one's work effectively, and incorporate critique and feedback into design iterations.
- Describe the history and application of design and how color, type, and other design elements are used as effective communications tools.
- Use industry-standard software with technical proficiency and create documents to required specifications for delivery to clients.

Health

Division: PATH (Public Safety, Adv. Manufacturing, Transportation, Health & Kinesiology)

Public Health Science Associate in Science for Transfer (AS-T)

Upon completion of this program, students are able to:

- Critically evaluate popular and scientific literature and other media for its significance and impact on individual and public health.
- Describe factors that contribute to health disparities and leading causes of morbidity and mortality, including factors related to public policy, socioeconomics, and the environment.
- Develop strategies for initiating and/ or maintaining activities that promote health through individual behavior, civic/community engagement, and/or environmental stewardship.

History

Division: BSSL (Business, Social Science, and Learning Resources)

History Associate for Arts (AA)

Upon completion of this program, students are able to:

- Analyze and assess various types of historical sources.
- Compose an argument using historical evidence.
- Explain major historical developments in United States and World History.

Horticulture

Division: STEM (Science, Technology, Engineering & Math)

Horticulture Associate of Science (AS)

Upon completion of this program, students are able to:

- Accurately identify a set of plant material; use that plant material in a landscape design; and prepare a maintenance schedule for the chosen plant materials.
- Demonstrate an understanding of the principles of ornamental horticulture, landscape maintenance and construction, nursery, greenhouse, and grower operations, and landscape design sufficient to seek employment in a technical or supervisorial horticultural position.

- Select plant materials for a given landscape based on water requirements, soil type, pest and disease resistance, growth habits, and design requirements.

Landscape Design Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Demonstrate an understanding of the concepts of sustainable landscaping, typical landscape construction techniques and irrigation systems.
- Prepare landscape plans and detailed drawings.

Landscape Maintenance and Construction Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Demonstrate an understanding of the maintenance requirements for trees, vines, shrubs, perennials, annuals, and turf.
- Read a landscape plan and install landscape features, such as plantings, pavement, structures, and irrigation systems, based on those plans.

Nursery, Greenhouse, and Grower Operations Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Demonstrate an understanding of propagation, care, and marketing involved in the production and sale of nursery plants.
- Demonstrate an understanding of the principles of growing plants in urban environments, such as greenhouse, interior plantscapes, hydroponic/aquaponic, and other urban agricultural and horticultural environments.

Ornamental Horticulture Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Demonstrate a basic understanding of the field of horticulture and possible career opportunities.
- Identify plants and be able to select their proper care and maintenance.
- Recognize typical horticultural pests and diseases, and know how to research their treatment.

Humanities

Division: A&H (Arts & Humanities)

Humanities Associate of Arts (AA)

Upon completion of this program, students are able to:

- Critically evaluate quality and effectiveness of design projects, present one's work effectively, and incorporate critique and feedback into design iterations.
- Describe the history and application of design and how color, type, and other design elements are used as effective communications tools.
- Effectively conceptualize, create and deliver design solutions for the intended audience.
- Use industry-standard software with technical proficiency and create documents to required specifications for delivery to clients.

Humanities Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Critically interpret and analyze aspects of culture and art by applying theoretical methods used in the humanities.
- Discuss important themes expressed in material culture and belief systems as seen throughout global history.
- Express and explain their appreciation for the arts through discussion and writing.
- Formally evaluate works of art using the elements and principles of art.

Interior Design

Division: A&H (Arts & Humanities)

Interior Design Associate of Science (AS)

Upon completion of this program, students are able to:

- Demonstrate the skills and knowledge learned through coursework to meet CSU transfer requirements.

Interior Design Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Work in a professional design company with both business and design education.

Journalism and Media Studies

Division: A&H (Arts & Humanities)

Journalism Associate in Arts for Transfer (AA-T)

Upon completion of this program, students are able to:

- Develop a broad understanding of the principles, roles, techniques, and effects of media in society.
- Prepare for careers in media and related fields.
- Have a broad college-level understanding of the principles, roles, techniques, and effects of media in society.

Journalism Certificate of Achievement (CA)

Journalism and Media Studies Associate of Arts (AA)

Kinesiology

Division: PATH (Public Safety, Adv. Manufacturing, Transportation, Health & Kinesiology)

Athletic Training/Sports Medicine Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Apply therapeutic modalities under the supervision of a staff athletic trainer, including thermotherapy, cryotherapy, ultrasound, and electrical stimulation.
- Analyze and categorize various athletic training and related programs (employment settings, educational preparation/programs, certification, continuing education requirements, professional development and responsibilities).
- Critique padding and bracing devices and apply as indicated for injury prevention and management.
- Demonstrate the skills relative to activation and implementation of the college athletic department emergency action plan, including primary and secondary surveys of an injured individual, and administration of emergency care procedures (first aid, control of bleeding, wound care, fracture/dislocation packaging, bloodborne pathogen protection and CPR/AED).
- Explain and identify techniques associated with injury recognition, evaluation and assessment, including taking an appropriate injury history.
- Identify prominent anatomical landmarks via palpation and assess ranges of motion of the foot, ankle, knee, hip, wrist/hand/thumb, elbow, shoulder and spine.
- Illustrate basic athletic taping and wrapping applications for injury prevention and management.

Fitness Trainer Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Develop and administer a safe and effective periodized exercise program designed for a client.
- Estimate heart rate, maximum heart rate and, target heart rate, and perform CPR with AED and rescue breathing.
- Identify modifiable and non-modifiable risk factors for personal health, locate health information related to behavior change processes, evaluate the credibility of those sources, and integrate and apply scientific research into individual behavior change processes for clients.
- Work in the field of personal trainers and as a group fitness instructor, and also identify a number of career options in the kinesiology field.

Physical Therapy Aide (CA)

Upon completion of this program, students are able to:

- Perform the duties of a physical therapy aide in a safe manner that minimizes risk to patients, self, and others.
- Demonstrate proper use of assistive/supportive devices, modalities, and specialized equipment.
- Apply the education, training, and hands on experience needed to enter the Physical Therapy field in the workforce.
- Assist in administering treatment plans under direct supervision of the Physical Therapist and/or Physical Therapy Assistant.

Kinesiology Associate in Arts for Transfer (AA-T)

Upon completion of this program, students are able to:

- Disseminate the knowledge of physical activity derived from experiences, scholarly study, and professional practice.
- Identify programs of study as well as career pathways within the field of Kinesiology.
- Perform a variety of motor activities at a proficient level from at least three of the movement-based categories.

Lesbian, Gay, Bisexual, Transgender, and Queer Studies

Division: BSSL (Business, Social Science, and Learning Resources)

Social Justice Studies: LGBTQ Studies Associate in Arts for Transfer (AA-T)

Upon completion of this program, students are able to:

- Discuss the social, economic, political, intellectual and cultural contributions of LGBTQ+ people of the past and present.
- Synthesize the relationships between epistemological frameworks used in LGBTQ+ studies and those used in other areas (i.e., Queer Theory, Feminist Theory, and Critial Theory).
- Compare and contrast the key methodologies utilized in LGBTQ+ studies.

Lesbian, Gay, Bisexual, Transgender, and Queer Studies (CA)

Upon completion of this program, students are able to:

- Discuss the social, economic, political, intellectual, and cultural contributions of LGBTQ+ people of the past and present.
- Discuss how sexual identity and gender identity combine with nationality, race and ethnicity, religion, social class, and physical ability to shape the experiences of LGBTQ+ individuals.
- Synthesize the relationships between epistemological frameworks used in LGBTQ+ studies and those used in other framework areas (i.e., Queer Theory, Feminist Theory, and Critical Theory).

Liberal Arts and Sciences

Division: A&H (Arts & Humanities)

Liberal Arts & Sciences: Arts and Humanities Associate of Arts (AA)

Upon completion of this program, students are able to:

- Apply art theory to specific works of art.
- Critically analyze important texts and ideas within the global intellectual tradition.

Liberal Arts & Sciences: Business Associate of Arts (AA)

Upon completion of this program, students are able to:

- Compare, contrast, and apply ethical standards and use best practices regarding the social responsibility of a business.
- Describe the significance of marketing functions including Price, Product, Place and Promotion in a product life cycle.
- Identify and describe types of business organizations and operations, as well as the effects of legal environments, when making a selection.

Liberal Arts & Sciences: Computer Studies Associate of Arts (AA)

Upon completion of this program, students are able to:

- Demonstrate a strong foundation of knowledge in computer hardware, software, networking, and programming.

Liberal Arts & Sciences: Language Arts and Communication Associate of Arts (AA)

Upon completion of this program, students are able to:

- Apply critical thinking principles to the evaluation of human symbolic interaction.
- Choose and apply appropriate communication strategies based on consideration of audience and purpose.
- Recognize and appreciate the value of a multicultural world and of diversity in its many forms.

Liberal Arts & Sciences: Mathematics and Science Associate of Arts (AA)

Upon completion of this program, students are able to:

- Apply mathematical and scientific ideas to analyze real-world situations.
- Read, write, listen to, and speak about mathematical and scientific ideas with understanding.
- Use appropriate technology and/or tools to enhance their scientific thinking and understanding.
- Use scientific reasoning to solve problems or conduct research, and assess the reasonableness of their results.

Liberal Arts & Sciences: Social and Behavioral Sciences Associate of Arts (AA)

Upon completion of this program, students are able to:

- Apply basic social scientific methods to investigate the relationships among individuals, cultures, and societies.
- Describe the major concepts, theoretical perspectives, empirical findings, and historical trends in the social science disciplines.
- Identify the major ideas, values, beliefs, and experiences that have shaped human history and cultures.

Marketing

Division: BSSL (Business, Social Science, and Learning Resources)

Marketing Associate of Arts (AA)

Upon completion of this program, students are able to:

- Compare and contrast the processes used to determine the (1) demand for products and services to be offered by a firm and the (2) identification of appropriate target markets.
- Construct a detailed marketing plan, which includes all aspects of the marketing mix.
- Demonstrate knowledge of business operations, the business organization, business environments, and business procedures.
- Detail available pricing strategies and prepare comparisons of strategies to achieve a firm’s market objectives.

PSLOS

Marketing Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Construct a marketing plan using all the elements of the marketing mix and defining a target market.
- Describe the role of marketing in building and managing customer relationships.
- Demonstrate an understanding of how marketing fits with the other business disciplines within an organization.

Retailing Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Compare and contrast the various pricing strategies.
- Determine the demand for products and services offered by a firm and identify potential customers.
- Develop pricing strategies with the goal of maximizing the firm's profits and/or market share while ensuring customer satisfaction.
- Explain promotional mixes and effective strategies for each.
- Identify distinctions between distribution channels.
- Identify the primary business operations, business organizational options, and business procedures.
- List resources and strategies for monitoring trends which help identify the need for new products and services.
- Summarize measures that can be taken by individuals and organizations to correct organizational dysfunctions.

Math

Division: STEM (Science, Technology, Engineering & Math)

Mathematics Associate in Science for Transfer (AS-T)

Upon completion of this program, students are able to:

- Demonstrate the ability to use symbolic, graphical, numerical, and written representations of mathematical ideas.
- Learn mathematics through modeling real-world situations.
- Read, write, listen to, and speak mathematics with understanding.
- Use appropriate technology to enhance their mathematical thinking and understanding, solve mathematical problems, and judge the reasonableness of their results.
- Use mathematical reasoning and, when appropriate, a general problem-solving process to solve problems.

Music

Division: A&H (Arts & Humanities)

Commercial Music: Music Business Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Analyze and evaluate standard contracts and legal procedures in the music industry.
- Develop a variety of approaches for marketing and promoting musical ensembles.
- Develop strategies to solve challenges of self employment in the music industry.

Commercial Music: Music Technology Fundamentals Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Demonstrate advanced techniques using a Digital Audio Workstation program with MIDI and live audio capability.
- Present completed audio projects using recorded live audio with appropriate editing, mixing, and mastering techniques.
- Present completed audio projects using recorded live audio with appropriate editing, mixing, and mastering techniques.

Commercial Music: Piano Teaching Fundamentals Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Create a business plan for a successful independent piano teaching studio.
- Teach a series of effective piano lessons tailored to a specific student's strengths and weaknesses.
- Utilize a variety of piano teaching methods and approaches in a private or group lesson.

Commercial Music: Scoring for Film and Multimedia Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Communicate and collaborate with a director, conduct an effective spotting session, and revise cues according to feedback.
- Conceptualize, compose, and produce musical cues for visual media.
- Heighten the action on screen using themes, syntactic matching, orchestration and timbral changes.

Commercial Music: Teaching Beginning Piano Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Develop, market, and maintain a private piano teaching studio.
- Present new pieces to their students by explaining the form, compositional technique, style and mood of the piece, as well as the intent of the composer.
- Solve common teaching issues using a variety of approaches.

Commercial Music: Teaching Intermediate Piano Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Choose appropriate methods and repertoire for the intermediate student.
- Present new pieces to their students by explaining the form, compositional technique, style and mood of the piece, as well as the intent of the composer.

Jazz Studies Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Analyze and interpret harmonic, melodic, and formal elements of solos by jazz improvisation masters.
- Perform, arrange, and compose jazz literature.
- Rehearse and practice effectively.

Music Associate of Arts (AA)

Upon completion of this program, students are able to:

- Adhere to recognized standards of professionalism in a rehearsal setting.
- Apply theoretical and analytical tools to musical compositions and performance practices.
- Develop a general overview of music history and stylistic developments to inform performance and analysis.
- Play or sing on pitch in a section and ensemble as directed by a conductor.

Music Associate in Arts for Transfer (AA-T)

Upon completion of this program, students are able to:

- Adhere to recognized standards of professionalism in a rehearsal setting.
- Analyze, rehearse, and perform music in a variety of genres at a high level.
- Play or sing on pitch in a section and ensemble as directed by a conductor.
- Utilize their knowledge of music theory and music history to analyze, interpret, and gain appreciation for musical works across a variety of genres.

Piano Technology Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Tune, voice, regulate, and repair upright and grand pianos using industry standard equipment in a timely manner.
- Be prepared to pass the Registered Piano Tuner certification through the Piano Technicians Guild.

Noncredit Automotive Technology

Division: PATH (Public Safety, Adv. Manufacturing, Transportation, Health & Kinesiology)

Automotive Advanced Smog Technician Certificate of Completion (NCL)

Upon completion of this program, students are able to:

- Apply and take the California Smog test.

- Diagnose emission issues.
- Diagnose engine mechanical issues.

Automotive Basic Certificate of Completion (NCL)

Upon completion of this program, students are able to:

- Diagnose basic engine mechanical issues.
- Measure engine components and compare to specifications.
- Tear down, inspect and reassemble engines.

Automotive Chassis Certificate of Completion (NCL)

Upon completion of this program, students are able to:

- Pass an industry standard exam.

Automotive Mechanical Certificate of Completion (NCL)

Upon completion of this program, students are able to:

- Pass the ASE G1 exam.

Automotive Smog Certificate of Completion (NCL)

Upon completion of this program, students are able to:

- Apply and take the California Smog test.
- Diagnose emission issues.
- Diagnose engine mechanical issues.

Concepts of Automotive Body Systems Certificate of Completion (NCL)

Upon completion of this program, students are able to:

- Pass the ASE G1 exam.

Concepts of Automotive Chassis Certificate of Completion (NCL)

Upon completion of this program, students are able to:

- Pass the ASE G1 exam.

Concepts of Automotive Know How Certificate of Completion (NCL)

Upon completion of this program, students are able to:

- Pass the ASE G1 exam.

Concepts of Automotive Mechanical Certificate of Completion (NCL)

Upon completion of this program, students are able to:

- Pass the ASE G1 exam.

Concepts of Automotive Powertrain Certificate of Completion (NCL)

Upon completion of this program, students are able to:

- Pass the ASE G1 exam.

Noncredit Aviation

Division: PATH (Public Safety, Adv. Manufacturing, Transportation, Health & Kinesiology)

Drone Photography, Mapping, and Piloting Certificate of Completion (NCL)

Upon completion of this program, students are able to:

- Safely operate common Unmanned Aerial Systems (UAS), more commonly referred to as drones.
- Collect aerial imagery in a purposeful manner that results in a professional report and/or presentation.
- Students will have skills necessary to pass the FAA Part 107 Remote Pilot Certification test.

Noncredit Biology

Division: STEM (Science, Technology, Engineering & Math)

Biotechnology Skills Certificate of Completion (NCL)

Upon completion of this program, students are able to:

- Employ standard biotech laboratory techniques to prepare assays.
- Document their procedures and results, and interpret their data.
- Explain the principles underlying common techniques.
- Describe the work environment of a biotech laboratory and the biotech industry.

Noncredit Business

Division: BSSL (Business, Social Science, and Learning Resources)

Customer Service Certificate of Completion (NCL)

Upon completion of this program, students are able to:

- Demonstrate how to prioritize responsibilities in relation to deadlines/time demands.
- Identify personal strengths and areas of improvement in relation to business roles and expertise.
- Recognize multiple tools in improving customer satisfactions and loyalty.

Emotional Intelligence in the Workplace Certificate of Completion (NCL)

Upon completion of this program, students are able to:

- Recognize how resilience will unleash personal and professional potential.
- Recognize how workplace relationships can be enhanced through EQ strategies.
- Eliminate emotional and relational barriers which stunt professional growth.
- Critically identify personal strengths and areas of improvement.
- Demonstrate healthy conflict resolution processes.
- Compassionately engage with others to solve problems and work towards common goals.
- Evaluate their priorities and vision for their future.

Innovation, Entrepreneurship, and Small Business Management Certificate of Completion (NCL)

Upon completion of this program, students are able to:

- Demonstrate the ability to comprehend, apply, and evaluate standards of ethical behavior in various business settings.
- Evaluate the feasibility of success when starting a new business venture.
- Recognize the advantages and disadvantages of the various forms of business ownership relative to a business opportunity.
- Research and compose a business plan that can be used for planning as well as financing.

Noncredit English

Division: A&H (Arts & Humanities)

Communication and Writing in English Certificate of Competency (NCY)

Noncredit English as a Second Language

Division: A&H (Arts & Humanities)

ESL College Grammar Pathway Certificate of Competency (NCY)

Upon completion of this program, students are able to:

- Analyze grammatical content in written discourse for comprehension.
- Apply grammatical concepts in writing.
- Matriculate into credit, transfer-level ESL courses.
- Use academic vocabulary, including parts of speech, at the intermediate level.
- Use foundational grammar, including all verb tenses and types of sentences.

ESL College Reading and Writing Pathway Certificate of Competency (NCY)

Upon completion of this program, students are able to:

- Comprehend a variety of authentic reading materials at the intermediate level.
- Matriculate into credit, transfer-level ESL courses.
- Use foundational grammar, including all verb tenses and types of sentences.
- Utilize a variety of study skills and strategies for language acquisition.
- Write paragraphs and essays with control of organization, development and language at the intermediate level.

ESL College Speaking and Listening Fluency Pathway Certificate of Competency (NCY)

ESL Pre-College Speaking and Listening Fluency Pathway Certificate of Competency (NCY)

School Matters Program Certificate of Competency (NCY)

Upon completion of this program, students are able to:

- Confidently engage in spoken communication within the K-12 school community.
- Confidently engage in written communication within the K-12 school community.
- Confidently access resources within the K-12 school community.
- Actively participate as a confident partner within the K-12 school community.

Vocational ESL Retail Certificate of Completion (NCL)

Noncredit Library Studies

Division: BSSL (Business, Social Science, and Learning Resources)

Basic Research Skills Certificate of Completion (NCL)

Upon completion of this program, students are able to:

- Develop research plans compatible with academic and workplace contexts.
- Effectively work with sources appropriate for academic and workplace research needs.
- Ethically use information for a purpose in academic and workplace contexts.

Noncredit Mathematics

Division: STEM (Science, Technology, Engineering & Math)

College Mathematics Pathway Certificate of Competency (NCY)

Upon completion of this program, students are able to:

- Use symbolic, graphical, numerical, and written representations of mathematical ideas.
- Learn mathematics through modeling real-world situations.
- Read, write, listen to, and speak mathematics with understanding.
- Use appropriate technology to enhance their mathematical thinking and understanding, solve mathematical problems, and judge the reasonableness of their results.
- Use mathematical reasoning and, when appropriate, a general problem solving process to solve problems.

College Mathematics Support Certificate of Competency (NCY)

Upon completion of this program, students are able to:

- Demonstrate the appropriate skills necessary to become a more productive, successful, and independent learner.
- Formulate short-term and long-term learning objectives based on their academic goal(s). Students in this program have a goal to develop their knowledge, skills and abilities in preparing transfer.
- Learn and apply study skills and life skills that will improve the student's likelihood of succeeding in their academic goals (examples of topics include brain research, identifying their individual growth mindset, personal time management, test taking and conquering math anxiety strategies, etc.).
- Use prerequisite topics effectively in their target mathematics course.

Noncredit Psychology-Counseling

Division: SS (Student Services)

Career Exploration and Preparation Certificate of Completion (NCL)

Upon completion of this program, students are able to:

- Introduce students to career/major exploration tools and resources available on and off-campus.
- Demonstrate occupational research tools and help students gain skills to prepare them for job application.
- Assist students in creating a plan for their next steps to further their career exploration or job
- preparation.

Nutrition

Division: PATH (Public Safety, Adv. Manufacturing, Transportation, Health & Kinesiology)

Nutrition and Dietetics Associate in Science for Transfer (AS-T)

Upon completion of this program, students are able to:

- Acquire knowledge to develop health promotion and disease prevention programs that address diverse populations within a community (such as ethnicity, cultural backgrounds, socioeconomic status, and regional resources).
- Critically evaluate factors influencing obesity, and the metabolic consequences of obesity, as it relates to chronic disease.
- Evaluate personal energy and nutrient requirements, along with the nutrient density of various food sources, using current dietary assessment tools.

Occupational Safety and Health

Division: PATH (Public Safety, Adv. Manufacturing, Transportation, Health & Kinesiology)

Occupational Safety and Health Associate of Science (AS)

Upon completion of this program, students are able to:

- Apply a working knowledge of mathematics and the sciences to conduct experiments and to analyze and interpret data to solve safety and health-related issues in the workplace.
- Prepare emergency response and fire prevention plans that meet regulatory requirements.
- Design programs to control, eliminate, and prevent occupational disease or injury caused by chemical, physical, radiological, and biological agents or ergonomic factors.

Occupational Safety Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Perform basic duties of a safety specialist.

Occupational Safety and Health Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Prepare an emergency response plan meeting regulatory requirements.
- Perform basic duties of a safety specialist.
- Design programs to control, eliminate, and prevent disease or injury caused by chemical, physical, radiological, and biological agents or ergonomic factors.

Philosophy

Division: A&H (Arts & Humanities)

Philosophy Associate in Arts for Transfer (AA-T)

Upon completion of this program, students are able to:

- Develop and present formal philosophical arguments using effective logical argumentative technique and avoiding logical error and fallacies.
- Respond to philosophical writing and ideas of historical and contemporary philosophers by describing philosophical arguments, evaluating those arguments, and applying them with accuracy and creativity to contemporary conditions.

Photography

Division: A&H (Arts & Humanities)

Photography Associate of Arts (AA)

Upon completion of this program, students are able to:

- Critique, analyze, and discuss photographic images utilizing knowledge of the history, aesthetics, and contemporary issues of the photography field.
- Effectively visualize and accurately construct lighting designs utilizing artificial studio lighting and natural light in photographs.
- Operate both digital and film-based photographic equipment used in the photography field.
- Visualize and produce entry-level commercial and fine art photographs that demonstrate fully developed concepts of form, medium, and content.

PSLOS

Photography Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Appropriately visualize and accurately construct lighting designs utilizing artificial studio lighting and natural, available light in film and digital photographs.
- Appropriately visualize and produce entry level professional, commercial, and fine art photographs that represent fully developed concepts of form, medium and content.
- Critique and discuss film and digital photographic images that represent fully developed concepts of form, medium and content.

Physics

Division: STEM (Science, Technology, Engineering & Math)

Physics Associate of Science (AS)

Upon completion of this program, students are able to:

- Analyze physical situations quantitatively using fundamental physics principles, ranging from Newtonian mechanics to modern physics.
- Design and conduct laboratory experiments, and analyze and interpret their data.
- Effectively communicate the methods, analysis, results, and conclusions of their own scientific experiments.

Political Science

Division: BSSL (Business, Social Science, and Learning Resources)

Political Science Associate in Arts for Transfer (AA-T)

Upon completion of this program, students are able to:

- Analyze and assess various types of sources in the discipline.
- Demonstrate an understanding of socioeconomic and/or political power disparities existing along the lines of identities such as race, class, gender, sexuality, legal status, and religion.
- Demonstrate understanding and application of theories and concepts in political science to contemporary political phenomenon.
- Research, synthesize, and argue a political thesis.

Psychology

Division: BSSL (Business, Social Science, and Learning Resources)

Psychology Associate in Arts for Transfer (AA-T)

Upon completion of this program, students are able to:

- Demonstrate effective written and oral communication for different purposes and audiences.
- Apply psychological content for personal, professional, and lifelong learning goals.
- Apply ethical standards to evaluate psychological science and practice in a diverse community at the local, national, and global levels.
- Describe key concepts, principles, and themes in psychology and apply empirical findings.

- Use scientific thinking and information literacy to interpret, design, and conduct psychological research.

Psychology Counseling

Division: SS (Student Services)

Social Work and Human Services Associate in Arts for Transfer (AA-T)

Upon completion of this program, students are able to:

- Critically analyze societal factors that create and contribute to social service needs.
- Demonstrate a foundational understanding of social work and human services outlining the evolution of social welfare and human services in the U.S.
- Demonstrate an understanding of cultural sensitivity and systems of oppression/ privilege as a foundation to success in the fields of social work and human services.
- Demonstrate knowledge and understanding of theoretical perspectives, legal and ethical principles and social issues related to social work and human services fields.

Sociology

Division: BSSL (Business, Social Science, and Learning Resources)

Sociology Associate in Arts for Transfer (AA-T)

Upon completion of this program, students are able to:

- Analyze and describe the major concepts, theoretical perspectives, empirical findings, and historical trends in sociology.
- Demonstrate critical thinking and analytic skills in the application of social theory to solve problems that arise in institutional and societal contexts.

Spanish

Division: A&H (Arts & Humanities)

Spanish Associate in Arts for Transfer (AA-T)

Upon completion of this program, students are able to:

- Analyze and interpret Spanish texts according to their cultural, literary and/or linguistic content.
- Demonstrate oral competence in the Spanish Language by using correct grammar, vocabulary, and appropriate register.
- Demonstrate written competence in the Spanish language by using correct grammar, vocabulary, and appropriate register.
- Have a clear understanding of the cultures of the Spanish speaking world.

Spanish Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Analyze and interpret Spanish texts according to their cultural, literary and/or linguistic content.
- Demonstrate oral competence in the Spanish Language by using correct grammar, vocabulary, and appropriate register.

- Demonstrate written competence in the Spanish language by using correct grammar, vocabulary, and appropriate register.
- Have a clear understanding of the cultures of the Spanish-speaking world.

Theater Arts

Division: A&H (Arts & Humanities)

Theater Arts Associate of Arts (AA)

Upon completion of this program, students are able to:

- Apply the learned techniques of acting or technical theater in a public performance of various genres of theater, or other types of personal creative work.
- Critically analyze the artistic elements in productions, looking at design, acting, directorial choices, as well as personal performance processes.
- Possess the skills necessary for textual interpretation for academic discourse, design, and/or performance studies.
- Understand how to develop and maintain a positive contribution the field of theater in academics, performance, or technical theater.
- Understand the historical and cultural significance of theater through completion of projects in the technical theater courses and theater history class.

Theater Arts Associate in Arts for Transfer (AA-T)

Upon completion of this program, students are able to:

- Analyze the artistic elements in productions, looking at design, acting, and directorial choice.
- Apply the learned techniques of acting or technical theater in a public performance of various genres of theater, or other types of personal creative work.
- Possess the skills necessary for textual interpretation for academic discourse, design, and/or performance studies.
- Understand how to develop and maintain a positive contribution the field of theater in academics, performance, or technical theater.
- Understand the historical and cultural significance of theater through completion of projects in the technical theater courses and theater history class.

Acting Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Develop an understanding of the role of a character within the context of a play and create a unique character portrayal in emotional, physical, and vocal life.
- Examine and perform within major genres of theater from world theatrical history.
- Make complex, creative, and bold acting choices during the rehearsal process as a means of creative exploration.
- Work collaboratively with fellow actors and production staff, demonstrating an understanding of the professional work ethic of an actor.

Actors Conservatory Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Apply the learned techniques of acting in a public performance of various genres of theater, or other types of personal creative work, synthesizing acting, movement, and vocal skills into a truthful theater performance.
- Integrate an understanding of the history of theater and theatrical text into performance using character construction, physicality and vocal nuance.
- Demonstrate a professional work ethic within a professional framework of collaboration in rehearsal and performance.
- Exhibit a portfolio of academic and performance work through engagement and experiences aimed at a deeper and more profound understanding of the craft of theater and the cultural importance of the art form.

Musical Theater Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Demonstrate a professional work ethic within a professional framework of collaboration in rehearsal and performance.

- Demonstrate knowledge of the basic anatomy and physiology involved in tone production and of the respiratory system and its contribution to singing.
- Examine and perform within major genres of American Musical Theater.
- Practice, perform, and memorize scales, chords, and simple harmonic progressions.
- Synthesize acting, movement, dance, and singing skills into a truthful musical theater performance.

Technical Theater Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Analyze elements of a theatrical design.
- Hang, cable, and focus stage lighting and be able to read lighting plots and related documents.
- Perform as a member of a show running crew in various capacities, such as stagehand, light or sound board operator, or wardrobe assistant.
- Read construction plans and construct common stage scenery such as flats, platform, and stairs.
- Research, plot, and design costumes for use in production.

Viticulture and Winery Technology

Division: STEM (Science, Technology, Engineering & Math)

Enology Associate of Science (AS)

Upon completion of this program, students are able to:

- Apply general chemistry principles, wine microbiology fundamentals, and laboratory techniques to produce sound wines.
- Perform an accurate wine assessment utilizing acquired organoleptic skills.
- Perform wine analysis methods including laboratory/quality control test during harvest, fermentations, cellaring, and prior to bottling.
- Safely start-up, operate, and shutdown winery equipment; and effectively utilize the equipment during the winemaking process.

Enology Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Apply general chemistry principles, wine microbiology fundamentals, and laboratory techniques to produce sound wines.
- Perform an accurate wine assessment utilizing acquired organoleptic skills.
- Perform wine analysis methods including laboratory/quality control test during harvest, fermentations, cellaring and prior to bottling.
- Safely start-up, operate and shut down winery equipment and effectively utilize the equipment during the wine making process.

Viticulture Associate of Science (AS)

Upon completion of this program, students are able to:

- Contribute to the wine grape industry and participate in professional organizations at the local, state-wide, national and/or international levels.
- Describe the latest technological advances in vineyard practices and incorporate current technology into their farming plans.
- Identify, plan, and implement sustainable farming practices that will improve fruit quality, provide efficacious pest and disease management, and protect natural resources and the environment.
- Show leadership capabilities by effectively training others to perform hands-on vineyard tasks.
- Use proficient knowledge of the seasonal requirements of a working vineyard.
- Work cooperatively and effectively with winery personnel to determine optimum harvest parameters and coordinate the operations required.

Viticulture Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Describe the latest technological advances in vineyard practices and incorporate current technology into their farming plans.

- Identify, plan, and implement sustainable farming practices that will improve fruit quality, provide efficacious pest and disease management, and protect natural resources and the environment.
- Show leadership capabilities by effectively training others to perform hands-on vineyard tasks.
- Work cooperatively and effectively with wineries to determine optimum harvest parameters and coordinate the operations required.

Wine Hospitality Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Demonstrate proper wine service.
- Describe a wine's qualities.

Welding Technology

Division: BSSL (Business, Social Science, and Learning Resources)

Production Welder Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Operate safely in a welding workplace environment.
- Have the skills necessary to pass an American Welding society standard welding certification test.

Welding Technology Associate of Science (AS)

Upon completion of this program, students are able to:

- Operate safely in a welding workplace environment.
- Have the skills necessary to pass an American Welding Society standard welding certification test.

Welding Technology Certificate of Achievement (CA)

Upon completion of this program, students are able to:

- Operate safely in a welding workplace environment.
- Have the skills necessary to pass an American Welding Society standard welding certification test.

Women’s Studies

Division: BSSL (Business, Social Science, and Learning Resources)

Social Justice Studies: Gender Studies Associate in Arts for Transfer (AA-T)

Upon completion of this program, students are able to:

- Explain the social, economic, political, intellectual, and cultural contributions of women nationally and internationally.
- Explain how gender identity intersects with nationality, race and ethnicity, religion, social and political class, and sexual orientation.
- Explain the relationship between women and globalization.