

# PSLO Presentation

Las Positas

Date: 08-24-2020

<b>AH</b>
<b>Art</b>
<p><b>Art: Emphasis in Painting- AA</b></p> <ul style="list-style-type: none"> <li>• Upon completion of the AA in Art: Emphasis in Painting, students are able to apply creative thinking through the production of original artworks.</li> <li>• Upon completion of the AA in Art: Emphasis in Painting, students are able to apply the principles of visual design for the communication and expression of ideas.</li> <li>• Upon completion of the AA in Art: Emphasis in Painting, students are able to create works of art that synthesize quality technical execution with content and concept.</li> <li>• Upon completion of the AA in Art: Emphasis in Painting, students are able to demonstrate technical proficiency in use of art media, tools, processes and technology.</li> </ul> <p><b>Studio Arts – AA-T</b></p> <ul style="list-style-type: none"> <li>• Upon completion of the AA-T in Studio Arts, students are able to apply the basic principles of observational drawing and how to develop illusionary spatial constructions.</li> <li>• Upon completion of the AA-T in Studio Arts, students are able to demonstrate critical thinking as it applies to critique, evaluation and/or production of works of art.</li> <li>• Upon completion of the AA-T in Studio Arts, students are able to demonstrate knowledge of the science of color perception and how it can be utilized in the creation of works of art.</li> <li>• Upon completion of the AA-T in Studio Arts, students are able to the principles and concepts of design.</li> </ul>
<b>Art History</b>
<p><b>Art History - AA-T</b></p> <ul style="list-style-type: none"> <li>• Upon completion of the AA-T in Art History, students are able to communicate concepts and ideas effectively through written, oral, and digital media.</li> <li>• Upon completion of the AA-T in Art History, students are able to evaluate the artwork from different cultures and art historical periods.</li> <li>• Upon completion of the AA-T in Art History, students are able to identify and evaluate art historical styles, movements, and concepts.</li> <li>• Upon completion of the AA-T in Art History, students are able to recognize art's relationship to geography, cultural ideologies, and historical periods.</li> <li>• Upon completion of the AA-T in Art History, students are able to research and analyze visual artwork using interdisciplinary theories and methods.</li> </ul>
<b>Communication Studies</b>
<p><b>Communication Studies AA-T</b></p> <ul style="list-style-type: none"> <li>• Upon completion of the AA-T in Communication Studies, students are able to apply ethical communication principles and practices.</li> <li>• Upon completion of the AA-T in Communication Studies, students are able to create and deliver messages appropriate to the audience, purpose, and context.</li> <li>• Upon completion of the AA-T in Communication Studies, students are able to critically analyze messages.</li> <li>• Upon completion of the AA-T in Communication Studies, students are able to describe the Communication discipline and its central questions.</li> <li>• Upon completion of the AA-T in Communication Studies, students are able to employ communication theories, perspectives, principles, and concepts.</li> <li>• Upon completion of the AA-T in Communication Studies, students are able to engage in communication inquiry.</li> <li>• Upon completion of the AA-T in Communication Studies, students are able to utilize communication to embrace difference.</li> </ul>
<b>English</b>
<p><b>Creative Writing - Certificate of Achievement</b></p> <ul style="list-style-type: none"> <li>• Upon completion of the Certificate of Achievement in Creative Writing, students are able to analyze and write about a diverse body of published literature.</li> <li>• Upon completion of the Certificate of Achievement in Creative Writing, students are able to evaluate and critique works of fiction and/or poetry.</li> </ul>

- Upon completion of the Certificate of Achievement in Creative Writing, students are able to perform entry-level editorial tasks on a magazine, journal, or newspaper.
- Upon completion of the Certificate of Achievement in Creative Writing, students are able to write and revise fiction and/or poetry, demonstrating proficiency with the elements of fiction and/or poetry.

**English - AA**

- Upon completion of the AA in English, students are able to analyze an author's use of literary techniques to develop a theme.
- Upon completion of the AA in English, students are able to identify and evaluate implied arguments in college-level literary texts.
- Upon completion of the AA in English, students are able to recognize, appreciate, and compare the similarities and differences between authors, characters and self that stem from historical era and cultural tradition.
- Upon completion of the AA in English, students are able to use grammar, vocabulary and style appropriate for academic essays.
- Upon completion of the AA in English, students are able to write a research paper using credible sources and correct documentation.
- Upon completion of the AA in English, students are able to write an academic essay synthesizing multiple texts and using logic to support a thesis.

**English - AA-T**

- Upon completion of the AA-T in English, students are able to analyze an author's use of literary techniques to develop a theme.
- Upon completion of the AA-T in English, students are able to identify and evaluate implied arguments in college-level literary texts.
- Upon completion of the AA-T in English, students are able to recognize, appreciate, and compare the similarities and differences between authors, characters and self that stem from historical era and cultural tradition.
- Upon completion of the AA-T in English, students are able to use grammar, vocabulary, and style appropriate for academic essays.
- Upon completion of the AA-T in English, students are able to write a research paper using credible sources and correct documentation.
- Upon completion of the AA-T in English, students are able to write an academic essay synthesizing multiple texts and using logic to support a thesis.

**English as a Second Language**

**PSLO**

No PSLOs

**Film Studies**

**Film Studies - AA**

- Upon completion of the AA in Film Studies, students are able to analyze film form and content using the major approaches of film criticism.
- Upon completion of the AA in Film Studies, students are able to create a short film, incorporating general knowledge of film production (e.g. narrative, mise-en-scene, cinematography, acting, editing, and film sound).
- Upon completion of the AA in Film Studies, students are able to describe the historical development of filmmaking and identify major historical film styles.
- Upon completion of the AA in Film Studies, students are able to describe the impact of film on modern media and culture.

**Film Studies - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Film Studies, students are able to analyze film form and content using the major approaches of film criticism.
- Upon completion of the Certificate of Achievement in Film Studies, students are able to create a short film, incorporating general knowledge of film production (e.g. narrative, mise-enscene, cinematography, acting, editing, and film sound).
- Upon completion of the Certificate of Achievement in Film Studies, students are able to describe the historical development of filmmaking and identify major historical film styles.
- Upon completion of the Certificate of Achievement in Film Studies, students are able to describe the impact of film on modern media and culture.

**Graphic Design Digital Media**

**Digital Illustration - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Digital Illustration, 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.
- Upon completion of the Certificate of Achievement in Digital Illustration, students are able to describe the history and application of design and how color, type, and other design elements are used as effective communications tools.
- Upon completion of the Certificate of Achievement in Digital Illustration, students are able to effectively conceptualize, create and deliver design solutions for the intended audience.
- Upon completion of the Certificate of Achievement in Digital Illustration, students are able to use industry-standard software with technical proficiency and create documents to required specifications for delivery to clients.

### Graphic Design - AA

- Upon completion of the AA in Graphic Design, students are able to apply principles of design to effectively conceptualize, create and deliver design solutions for the intended audience.
- Upon completion of the AA in Graphic Design, 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.
- Upon completion of the AA in Graphic Design, students are able to describe the history and application of design and how color, type, and other design elements are used as effective communications tools.
- Upon completion of the AA in Graphic Design, students are able to use industry-standard software with technical proficiency and create documents to required specifications for delivery to clients.

### Graphic Design - Certificate of Achievement

- Upon completion of the Certificate of Achievement in Graphic Design, students are able to apply principles of design to effectively conceptualize, create and deliver design solutions for the intended audience.
- Upon completion of the Certificate of Achievement in Graphic Design, 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.
- Upon completion of the Certificate of Achievement in Graphic Design, students are able to describe the history and application of design and how color, type, and other design elements are used as effective communications tools.
- Upon completion of the Certificate of Achievement in Graphic Design, students are able to use industry-standard software with technical proficiency and create documents to required specifications for delivery to clients.

### Print Design - Certificate of Achievement

- Upon completion of the Certificate of Achievement in Print Design, students are able to apply principles of design to effectively conceptualize, create and deliver design solutions for the intended audience.
- Upon completion of the Certificate of Achievement in Print Design, 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.
- Upon completion of the Certificate of Achievement in Print Design, students are able to describe the history and application of design and how color, type, and other design elements are used as effective communications tools.
- Upon completion of the Certificate of Achievement in Print Design, students are able to use industry-standard software with technical proficiency and create documents to required specifications for delivery to clients.

### Web & Interaction Design - Certificate of Achievement

- Upon completion of the Certificate of Achievement in Web & Interaction Design, students are able to apply principles of design to effectively conceptualize, create and deliver design solutions for the intended audience.
- Upon completion of the Certificate of Achievement in Web & Interaction Design, 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.
- Upon completion of the Certificate of Achievement in Web & Interaction Design, students are able to describe the history and application of design and how color, type, and other design elements are used as effective communications tools.
- Upon completion of the Certificate of Achievement in Web & Interaction Design, students are able to use industry-standard software with technical proficiency and create documents to required specifications for delivery to clients.

## Humanities

### Humanities - AA

- Upon completion of the AA in Humanities, students are able to discuss important themes expressed in material culture and belief systems as seen throughout global history.
- Upon completion of the AA in Humanities, students are able to express and explain their appreciation for the arts through discussion and writing.
- Upon completion of the AA in Humanities, students are able to formally evaluate works of art using the elements and principles of art.
- Upon completion of the AA in Humanities, students are able to interpret and analyze aspects of culture and art by applying theoretical methods used in the humanities.

### Humanities - Certificate of Achievement

- Upon completion of the Certificate of Achievement in Humanities, students are able to critically interpret and analyze aspects of culture and art by applying theoretical methods used in the humanities.
- Upon completion of the Certificate of Achievement in Humanities, students are able to discuss important themes expressed in material culture and belief systems as seen throughout global history.
- Upon completion of the Certificate of Achievement in Humanities, students are able to express and explain their appreciation for the arts through discussion and writing.
- Upon completion of the Certificate of Achievement in Humanities, students are able to formally evaluate works of art using the elements and principles of art.

## Interior Design

**Interior Design - AS**

- Upon completion of the AS in Interior Design, students are able to demonstrate the skills and knowledge learned through coursework to meet CSU transfer requirements.

**Interior Design - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Interior Design, students are able to work in a professional design company with both business and design education.

**Liberal Arts and Sciences****Liberal Arts and Sciences: Arts and Humanities- AA**

- Upon completion of the AA in Liberal Arts & Sciences: Arts and Humanities, students are able to apply art theory to specific works of art.
- Upon completion of the AA in Liberal Arts & Sciences: Arts and Humanities, students are able to critically analyze important texts and ideas within the global intellectual tradition.

**Liberal Arts and Sciences: Business- AA**

- Upon completion of the AA in Liberal Arts & Sciences: Business, students are able to compare, contrast, and apply ethical standards and use best practices regarding the social responsibility of a business.
- Upon completion of the AA in Liberal Arts & Sciences: Business, students are able to describe the significance of marketing functions including Price, Product, Place and Promotion in a product life cycle.
- Upon completion of the AA in Liberal Arts & Sciences: Business, students are able to identify and describe types of business organizations and operations, as well as the effects of legal environments, when making a selection.

**Liberal Arts and Sciences: Computer Studies- AA**

- Upon completion of the AA in Liberal Arts & Sciences: Computer Studies, students are able to demonstrate a strong foundation of knowledge in computer hardware, software, networking, and programming.

**Liberal Arts and Sciences: Language Arts and Communication- AA**

- Upon completion of the AA in Liberal Arts & Sciences: Language Arts and Communication, students are able to apply critical thinking principles to the evaluation of human symbolic interaction.
- Upon completion of the AA in Liberal Arts & Sciences: Language Arts and Communication, students are able to choose and apply appropriate communication strategies based on consideration of audience and purpose.
- Upon completion of the AA in Liberal Arts & Sciences: Language Arts and Communication, students are able to recognize and appreciate the value of a multicultural world and of diversity in its many forms.

**Liberal Arts and Sciences: Mathematics and Science- AA**

- Upon completion of the AA in Liberal Arts & Sciences: Mathematics and Science, students are able to apply mathematical and scientific ideas to analyze real-world situations.
- Upon completion of the AA in Liberal Arts & Sciences: Mathematics and Science, students are able to read, write, listen to, and speak about mathematical and scientific ideas with understanding.
- Upon completion of the AA in Liberal Arts & Sciences: Mathematics and Science, students are able to use appropriate technology and/or tools to enhance their scientific thinking and understanding.
- Upon completion of the AA in Liberal Arts & Sciences: Mathematics and Science, students are able to use scientific reasoning to solve problems or conduct research, and assess the reasonableness of their results.

**Liberal Arts and Sciences: Social and Behavioral Science- AA**

- Upon completion of the AA in Liberal Arts & Sciences: Social and Behavioral Sciences, students are able to apply basic social scientific methods to investigate the relationships among individuals, cultures, and societies.
- Upon completion of the AA in Liberal Arts & Sciences: Social and Behavioral Sciences, students are able to describe the major concepts, theoretical perspectives, empirical findings, and historical trends in the social science disciplines.
- Upon completion of the AA in Liberal Arts & Sciences: Social and Behavioral Sciences, students are able to identify the major ideas, values, beliefs, and experiences that have shaped human history and cultures.

**Mass Communications****PSLO**

- Upon completion of the Certificate of Accomplishment in Radio Communications, students are able to create a marketing plan for all potential advertising clients as a web presence and use metrics such as adsense and metatags to show high web traffic for buyers.
- Upon completion of the Certificate of Accomplishment in Radio Communications, students are able to use an all-digital environment, using multi-platform sources to be able to deliver media in a high definition, streaming, mobile media in all broadcasting mediums.

**Journalism - AA-T**

- Upon completion of the AA-T in Journalism, students are able to develop a broad understanding of the principles, roles, techniques, and effects of media in society.
- Upon completion of the AA-T in Journalism, students are able to gain experience in production of the student media.

- Upon completion of the AA-T in Journalism, students are able to prepare for careers in media and related fields.

### **Mass Communications - AA**

- Upon completion of the AA in Mass Communications, students are able to demonstrate an understanding of different aspects of the role of media in society through research and writing.
- Upon completion of the AA in Mass Communications, students are able to participate in the creation of student media, following a timeline for production, editing and formatting content, and publishing and distributing.

### **Mass Communications: Journalism - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Mass Communications: Journalism, students are able to demonstrate an understanding of different aspects of the role of media in society through research and writing.
- Upon completion of the Certificate of Achievement in Mass Communications: Journalism, students are able to participate in the creation of student media, following a timeline for production, editing and formatting content, and publishing and distributing.
- Upon completion of the Certificate of Achievement in Mass Communications: Journalism, students are able to recognize, acquire, produce, and distribute content for the weekly college newspaper, The Express, demonstrating increasing understanding of standards of journalism and design.

## **Music**

### **Commercial Music: Music Business - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Commercial Music: Music Business, students are able to analyze and evaluate standard contracts and legal procedures in the music industry.
- Upon completion of the Certificate of Achievement in Commercial Music: Music Business, students are able to develop a variety of approaches for marketing and promoting musical ensembles.
- Upon completion of the Certificate of Achievement in Commercial Music: Music Business, students are able to develop strategies to solve challenges of self employment in the music industry.

### **Commercial Music: Music Technology Fundamentals - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Commercial Music: Music Technology Fundamentals, students are able to demonstrate advanced techniques using a Digital Audio Workstation program with MIDI and live audio capability.
- Upon completion of the Certificate of Achievement in Commercial Music: Music Technology Fundamentals, students are able to present completed audio projects using recorded live audio with appropriate editing, mixing, and mastering techniques.
- Upon completion of the Certificate of Achievement in Commercial Music: Music Technology Fundamentals, students are able to present completed audio projects using recorded live audio with appropriate editing, mixing, and mastering techniques.

### **Commercial Music: Scoring for Film and Multimedia - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Commercial Music: Scoring for Film and Multimedia, students are able to communicate and collaborate with a director, conduct an effective spotting session, and revise cues according to feedback.
- Upon completion of the Certificate of Achievement in Commercial Music: Scoring for Film and Multimedia, students are able to conceptualize, compose, and produce musical cues for visual media.
- Upon completion of the Certificate of Achievement in Commercial Music: Scoring for Film and Multimedia, students are able to heighten the action on screen using themes, syntactic matching, orchestration and timbral changes.

### **Commercial Music: Teaching Beginning Piano - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Commercial Music: Teaching Beginning Piano, students are able to develop, market, and maintain a private piano teaching studio.
- Upon completion of the Certificate of Achievement in Commercial Music: Teaching Beginning Piano, students are able to 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.
- Upon completion of the Certificate of Achievement in Commercial Music: Teaching Beginning Piano, students are able to solve common teaching issues using a variety of approaches.

### **Commercial Music: Teaching Intermediate Piano - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Commercial Music: Teaching Intermediate Piano, students are able to choose appropriate methods and repertoire for the intermediate student.
- Upon completion of the Certificate of Achievement in Commercial Music: Teaching Intermediate Piano, students are able to 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**

- Upon completion of the Certificate of Achievement in Jazz Studies, students are able to analyze and interpret harmonic, melodic, and formal elements of solos by jazz improvisation masters.
- Upon completion of the Certificate of Achievement in Jazz Studies, students are able to perform, arrange, and compose jazz literature.
- Upon completion of the Certificate of Achievement in Jazz Studies, students are able to rehearse and practice effectively.

### **Music - AA**

- Upon completion of the AA in Music, students are able to adhere to recognized standards of professionalism in a rehearsal setting.

- Upon completion of the AA in Music, students are able to apply theoretical and analytical tools to musical compositions and performance practices.
- Upon completion of the AA in Music, students are able to develop a general overview of music history and stylistic developments to inform performance and analysis.
- Upon completion of the AA in Music, students are able to play or sing on pitch in a section and ensemble as directed by a conductor.

### **Music- AA-T**

- Upon completion of the AA-T in Music, students are able to adhere to recognized standards of professionalism in a rehearsal setting.
- Upon completion of the AA-T in Music, students are able to analyze, rehearse, and perform music in a variety of genres at a high level.
- Upon completion of the AA-T in Music, students are able to play or sing on pitch in a section and ensemble as directed by a conductor.
- Upon completion of the AA-T in Music, students are able to utilize their knowledge of music theory and music history to analyze, interpret, and gain appreciation for musical works across a variety of genres.

## **Noncredit ESL**

### **Advanced ESL Communication Studies - Certificate of Completion**

- Upon completion of the Certificate of Completion in Advanced ESL Communication Studies, students are able to demonstrate an awareness of cultural norms appropriate to specific public speaking situations.
- Upon completion of the Certificate of Completion in Advanced ESL Communication Studies, students are able to establish an effective and assertive presence in formal speaking situations such as academic courses, job interviews, professional meetings, and presentations.
- Upon completion of the Certificate of Completion in Advanced ESL Communication Studies, students are able to give responses using appropriate and concise rhetorical frames in common formal speaking situations, such as academic courses, job interviews, professional meetings, and presentations.

### **ESL College Grammar Pathway - Certificate of Competency**

- Upon completion of the Certificate of Competency in ESL College Grammar Pathway, students are able to analyze grammatical content in written discourse for comprehension.
- Upon completion of the Certificate of Competency in ESL College Grammar Pathway, students are able to apply grammatical concepts in writing.
- Upon completion of the Certificate of Competency in ESL College Grammar Pathway, students are able to matriculate into credit, transfer-level ESL courses.
- Upon completion of the Certificate of Competency in ESL College Grammar Pathway, students are able to use academic vocabulary, including parts of speech, at the intermediate level.
- Upon completion of the Certificate of Competency in ESL College Grammar Pathway, students are able to use foundational grammar, including all verb tenses and types of sentences.

### **ESL College Reading and Writing Pathway - Certificate of Competency**

- Upon completion of the Certificate of Competency in ESL College Reading and Writing Pathway, students are able to comprehend a variety of authentic reading materials at the intermediate level.
- Upon completion of the Certificate of Competency in ESL College Reading and Writing Pathway, students are able to matriculate into credit, transfer-level ESL courses.
- Upon completion of the Certificate of Competency in ESL College Reading and Writing Pathway, students are able to use foundational grammar, including all verb tenses and types of sentences.
- Upon completion of the Certificate of Competency in ESL College Reading and Writing Pathway, students are able to utilize a variety of study skills and strategies for language acquisition.
- Upon completion of the Certificate of Competency in ESL College Reading and Writing Pathway, students are able to write paragraphs and essays with control of organization, development and language at the intermediate level.

## **Philosophy**

### **Philosophy - AA-T**

- Upon completion of the AA-T in Philosophy, students are able to communicate ideas in a way that shows respect for others.
- Upon completion of the AA-T in Philosophy, students are able to develop and present formal philosophical arguments using effective logical argumentative technique and avoiding logical error and fallacies.
- Upon completion of the AA-T in Philosophy, students are able to 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**

### **Photography - AA**

- Upon completion of the AA in Photography, students are able to critique, analyze, and discuss photographic images utilizing knowledge of the history, aesthetics, and contemporary issues of the photography field.

- Upon completion of the AA in Photography, students are able to effectively visualize and accurately construct lighting designs utilizing artificial studio lighting and natural light in photographs.
- Upon completion of the AA in Photography, students are able to operate both digital and film-based photographic equipment used in the photography field.
- Upon completion of the AA in Photography, students are able to visualize and produce entry-level commercial and fine art photographs that demonstrate fully developed concepts of form, medium, and content.

### **Photography - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Photography, students are able to appropriately visualize and accurately construct lighting designs utilizing artificial studio lighting and natural, available light in film and digital photographs.
- Upon completion of the Certificate of Achievement in Photography, students are able to appropriately visualize and produce entry level professional, commercial, and fine art photographs that represent fully developed concepts of form, medium and content.
- Upon completion of the Certificate of Achievement in Photography, students are able to critique and discuss film and digital photographic images that represent fully developed concepts of form, medium and content.

## **Spanish**

### **Spanish - AA-T**

- Upon completion of the AA-T in Spanish, students are able to analyze and interpret Spanish texts according to their cultural, literary and/or linguistic content.
- Upon completion of the AA-T in Spanish, students are able to demonstrate oral competence in the Spanish Language by using correct grammar, vocabulary, and appropriate register.
- Upon completion of the AA-T in Spanish, students are able to demonstrate written competence in the Spanish language by using correct grammar, vocabulary, and appropriate register.
- Upon completion of the AA-T in Spanish, students are able to have a clear understanding of the cultures of the Spanish speaking world.

### **Spanish - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Spanish, students are able to analyze and interpret Spanish texts according to their cultural, literary and/or linguistic content.
- Upon completion of the Certificate of Achievement in Spanish, students are able to demonstrate oral competence in the Spanish Language by using correct grammar, vocabulary, and appropriate register.
- Upon completion of the Certificate of Achievement in Spanish, students are able to demonstrate written competence in the Spanish language by using correct grammar, vocabulary, and appropriate register.
- Upon completion of the Certificate of Achievement in Spanish, students are able to have a clear understanding of the cultures of the Spanish-speaking world.

## **Theater Arts**

### **Acting - Certificate of Achievement**

- Upon completion of the Acting Certificate, 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.
- Upon completion of the Acting Certificate, students are able to examine and perform within major genres of theater from world theatrical history.
- Upon completion of the Acting Certificate, students are able to make complex, creative, and bold acting choices during the rehearsal process as a means of creative exploration.
- Upon completion of the Acting Certificate, students are able to work collaboratively with fellow actors and production staff, demonstrating an understanding of the professional work ethic of an actor

### **Actors Conservatory - Certificate of Achievement**

- Upon completion of the Actors Conservatory, 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.
- Upon completion of the Actors Conservatory, students are able to demonstrate a professional work ethic within a professional framework of collaboration in rehearsal and performance.
- Upon completion of the Actors Conservatory, students are able to 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.
- Upon completion of the Certificate of Achievement in Actors Conservatory, students are able to integrate an understanding of the history of theater and theatrical text into performance using character construction, physicality and vocal nuance.

### **Musical Theater - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Musical Theater, students are able to demonstrate a professional work ethic within a professional framework of collaboration in rehearsal and performance.
- Upon completion of the Certificate of Achievement in Musical Theater, students are able to demonstrate knowledge of the basic anatomy and physiology involved in tone production and of the respiratory system and its contribution to singing.

- Upon completion of the Certificate of Achievement in Musical Theater, students are able to examine and perform within major genres of American Musical Theater.
- Upon completion of the Certificate of Achievement in Musical Theater, students are able to practice, perform, and memorize scales, chords, and simple harmonic progressions.
- Upon completion of the Certificate of Achievement in Musical Theater, students are able to synthesize acting, movement, dance, and singing skills into a truthful musical theater performance.

**Technical Theater - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Technical Theater, students are able to analyze elements of a theatrical design.
- Upon completion of the Certificate of Achievement in Technical Theater, students are able to complete basic hand sewing tasks and read and execute a pattern for costume construction.
- Upon completion of the Certificate of Achievement in Technical Theater, students are able to hang, cable, and focus stage lighting and be able to read lighting plots and related documents.
- Upon completion of the Certificate of Achievement in Technical Theater, students are able to perform as a member of a show running crew in various capacities, such as stagehand, light or sound board operator, or wardrobe assistant.
- Upon completion of the Certificate of Achievement in Technical Theater, students are able to read construction plans and construct common stage scenery such as flats, platform, and stairs.
- Upon completion of the Certificate of Achievement in Technical Theater, students are able to research, plot, and design costumes for use in production.

**Theater Arts - AA**

- Upon completion of the AA in Theater Arts, 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.
- Upon completion of the AA in Theater Arts, students are able to critically analyze the artistic elements in productions, looking at design, acting, directorial choices, as well as personal performance processes.
- Upon completion of the AA in Theater Arts, students are able to possess the skills necessary for textual interpretation for academic discourse, design, and/or performance studies.
- Upon completion of the AA in Theater Arts, students are able to understand how to develop and maintain a positive contribution the field of theater in academics, performance, or technical theater.
- Upon completion of the AA in Theater Arts, students are able to understand the historical and cultural significance of theater through completion of projects in the technical theater courses and theater history class.

**Theater Arts - AA-T**

- Upon completion of the AA-T in Theater Arts, students are able to analyze the artistic elements in productions, looking at design, acting, and directorial choice.
- Upon completion of the AA-T in Theater Arts, 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.
- Upon completion of the AA-T in Theater Arts, students are able to possess the skills necessary for textual interpretation for academic discourse, design, and/or performance studies.
- Upon completion of the AA-T in Theater Arts, students are able to understand how to develop and maintain a positive contribution the field of theater in academics, performance, or technical theater.
- Upon completion of the AA-T in Theater Arts, students are able to understand the historical and cultural significance of theater through completion of projects in the technical theater courses and theater history class.

**BSSL**

**Anthropology**

**Anthropology - AA-T**

- Upon completion of the AA-T in Anthropology, students are able to describe and discuss differing cultural practices using anthropological theories and terms.
- Upon completion of the AA-T in Anthropology, students are able to describe and discuss the evolution and prehistory of human beings.
- Upon completion of the AA-T in Anthropology, students are able to explain why there is no biological validity to the concept of "race."
- Upon completion of the AA-T in Anthropology, students are able to use the scientific method to test hypotheses and establish empirical facts.

**Business**

**Accounting Technician - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Accounting Technician, students are able to 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.



**Administrative Assistant - AA**

- Upon completion of the AA in Administrative Assistant, 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**

- Upon completion of the Certificate of Achievement in Administrative Assistant, students are able to demonstrate the ability to successfully use basic English language skills (grammar, punctuation, capitalization, etc.) in business documents.

**Bookkeeping - Certificate of Achievement**

- Upon completion of the Certificate of Accomplishment in Bookkeeping, 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 - AS**

- Upon completion of the AS in Business, students are able to compare and contrast ethical standards and best practices of social responsibility to business situations.
- Upon completion of the AS in Business, students are able to demonstrate knowledge of business operations, the business organization, business environments, and business procedures.
- Upon completion of the AS in Business, students are able to explain the functions of all business operations and identify the resources needed in each area.

**Business Administration - AA**

- Upon completion of the AA in Business Administration, students are able to compare and contrast ethical standards and best practices of social responsibility to business situations.
- Upon completion of the AA in Business Administration, students are able to demonstrate knowledge of business operations, the business organization, business environments, and business procedures.
- Upon completion of the AA in Business Administration, students are able to explain the functions of all business operations and identify the resources needed in each area.
- Upon completion of the AA in Business Administration, students are able to list and explain the factors of production, the external business environments and apply their influence in specific business problems.

**Business Administration - AS-T**

- Upon completion of the AS-T in Business Administration, students are able to compare and contrast ethical standards and best practices of social responsibility to business situations.
- Upon completion of the AS-T in Business Administration, students are able to demonstrate knowledge of business operations, the business organization, business environments, and business procedures.
- Upon completion of the AS-T in Business Administration, students are able to explain the functions of all business operations and identify the resources needed in each area.
- Upon completion of the AS-T in Business Administration, students are able to list and explain the factors of production, the external business environments and apply their influence in specific business problems.

**Business Entrepreneurship - AA**

- Upon completion of the AA in Business Entrepreneurship, students are able to construct a business plan, essential marketing plan, and the basic financial documents needed for a small business.
- Upon completion of the AA in Business Entrepreneurship, students are able to define "Competitive Advantage" and discuss actions a small business should use to achieve it.
- Upon completion of the AA in Business Entrepreneurship, students are able to demonstrate knowledge of business operations, the business organization, business environments, and business procedures.
- Upon completion of the AA in Business Entrepreneurship, students are able to describe the nature and characteristics of successful small businesses.

**Business Entrepreneurship - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Business Entrepreneurship, students are able to compare and contrast the impact of the external business environments on small businesses.
- Upon completion of the Certificate of Achievement in Business Entrepreneurship, students are able to construct a business plan, essential marketing plan, and basic financial documents for a small business.
- Upon completion of the Certificate of Achievement in Business Entrepreneurship, students are able to define and provide concrete examples of the "Competitive Advantage" concept that a small business must achieve in order to succeed.
- Upon completion of the Certificate of Achievement in Business Entrepreneurship, students are able to describe the nature and characteristics of successful small business persons.
- Upon completion of the Certificate of Achievement in Business Entrepreneurship, students are able to detail key business procedures relevant to a specific problem using appropriate technology.
- Upon completion of the Certificate of Achievement in Business Entrepreneurship, students are able to summarize the responsibilities of small business owners in selecting, motivating, training, and supervising employees.

### **Business Workforce Proficiency - Certificate of Achievement**

- Upon completion of the Certificate of Accomplishment in Business Workforce Proficiency, students are able to apply standard business English to oral and written communications, including grammar, punctuation, mechanics, vocabulary, style, media, and usage.
- Upon completion of the Certificate of Accomplishment in Business Workforce Proficiency, students are able to describe the work ethic needed for success in today's work environment.
- Upon completion of the Certificate of Accomplishment in Business Workforce Proficiency, students are able to develop business communications that present information in an organized and concise manner.
- Upon completion of the Certificate of Accomplishment in Business Workforce Proficiency, students are able to explain group dynamics as they apply to an individual working effectively within a group and within teams.
- Upon completion of the Certificate of Accomplishment in Business Workforce Proficiency, students are able to identify the primary business operations, business organizational options, and business procedures.

### **Retail Management (W AFC) - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Retail Management (W AFC), students are able to demonstrate the integration of basic management theories into supervisory and management functions.
- Upon completion of the Certificate of Achievement in Retail Management (W AFC), students are able to determine the demand for products and services offered by a firm and identify potential customers.
- Upon completion of the Certificate of Achievement in Retail Management (W AFC), students are able to differentiate threshold issues involved in legal, ethical, and social responsibilities of management.
- Upon completion of the Certificate of Achievement in Retail Management (W AFC), students are able to identify key business procedures relevant to a specific problem using appropriate technology.
- Upon completion of the Certificate of Achievement in Retail Management (W AFC), students are able to integrate basic management theories into supervisor and management functions.
- Upon completion of the Certificate of Achievement in Retail Management (W AFC), students are able to list current problems related to human behavior in organizations and detail management practices effective in managing those issues.
- Upon completion of the Certificate of Achievement in Retail Management (W AFC), students are able to list resources and strategies for monitoring trends which help identify the need for new products and services.
- Upon completion of the Certificate of Achievement in Retail Management (W AFC), students are able to summarize measures that can be taken by individuals and organizations to correct organizational dysfunctions.

### **Supervisory Management - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Supervisory Management, students are able to analyze basic business documents to detect problems within an area of supervision.
- Upon completion of the Certificate of Achievement in Supervisory Management, students are able to demonstrate effective strategies for team work, planning, organizing, leading, and controlling human resources.
- Upon completion of the Certificate of Achievement in Supervisory Management, students are able to identify appropriate information compilation, reporting, storage and retrieval systems for common business situations.
- Upon completion of the Certificate of Achievement in Supervisory Management, students are able to list the primary responsibilities of a supervisor in business today.

## **Early Care and Education**

### **Associate Teacher - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Associate Teacher, students are able to assess children's development through observation, documentation, reflection and interpretation to guide curriculum and intentional teaching.
- Upon completion of the Certificate of Achievement in Associate Teacher, students are able to 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.
- Upon completion of the Certificate of Achievement in Associate Teacher, students are able to intentionally design inclusive, culturally and linguistically appropriate curriculum to promote positive development for all young children, based on child development, observation and reflection.
- Upon completion of the Certificate of Achievement in Associate Teacher, students are able to 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 - AA-T**

- Upon completion of the AA-T in Child and Adolescent Development, students are able to apply ethical standards of behavior accepted by the education profession using ongoing reflection to guide practices.
- Upon completion of the AA-T in Child and Adolescent Development, students are able to apply principles of child and adolescent development considering children's varying characteristics, needs and the multiple interacting influences on children's development.
- Upon completion of the AA-T in Child and Adolescent Development, students are able to compare and contrast diverse cultural values to develop respectful and reciprocal relationships for the purpose of working effectively with children, families, co-workers and community.
- Upon completion of the AA-T in Child and Adolescent Development, students are able to synthesize child and adolescent development research and theories.

### **Early Childhood Development - AA**

- Upon completion of the AA in Early Childhood Development, students are able to apply ethical standards of behavior accepted by the profession of early childhood education using ongoing self-reflection to guide practices.
- Upon completion of the AA in Early Childhood Development, students are able to assess children's development through observation, documentation, reflection and interpretation to guide curriculum and intentional teaching.
- Upon completion of the AA in Early Childhood Development, students are able to 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.
- Upon completion of the AA in Early Childhood Development, students are able to demonstrate practices that maintain standards of health, nutrition, and safety in early childhood settings.
- Upon completion of the AA in Early Childhood Development, students are able to 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.
- Upon completion of the AA in Early Childhood Development, students are able to intentionally design inclusive, culturally and linguistically appropriate curriculum to promote positive development for all young children, based on child development, observation and reflection.
- Upon completion of the AA in Early Childhood Development, students are able to 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.
  
- Upon completion of the AA in Early Childhood Development, students are able to 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**

- Upon completion of the Certificate of Achievement in Early Childhood Development, students are able to apply ethical standards of behavior accepted by the profession of early childhood education using ongoing self-reflection to guide practices.
- Upon completion of the Certificate of Achievement in Early Childhood Development, students are able to assess children's development through observation, documentation, reflection and interpretation to guide curriculum and intentional teaching.
- Upon completion of the Certificate of Achievement in Early Childhood Development, students are able to 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.
- Upon completion of the Certificate of Achievement in Early Childhood Development, students are able to demonstrate practices that maintain standards of health, nutrition, and safety in early childhood settings.
- Upon completion of the Certificate of Achievement in Early Childhood Development, students are able to 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.
- Upon completion of the Certificate of Achievement in Early Childhood Development, students are able to intentionally design inclusive, culturally and linguistically appropriate curriculum to promote positive development for all young children, based on child development, observation and reflection.
  
- Upon completion of the Certificate of Achievement in Early Childhood Development, students are able to 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.
  
- Upon completion of the Certificate of Achievement in Early Childhood Development, students are able to 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 - AS-T**

- Upon completion of the AS-T in Early Childhood Education, students are able to apply ethical standards of behavior accepted by the profession of early childhood education using ongoing self-reflection to guide practices.
- Upon completion of the AS-T in Early Childhood Education, students are able to assess children's development through observation, documentation, reflection and interpretation to guide curriculum and intentional teaching.
- Upon completion of the AS-T in Early Childhood Education, students are able to 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.
- Upon completion of the AS-T in Early Childhood Education, students are able to demonstrate practices that maintain standards of health, nutrition, and safety in early childhood settings.
- Upon completion of the AS-T in Early Childhood Education, students are able to intentionally design inclusive, culturally and linguistically appropriate curriculum to promote positive development for all young children, based on child development, observation and reflection.
- Upon completion of the AS-T in Early Childhood Education, students are able to 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.
- Upon completion of the AS-T in Early Childhood Education, students are able to 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 - AA**

- Upon completion of the AA in Early Childhood Intervention, students are able to assess children's development through observation, documentation, reflection and interpretation to guide curriculum and intentional teaching.
- Upon completion of the AA in Early Childhood Intervention, students are able to 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.
- Upon completion of the AA in Early Childhood Intervention, students are able to demonstrate practices that maintain standards of health, nutrition, and safety in early childhood settings.
- Upon completion of the AA in Early Childhood Intervention, students are able to 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.
- Upon completion of the AA in Early Childhood Intervention, students are able to intentionally design inclusive, culturally and linguistically appropriate curriculum to promote positive development for all young children, based on child development, observation and reflection.
- Upon completion of the AA in Early Childhood Intervention, students are able to students will develop a personal ECE philosophy after reviewing ECE philosophies and program approaches.
- Upon completion of the AA in Early Childhood Intervention, students are able to 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.
- Upon completion of the AA in Early Childhood Intervention, students are able to 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**

- Upon completion of the Certificate of Achievement in Early Childhood Intervention Assistant, students are able to assess children's development through observation, documentation, reflection and interpretation to guide curriculum and intentional teaching.
- Upon completion of the Certificate of Achievement in Early Childhood Intervention Assistant, students are able to 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.
- Upon completion of the Certificate of Achievement in Early Childhood Intervention Assistant, students are able to demonstrate practices that maintain standards of health, nutrition, and safety in early childhood settings.
- Upon completion of the Certificate of Achievement in Early Childhood Intervention Assistant, students are able to intentionally design inclusive, culturally and linguistically appropriate curriculum to promote positive development for all young children, based on child development, observation and reflection.
- Upon completion of the Certificate of Achievement in Early Childhood Intervention Assistant, students are able to 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.
- Upon completion of the Certificate of Achievement in Early Childhood Intervention Assistant, students are able to 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.

## **Economics**

### **Economics - AA-T**

- Upon completion of the AA-T in Economics, students are able to explain how market forces of supply and demand lead to efficient allocation of goods, services and factors of production.
- Upon completion of the AA-T in Economics, students are able to 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.
- Upon completion of the AA-T in Economics, students are able to use marginal analysis to explain how individuals in the economy make their production and purchasing decisions.

## **Global Studies**

### **Global Studies - AA-T**

- Upon completion of an AA-T in Global Studies, 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.
- Upon completion of an AA-T in Global Studies, students are able to assess the benefits and costs of globalization to various classes, regions, nations, and ethnic groups across the globe.
- Upon completion of an AA-T in Global Studies, students are able to demonstrate knowledge of world's cultures, languages, art, geography, climate, social and political systems.
- Upon completion of an AA-T in Global Studies, students are able to use social scientific and humanist modes of analysis to relate and differentiate between cultures.

## **History**

### **History - AA-T**

- Upon completion of the AA-T in History, students are able to analyze and assess various types of historical sources.
- Upon completion of the AA-T in History, students are able to compose an argument using historical evidence.

- Upon completion of the AA-T in History, students are able to explain major historical developments in United States and World History.

**Marketing**

**Marketing - AA**

- Upon completion of the AA in Marketing, 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.
- Upon completion of the AA in Marketing, students are able to construct a detailed marketing plan, which includes all aspects of the marketing mix.
- Upon completion of the AA in Marketing, students are able to demonstrate knowledge of business operations, the business organization, business environments, and business procedures.
- Upon completion of the AA in Marketing, students are able to detail available pricing strategies and prepare comparisons of strategies to achieve a firm's market objectives.

**Retailing - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Retailing, students are able to compare and contrast the various pricing strategies.
- Upon completion of the Certificate of Achievement in Retailing, students are able to determine the demand for products and services offered by a firm and identify potential customers.
- Upon completion of the Certificate of Achievement in Retailing, students are able to develop pricing strategies with the goal of maximizing the firm's profits and/or market share while ensuring customer satisfaction.
- Upon completion of the Certificate of Achievement in Retailing, students are able to explain promotional mixes and effective strategies for each.
- Upon completion of the Certificate of Achievement in Retailing, students are able to identify distinctions between distribution channels.
- Upon completion of the Certificate of Achievement in Retailing, students are able to identify the primary business operations, business organizational options, and business procedures.
- Upon completion of the Certificate of Achievement in Retailing, students are able to list resources and strategies for monitoring trends which help identify the need for new products and services.
- Upon completion of the Certificate of Achievement in Retailing, students are able to summarize measures that can be taken by individuals and organizations to correct organizational dysfunctions.

**Noncredit Business**

**Customer Service - Certificate of Completion**

- Upon completion of the Certificate of Completion in Customer Service, students are able to demonstrate how to prioritize responsibilities in relation to deadlines/time demands.
- Upon completion of the Certificate of Completion in Customer Service, students are able to identify personal strengths and areas of improvement in relation to business roles and expertise.
- Upon completion of the Certificate of Completion in Customer Service, students are able to recognize multiple tools in improving customer satisfactions and loyalty.

**Small Business Management - Certificate of Completion**

- Upon completion of the Certificate of Completion in Small Business Management, students are able to demonstrate the ability to comprehend, apply, and evaluate standards of ethical behavior in various business settings.
- Upon completion of the Certificate of Completion in Small Business Management, students are able to evaluate the feasibility of success when starting a new business venture.
- Upon completion of the Certificate of Completion in Small Business Management, students are able to recognize the advantages and disadvantages of the various forms of business ownership relative to a business opportunity.
- Upon completion of the Certificate of Completion in Small Business Management, students are able to research and compose a business plan that can be used for planning as well as financing.

**Political Science**

**Political Science - AA-T**

- Upon completion of the AA-T in Political Science, students are able to analyze and assess various types of sources in the discipline.
- Upon completion of the AA-T in Political Science, students are able to 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.
- Upon completion of the AA-T in Political Science, students are able to demonstrate understanding and application of theories and concepts in political science to contemporary political phenomenon.
- Upon completion of the AA-T in Political Science, students are able to research, synthesize, and argue a political thesis.

**Psychology**

**Psychology - AA-T**

- Upon completion of the AA-T in Psychology, students are able to demonstrate effective written and oral communication for different purposes and audiences.
- Upon completion of the AA-T in Psychology, students are able to apply psychological content for personal, professional, and lifelong learning goals.
- Upon completion of the AA-T in Psychology, students are able to apply ethical standards to evaluate psychological science and practice in a diverse community at the local, national, and global levels.
- Upon completion of the AA-T in psychology, students are able to describe key concepts, principles, and themes in psychology and apply empirical findings.
- Upon completion of the AA-T in Psychology, students are able to use scientific thinking and information literacy to interpret, design, and conduct psychological research.

**Sociology****Sociology - AA-T**

- Upon completion of AA-T in Sociology, students are able to analyze and describe the major concepts, theoretical perspectives, empirical findings, and historical trends in sociology.
- Upon completion of AA-T in Sociology, students are able to demonstrate critical thinking and analytic skills in the application of social theory to solve problems that arise in institutional and societal contexts.

**PATH****Administration of Justice****PSLO**

- Upon completion of the Certificate of Achievement in Law Enforcement, students are able to assume the duties of a basically trained California peace officer and be eligible for duty as a probationary peace officer.

**Administration of Justice - AA**

- Upon completion of the AA in Administration of Justice, students are academically prepared for a California Peace Officer Standards and Training Commission basic training academy and prepared for transfer to a four year degree program. The student will be able to 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 – AS-T**

- Upon completion of the AS-T in Administration of Justice, students are academically prepared for transfer to a four year degree program. The student will be able to explain different components and sub-components of the American criminal justice program; interpret criminal law statutes and differentiate between civil law and criminal law.

**Apprenticeship Ironworkers****Advanced Shop Ironworkers Apprenticeship - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Advanced Shop Ironworkers Apprenticeship, students are able to explain how building loads are distributed into the ground through the use of footings.
- Upon completion of the Certificate of Achievement in Advanced Shop Ironworkers Apprenticeship, students are able to demonstrate preparation of structural members for painting work.
- Upon completion of the Certificate of Achievement in Advanced Shop Ironworkers Apprenticeship, students are able to demonstrate torque inspection of high strength steel bolts and fasteners.
- Upon completion of the Certificate of Achievement in Advanced Shop Ironworkers Apprenticeship, students are able to demonstrate visual inspection of welded materials for weld soundness and discontinuities.
- Upon completion of the Certificate of Achievement in Advanced Shop Ironworkers Apprenticeship, students are able to explain the AWS code requirements for the qualification of welders and welding operators.

**Basic Shop Ironworkers Apprenticeship - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Basic Shop Ironworkers Apprenticeship, students are able to demonstrate using a calculator to solve right triangle problems.
- Upon completion of the Certificate of Achievement in Basic Shop Ironworkers Apprenticeship, students are able to demonstrate the skills needed to perform AWS Code quality welding in the flat position.
- Upon completion of the Certificate of Achievement in Basic Shop Ironworkers Apprenticeship, students are able to calculate material lengths base on tapeline measurements.

- Upon completion of the Certificate of Achievement in Basic Shop Ironworkers Apprenticeship, students are able to identify essential components of being a valuable ironworker employee.
- Upon completion of the Certificate of Achievement in Basic Shop Ironworkers Apprenticeship, students are able to identify the basic line types used on an blueprints.

### **Elementary Shop Ironworkers Apprenticeship - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Elementary Shop Ironworkers Apprenticeship, students are able to identify common structural shapes used on an blueprints.
- Upon completion of the Certificate of Achievement in Elementary Shop Ironworkers Apprenticeship, students are able to demonstrate fit-up and preparation of beam ends intended for complete joint penetration.
- Upon completion of the Certificate of Achievement in Elementary Shop Ironworkers Apprenticeship, students are able to demonstrate layout of basic structural columns and base plates.
- Upon completion of the Certificate of Achievement in Elementary Shop Ironworkers Apprenticeship, students are able to demonstrate the skills needed to perform AWS Code quality welding in the horizontal position.
- Upon completion of the Certificate of Achievement in Elementary Shop Ironworkers Apprenticeship, students are able to operate safely in a shop Ironworker employment environment.

### **Intermediate Shop Ironworkers Apprenticeship - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Intermediate Shop Ironworkers Apprenticeship, students are able to demonstrate fit-up and preparation of pipe and rolled sections.
- Upon completion of the Certificate of Achievement in Intermediate Shop Ironworkers Apprenticeship, students are able to demonstrate layout of flat plates, drill bushings and angle templates.
- Upon completion of the Certificate of Achievement in Intermediate Shop Ironworkers Apprenticeship, students are able to demonstrate the skills needed to perform AWS Code quality welding in the vertical position.
- Upon completion of the Certificate of Achievement in Intermediate Shop Ironworkers Apprenticeship, students are able to identify tools used for layout of patterns and templates.
- Upon completion of the Certificate of Achievement in Intermediate Shop Ironworkers Apprenticeship, students are able to identify various non-destructive tests that are utilized to check welds for soundness.

### **Shop Ironworkers Apprenticeship - AS**

- Upon completion of the AS in Shop Ironworkers Apprenticeship, students are able to demonstrate AWS code quality welding.
- Upon completion of the AS in Shop Ironworkers Apprenticeship, students are able to demonstrate the ability to layout and fabricate steel stairs and handrail.
- Upon completion of the AS in Shop Ironworkers Apprenticeship, students are able to demonstrate the ability to read and interpret blueprints used in the ironworker shop.
- Upon completion of the AS in Shop Ironworkers Apprenticeship, students are able to describe the benefits derived from collective bargaining and union membership.
- Upon completion of the AS in Shop Ironworkers Apprenticeship, students are able to operate safely in an ironworker shop environment.

## **Automotive Technology**

### **Automotive Alternative Fuels/Hybrid Technology - AS**

- Upon completion of the AS in Automotive Alternative Fuels/ Hybrid Technology, students are able to apply safety procedures relating to alternative fuels and high voltage.
- Upon completion of the AS in Automotive Alternative Fuels/ Hybrid Technology, students are able to diagnose alternative fuel systems.
- Upon completion of the AS in Automotive Alternative Fuels/ Hybrid Technology, students are able to perform high voltage disable procedures.

### **Automotive Alternative Fuels/Hybrid Technology - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Automotive Alternative Fuels/ Hybrid Technology, students are able to apply safety procedures relating to alternative fuels and high voltage.
- Upon completion of the Certificate of Achievement in Automotive Alternative Fuels/ Hybrid Technology, students are able to perform high voltage disable procedures.
- Upon completion of the Certificate of Achievement in Automotive Alternative Fuels/Hybrid Technology, students are able to diagnose alternative fuel systems.

### **Automotive Chassis - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Automotive Chassis, students are able to follow safety guidelines while employed in an automotive related job.
- Upon completion of the Certificate of Achievement in Automotive Chassis, students are able to use automotive knowledge to diagnose various automotive concerns.

**Automotive Drivability- Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Automotive Drivability, students are able to follow safety guidelines while employed in an automotive related job.
- Upon completion of the Certificate of Achievement in Automotive Drivability, students are able to use automotive knowledge to diagnose various automotive concerns.

**Automotive Electronics Technology - AS**

- Upon completion of the AS in Automotive Electronics Technology, students are able to follow safety guidelines while employed in an automotive related job.
- Upon completion of the AS in Automotive Electronics Technology, students are able to use automotive knowledge to diagnose various automotive concerns.

**Automotive Light Duty Diesel - AS**

- Upon completion of the AS in Automotive Light Duty Diesel, students are able to diagnose electronic diesel systems.
- Upon completion of the AS in Automotive Light Duty Diesel, students are able to repair diesel engine mechanical systems.
- Upon completion of the AS in Automotive Light Duty Diesel, students are able to repair diesel engine mechanical systems.

**Automotive Light Duty Diesel - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Automotive Light Duty Diesel, students are able to diagnose and repair diesel turbo systems.
- Upon completion of the Certificate of Achievement in Automotive Light Duty Diesel, students are able to diagnose electronic diesel systems.
- Upon completion of the Certificate of Achievement in Automotive Light Duty Diesel, students are able to repair diesel engine mechanical systems.

**Automotive Master - AS**

- Upon completion of AS in Automotive Master, students are able to diagnose electrical issues.
- Upon completion of AS in Automotive Master, students are able to diagnose electrical issues.
- Upon completion of AS in Automotive Master, students are able to diagnose engine mechanical issues.

**Automotive Master - Certificate of Achievement**

- Upon completion of Certificate of Achievement in Automotive Master, students are able to diagnose electrical issues.
- Upon completion of Certificate of Achievement in Automotive Master, students are able to diagnose emission issues.
- Upon completion of Certificate of Achievement in Automotive Master, students are able to diagnose engine mechanical issues.

**Automotive Mechanical - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Automotive Mechanical, students are able to diagnose engine mechanical issues.
- Upon completion of the Certificate of Achievement in Automotive Mechanical, students are able to measure engine components and compare to specifications.
- Upon completion of the Certificate of Achievement in Automotive Mechanical, students are able to tear down, inspect and reassemble engines.

**Automotive Smog Technician - AS**

- Upon completion of the AS in Automotive Smog Technician, students are able to apply for and take the California Smog test.
- Upon completion of the AS in Automotive Smog Technician, students are able to diagnose advanced emission issues using five gas.
- Upon completion of the AS in Automotive Smog Technician, students are able to diagnose high level engine mechanical issues using engine scanners.

**Automotive Smog Technician - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Automotive Smog Technician, students are able to apply for and take the California Smog test.
- Upon completion of the Certificate of Achievement in Automotive Smog Technician, students are able to diagnose emission issues.
- Upon completion of the Certificate of Achievement in Automotive Smog Technician, students are able to diagnose engine mechanical issues.

**Emergency Medical Services****Emergency Medical Responder - Certificate of Accomplishment**

- Upon completion of the Certificate of Accomplishment in Emergency Medical Responder, 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.



- Upon completion of the Certificate of Accomplishment in Emergency Medical Responder, students are competent and prepared for employment as a Lifeguard, Police Officer, and/or Search and Rescue Squad member.
- Upon completion of the Certificate of Accomplishment in Emergency Medical Responder, students are prepared to become an Emergency Medical Responder (EMR) through registration with the National Registry of EMT's.

### **Emergency Medical Services EMT-Paramedic - AS**

- Upon completion of the AS in Emergency Medical Services EMT-Paramedic, students are prepared as a competent entry-level Paramedics in the affective (behavior) learning domain with or without exit points at the Advanced Emergency Medical Technician and/or Emergency Medical Technician, and/or Emergency Medical Responder levels.
- Upon completion of the AS in Emergency Medical Services EMT-Paramedic, students are prepared as a competent entry-level Paramedics in the cognitive (knowledge) learning domain with or without exit points at the Advanced Emergency Medical Technician and/or Emergency Medical Technician, and/or Emergency Medical Responder levels.
- Upon completion of the AS in Emergency Medical Services EMT-Paramedic, students are prepared as a competent entry-level Paramedics in the psychomotor (skills) learning domain with or without exit points at the Advanced Emergency Medical Technician and/or Emergency Medical Technician, and/or Emergency Medical Responder levels.
- Upon completion of the AS in Emergency Medical Services EMT-Paramedic, students are prepared to become a Nationally Registered Paramedic (NRP).

### **Emergency Medical Services EMT-Paramedic - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Emergency Medical Services EMT-Paramedic, students are prepared as a competent entry-level Paramedics in the affective (behavior) learning domain with or without exit points at the Advanced Emergency Medical Technician and/or Emergency Medical Technician, and/or Emergency Medical Responder levels.
- Upon completion of the Certificate of Achievement in Emergency Medical Services EMT-Paramedic, students are prepared as a competent entry-level Paramedics in the psychomotor (skills) learning domain with or without exit points at the Advanced Emergency Medical Technician and/or Emergency Medical Technician, and/or Emergency Medical Responder levels.
- Upon completion of the Certificate of Achievement in Emergency Medical Services EMT-Paramedic, students are prepared to become a Nationally Registered Paramedic (NRP).
- Upon completion of the Certificate of Achievement in Emergency Medical Services EMT-Paramedics, students are prepared as a competent entry-level Paramedics in the cognitive (knowledge) learning domain with or without exit points at the Advanced Emergency Medical Technician and/or Emergency Medical Technician, and/or Emergency Medical Responder levels.

### **Emergency Medical Technologies- Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Emergency Medical Technologies, students are able to function at the California State certified level of EMT.
- Upon completion of the Certificate of Achievement in Emergency Medical Technologies, students are prepared to become a Nationally Registered Emergency Medical Technician (NREMT).

## **Fire Service Technology**

### **Company Officer - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Company Officer, 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.
- Upon completion of the Certificate of Achievement in Company Officer, students are able to demonstrate the ability to teach and deliver instruction from a prepared lesson plan utilizing instructional aids and evaluation instruments.
- Upon completion of the Certificate of Achievement in Company Officer, students are able to demonstrate the use of human resources to accomplish assignments of a company officer such as personnel professional evaluations and performance reviews.
- Upon completion of the Certificate of Achievement in Company Officer, students are able to 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.
- Upon completion of the Certificate of Achievement in Company Officer, students are able to identify the steps of certification in the Company Officer certification track.

### **Fire Academy-Fire Suppression - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Fire Academy-Fire Suppression, students are able to define and identify the structure, culture and expectations of entry level firefighting personnel.
- Upon completion of the Certificate of Achievement in Fire Academy-Fire Suppression, students are able to demonstrate the ability to perform to the standard set forth by State Fire Training Firefighter 2013 skills and examination standards.
- Upon completion of the Certificate of Achievement in Fire Academy-Fire Suppression, students are able to demonstrate the proper use of equipment, tools, skills and abilities required of an entry-level firefighter.

### **Fire Prevention - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Fire Prevention, students are able to explain the difference between fire codes and building codes and how they apply to different municipalities.
- Upon completion of the Certificate of Achievement in Fire Prevention, students are able to use and demonstrate how to properly conduct a fire inspection.
- Upon completion of the Certificate of Achievement in Fire Prevention, students, given field observations, are able to 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 - AS**

- Upon completion of the AS in Fire Service Technology, students are able to analyze and apply measures to resolve problems in areas of suppression, prevention, and EMS.
- Upon completion of the AS in Fire Service Technology, students are able to analyze and evaluate data to solve Fire Technology problems.
- Upon completion of the AS in Fire Service Technology, students are able to demonstrate technical, cognitive, and psycho-motor skills necessary to achieve and maintain employment in the fire service.
- Upon completion of the AS in Fire Service Technology, students are able to gain knowledge safety, rescue, emergency medical operations and hazardous materials.
- Upon completion of the AS in Fire Service Technology, students are able to recognize the importance of ethics and professionalism within the Fire Technology field.

### **Fire Service Technology - Certificate of Achievement**

- Upon completion of the Fire Service Technology Certificate of Achievement, students are able to analyze and apply measures to resolve problems in areas of suppression, prevention, and EMS.
- Upon completion of the Fire Service Technology Certificate of Achievement, students are able to analyze and evaluate data to solve Fire Technology problems.
- Upon completion of the Fire Service Technology Certificate of Achievement, students are able to demonstrate technical, cognitive, and psycho-motor skills necessary to achieve and maintain employment in the fire service.
- Upon completion of the Fire Service Technology Certificate of Achievement, students are able to recognize the importance of ethics and professionalism within the Fire Technology field.

## **Health**

### **Public Health Science - AS-T**

- Upon completion of the AS-T in Public Health Science, students are able to critically evaluate popular and scientific literature and other media for its significance and impact on individual and public health.
- Upon completion of the AS-T in Public Health Science, students are able to describe factors that contribute to health disparities and leading causes of morbidity and mortality, including factors related to public policy, socioeconomics, and the environment.
- Upon completion of the AS-T in Public Health Science, students are able to develop strategies for initiating and/ or maintaining activities that promote health through individual behavior, civic/community engagement, and/or environmental stewardship.

## **Kinesiology**

### **PSLO**

- Upon completion of the AA-T in Kinesiology, students are able to disseminate the knowledge of physical activity derived from experiences, scholarly study, and professional practice.

### **Athletic Training/ Sports Medicine - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Athletic Training/ Sports Medicine, students are able to apply therapeutic modalities under the supervision of a staff athletic trainer, including thermotherapy, cryotherapy, ultrasound, and electrical stimulation.
- Upon completion of the Certificate of Achievement in Athletic Training/ Sports Medicine, students are able to analyze and categorize various athletic training and related programs (employment settings, educational preparation/programs, certification, continuing education requirements, professional development and responsibilities).
- Upon completion of the Certificate of Achievement in Athletic Training/ Sports Medicine, students are able to critique padding and bracing devices and apply as indicated for injury prevention and management.
- Upon completion of the Certificate of Achievement in Athletic Training/ Sports Medicine, students are able to 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).
- Upon completion of the Certificate of Achievement in Athletic Training/ Sports Medicine, students are able to explain and identify techniques associated with injury recognition, evaluation and assessment, including taking an appropriate injury history.
- Upon completion of the Certificate of Achievement in Athletic Training/ Sports Medicine, students are able to identify prominent anatomical landmarks via palpation and assess ranges of motion of the foot, ankle, knee, hip, wrist/hand/thumb, elbow, shoulder and spine.
- Upon completion of the Certificate of Achievement in Athletic Training/ Sports Medicine, students are able to illustrate basic athletic taping and wrapping applications for injury prevention and management.

### **Fitness Trainer - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Fitness Trainer, students are able to develop and administer a safe and effective periodized exercise program designed for a client.
- Upon completion of the Certificate of Achievement in Fitness Trainer, students are able to estimate heart rate, maximum heart rate and, target heart rate, and perform CPR with AED and rescue breathing.
- Upon completion of the Certificate of Achievement in Fitness Trainer, students are able to 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.

- Upon completion of the Certificate of Achievement in Fitness Trainer, students are able to 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.

### **Kinesiology – AA-T**

- Upon completion of the AA-T in Kinesiology, students are able to disseminate the knowledge of physical activity derived from experiences, scholarly study, and professional practice.

- Upon completion of the AA-T in Kinesiology, students are able to identify programs of study as well as career pathways within the field of Kinesiology.

- Upon completion of the AA-T in Kinesiology, students are able to perform a variety of motor activities at a proficient level from at least three of the movement-based categories.

## **Noncredit Automotive Technology**

### **Automotive Basic - Certificate of Completion**

- Upon completion of the Certificate of Completion in Automotive Basic, students are able to diagnose basic engine mechanical issues.

- Upon completion of the Certificate of Completion in Automotive Basic, students are able to measure engine components and compare to specifications.

- Upon completion of the Certificate of Completion in Automotive Basic, students are able to tear down, inspect and reassemble engines.

### **Automotive Smog - Certificate of Completion**

- Upon completion of the Certificate of Completion in Automotive Smog, students are able to apply and take the California Smog test.

- Upon completion of the Certificate of Completion in Automotive Smog, students are able to diagnose emission issues.

- Upon completion of the Certificate of Completion in Automotive Smog, students are able to diagnose engine mechanical issues.

## **Nutrition**

### **Nutrition and Dietetics- AS-T**

- Upon completion of the AS-T in Nutrition and Dietetics, 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).

- Upon completion of the AS-T in Nutrition and Dietetics, students are able to communicate knowledge of nutrition and metabolism and apply that knowledge to the maintenance of health and the treatment of disease.

- Upon completion of the AS-T in Nutrition and Dietetics, students are able to critically evaluate factors influencing obesity, and the metabolic consequences of obesity, as it relates to chronic disease.

## **Welding Technology**

### **Welding Technology - AS**

- Upon completion of the AS in Welding Technology, students are able to operate safely in a welding workplace environment.

- Upon completion of the AS in Welding Technology, students have the skills necessary to pass an American Welding Society standard welding certification test.

### **Welding Technology - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Welding Technology, students are able to operate safely in a welding workplace environment.

- Upon completion of the Certificate of Achievement in Welding Technology, students have the skills necessary to pass an American Welding Society standard welding certification test.

## **STEM**

### **Biological Sciences**

#### **Biology - AA**

- Upon completion of an AA in Biology, students are able to explain and apply basic principles and processes of biology at different levels, from the biochemical to the ecological.

- Upon completion of an AA in Biology, students are able to design, conduct, analyze, and/or report results of investigations and experiments in the laboratory and/or field.

- Upon completion of an AA in Biology, students are proficient in standard biology lab techniques and lab safety procedures.

#### **Biology - AS-T**

- Upon completion of an AS-T in Biology, students are able to design, conduct, analyze, and/or report results of investigations and experiments in the laboratory and/or field.

- Upon completion of an AS-T in Biology, students are able to explain and apply basic principles and processes of biology at different levels, from the biochemical to the ecological.
- Upon completion of an AS-T in Biology, students are proficient in standard biology lab techniques and lab safety procedures.

### **Biology UC Pathway - AS**

- Upon completion of an AS in Biology UC Pathway, students are able to design, conduct, analyze, and/or report results of investigations and experiments in the laboratory and/or field.
- Upon completion of an AS in Biology UC Pathway, students are able to explain and apply basic principles and processes of biology at different levels, from the biochemical to the ecological.
- Upon completion of an AS in Biology UC Pathway, students are proficient in standard biology lab techniques and lab safety procedures.

### **Biology UC Pathway - Certificate of Achievement**

- Upon completion of an Certificate of Achievement in Biology UC Pathway, students are able to design, conduct, analyze, and/or report results of investigations and experiments in the laboratory and/or field.
- Upon completion of an Certificate of Achievement in Biology UC Pathway, students are able to explain and apply basic principles and processes of biology at different levels, from the biochemical to the ecological.
- Upon completion of an Certificate of Achievement in Biology UC Pathway, students are proficient in standard biology lab techniques and lab safety procedures.

### **Biology: Allied Health - AA**

- Upon completion of an AA in Biology: Allied Health, students are able to explain and apply the basic processes of homeostasis in humans from the cellular to the organismal level.
- Upon completion of an AA in Biology: Allied Health, students are able to conduct, analyze, and report results of experiments.
- Upon completion of an AA in Biology: Allied Health, students are proficient in standard biology lab techniques and lab safety procedure.

### **Computational Biology - AA**

- Upon completion of the AA in Computational Biology, students are able to demonstrate an understanding of the fundamental concepts in molecular biology, including DNA, genes, proteins and genomes.
- Upon completion of the AA in Computational Biology, students are able to explain the use of computational techniques to solve biological problems.
- Upon completion of the AA in Computational Biology, students are able to 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**

- Upon completion of the Certificate of Achievement in Computational Biology, students are able to demonstrate an understanding of the fundamental concepts in molecular biology, including DNA, genes, proteins and genomes.
- Upon completion of the Certificate of Achievement in Computational Biology, students are able to explain the use of computational techniques to solve biological problems.
- Upon completion of the Certificate of Achievement in Computational Biology, students are able to use online resources such as NCBI (National Center for Biotechnology Information) and bioinformatics applications to research and analyze biological data.

## **Chemistry**

### **Chemistry - AS**

- Upon completion of the AS in Chemistry, 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.
- Upon completion of the AS in Chemistry, students are able to demonstrate proficiency in solving complex problems in and conceptual understanding of Organic Chemistry as measured by the ACS Full-Year Organic Chemistry Exam.

### **Chemistry Education - AS**

- Upon completion of the AA in Chemistry Education, 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.
- Upon completion of the AA in Chemistry Education, students are able to demonstrate proficiency in solving complex problems in and conceptual understanding of Organic Chemistry as measured by the ACS Full-Year Organic Chemistry Exam.

## **Computer Information Systems**

### **Administrative Medical Assistant – Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Administrative Medical Assistant, 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.
- Upon completion of the Certificate of Achievement in Administrative Medical Assistant, 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.

### **Cloud Computing - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Cloud Computing, 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.
- Upon completion of the Certificate of Achievement in Cloud Computing, 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 Achievement**

- Upon completion of the Certificate of Achievement in Computer Applications Software, 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.
- Upon completion of the Certificate of Achievement in Computer Applications Software, students are able to analyze a business problem and develop a solution using appropriate application software.

### **Computer Information Systems - AA**

- Upon completion of the AA in Computer Information Systems, students are able to analyze a business problem and develop a solution using appropriate applications software.

### **Computer Information Technologist – AS**

- Upon completion of the AS in Computer Information Technologist, students are able to demonstrate a strong foundation of knowledge in computer programming, database design and administration, and computer networking.
- Upon completion of the AS in Computer Information Technologist, students are able to demonstrate clear, compelling, analytical, and concise writing to professionally describe their programming, database, and networking project and skills.

### **Project Management - Certificate of Achievement**

- Upon completion of the Certificate of Accomplishment in Project Management, 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.
- Upon completion of the Certificate of Accomplishment in Project Management, students are able to 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**

- Upon completion of the Certificate of Accomplishment in Web Development, 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.
- Upon completion of the Certificate of Accomplishment in Web Development, students are able to create web pages that incorporate JavaScript controls.

## **Computer Networking Technology**

### **Cisco Network Associate - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Cisco Network Associate, students are able to configure a LAN with routing, Troubleshoot LAN configuration.
- Upon completion of the Certificate of Achievement in Cisco Network Associate, students are able to configure a WAN with routing, Troubleshoot WAN configuration.

### **Computer Desktop OS Security - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Computer Desktop OS Security, students are able to demonstrate professional behavior such as working in a team and communicating in a professional manner.
- Upon completion of the Certificate of Achievement in Computer Desktop OS Security, students are able to explain the basic objectives of cybersecurity and the importance of information security.
- Upon completion of the Certificate of Achievement in Computer Desktop OS Security, students are able to identify, install, configure, and manage common network cables, devices and services.
- Upon completion of the Certificate of Achievement in Computer Desktop OS Security, students are able to install, configure, and manage computer and network hardware.
- Upon completion of the Certificate of Achievement in Computer Desktop OS Security, students are able to install, configure, and manage desktop operating systems.

### **Computer Network Technician - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Computer Network Technician, students are able to analyze, design and document computer network specifications to meet client needs.
- Upon completion of the Certificate of Achievement in Computer Network Technician, students are able to demonstrate professional behavior such as working in a team and communicating in a professional manner.
- Upon completion of the Certificate of Achievement in Computer Network Technician, students are able to install, configure, and manage client and server operating systems.
- Upon completion of the Certificate of Achievement in Computer Network Technician, students are able to install, configure, and manage computer hardware.

### **CyberSecurity - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in CyberSecurity, students are able to use analytical thinking and critical analysis skills necessary to analyze and solve computer network security issues to help protect computers and computer networks using multiple operating systems.
- Upon completion of the Certificate of Achievement in CyberSecurity, students are able to use group collaboration and communications skills necessary to work effectively in a team to solve computer networking security issues and to document and present information on security risks and planned responses.

### **Digital Forensics Examiner - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Digital Forensics Examiner, students are able to image and examine evidence in a forensically sound manner.
- Upon completion of the Certificate of Achievement in Digital Forensics Examiner, students are able to perform evidence examination and evaluation and present in a standard forensic case report.

### **IT Support Professional - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in IT Support Professional, 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.

### **Microsoft Systems Administrator - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Microsoft Systems Administrator, students are able to analyze, design and document computer network specifications to meet client needs.
- Upon completion of the Certificate of Achievement in Microsoft Systems Administrator, students are able to analyze, design, and document Windows enterprise services to meet client needs.
- Upon completion of the Certificate of Achievement in Microsoft Systems Administrator, students are able to demonstrate professional behavior such as working in a team and communicating in a professional manner.
- Upon completion of the Certificate of Achievement in Microsoft Systems Administrator, students are able to install, configure, and manage client and server operating systems.
- Upon completion of the Certificate of Achievement in Microsoft Systems Administrator, students are able to install, configure, and manage network dependencies and services.
- Upon completion of the Certificate of Achievement in Microsoft Systems Administrator, students are able to install, configure, and manage Windows client operating systems.
- Upon completion of the Certificate of Achievement in Microsoft Systems Administrator, students are able to manage users, computers, and groups in Active Directory.

### **Network Security and Administration - AS**

- Upon completion of the AS in Network Security and Administration, students are able to analyze, design, and document computer and network specifications to meet client needs.
- Upon completion of the AS in Network Security and Administration, students are able to demonstrate professional behavior such as working in a team and communicating in a professional manner.
- Upon completion of the AS in Network Security and Administration, students are able to explain the basic objectives of cybersecurity and the importance of information security.
- Upon completion of the AS in Network Security and Administration, students are able to install, configure, and manage computer and network hardware.
- Upon completion of the AS in Network Security and Administration, students are able to install, configure, and manage operating systems.

## **Computer Science**

### **Computer Programming - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Computer Programming, 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.
- Upon completion of the Certificate of Achievement in Computer Programming, students are able to 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**

- Upon completion of the Certificate of Achievement in Computer Programming for the Web, students are able to direct computer operations by writing detailed instructions in computer languages.
- Upon completion of the Certificate of Achievement in Computer Programming for the Web, students are able to implement interactive web pages using high level programming language instructions to implement specific information internet-based solutions.
- Upon completion of the Certificate of Achievement in Computer Programming for the Web, students are able to 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 - AS**

- Upon completion of the AS in Computer Science, 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.
- Upon completion of the AS in Computer Science, students are able to direct computer operations by writing detailed instructions in computer languages to solve a variety of problems.

- Upon completion of the AS in Computer Science, students are able to 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.

## Engineering

### Civil/Mechanical Engineering - Certificate of Achievement

- Upon completion of the Certificate of Achievement in Civil/ Mechanical Engineering, students are able to apply fundamental principles from mathematics, science and engineering to solve an civil/mechanical engineering-related problem.
- Upon completion of the Certificate of Achievement in Civil/ Mechanical Engineering, students are able to set up appropriate laboratory equipment, collect and analyze civil/mechanical data, draw conclusions, and clearly communicate results.
- Upon completion of the Certificate of Achievement in Civil/ Mechanical Engineering, students are able to use a variety of technological tools to solve civil/mechanical engineering problems.

### Civil/Mechanical Engineering -AS

- Upon completion of the AS in Civil/Mechanical Engineering, students are able to apply fundamental principles from mathematics, science and engineering to solve a civil/mechanical engineering-related problem.
- Upon completion of the AS in Civil/Mechanical Engineering, students are able to set up appropriate laboratory equipment, collect and analyze civil/mechanical data, draw conclusions, and clearly communicate results.
- Upon completion of the AS in Civil/Mechanical Engineering, students are able to use a variety of technological tools to solve civil/mechanical engineering problems.

### Electrical Engineering - Certificate of Achievement

- Upon completion of the Certificate of Achievement in Electrical Engineering, students are able to apply fundamental principles from mathematics, science and engineering to solve an electrical engineering-related problem.
- Upon completion of the Certificate of Achievement in Electrical Engineering, students are able to set up appropriate laboratory equipment, collect and analyze electrical data, draw conclusions, and clearly communicate results.
- Upon completion of the Certificate of Achievement in Electrical Engineering, students are able to use a variety of technological tools to solve electrical engineering problems.

### Electrical Engineering UC Pathway - Certificate of Achievement

- Upon completion of the Certificate of Achievement in Electrical Engineering UC Pathway, students are able to apply fundamental principles from mathematics, science and engineering to solve an electrical engineering-related problem.
- Upon completion of the Certificate of Achievement in Electrical Engineering UC Pathway, students are able to set up appropriate laboratory equipment, collect and analyze electrical data, draw conclusions, and clearly communicate results.
- Upon completion of the Certificate of Achievement in Electrical Engineering UC Pathway, students are able to use a variety of technological tools to solve electrical engineering problems.

### Electronic Engineering - AS

- Upon completion of the AS in Electrical Engineering, the students are able to apply fundamental principles from mathematics, science and engineering to solve an electrical engineering-related problem.
- Upon completion of the AS in Electrical Engineering, the students are able to set up appropriate laboratory equipment, collect and analyze electrical data, draw conclusions, and clearly communicate results.
- Upon completion of the AS in Electrical Engineering, the students are able to use a variety of technological tools to solve electrical engineering problems.

### Electronic Engineering UC Pathway - AS

- Upon completion of the AS in Electrical Engineering UC Pathway, students are able to apply fundamental principles from mathematics, science and engineering to solve an electrical engineering-related problem.
- Upon completion of the AS in Electrical Engineering UC Pathway, students are able to set up appropriate laboratory equipment, collect and analyze electrical data, draw conclusions, and clearly communicate results.
- Upon completion of the AS in Electrical Engineering UC Pathway, students are able to use a variety of technological tools to solve electrical engineering problems.

### Engineering - AS

- Upon completion of the AS in Engineering, students are able to apply fundamental principles from mathematics, science and engineering to solve an engineering-related problem.
- Upon completion of the AS in Engineering, students are able to set up appropriate laboratory equipment, collect and analyze data, draw conclusions, and clearly communicate results.
- Upon completion of the AS in Engineering, students are able to use a variety of technological tools to solve engineering problems.

### Engineering - Certificate of Achievement

- Upon completion of the Certificate of Achievement in Engineering, students are able to apply fundamental principles from mathematics, science and engineering to solve an engineering-related problem.
- Upon completion of the Certificate of Achievement in Engineering, students are able to set up appropriate laboratory equipment, collect and analyze data, draw conclusions, and clearly communicate results.

- Upon completion of the Certificate of Achievement in Engineering, students are able to use a variety of technological tools to solve engineering problems.

### **Engineering Technology - AS**

- Upon completion of the AS in Engineering Technology, students are able to set up appropriate laboratory equipment, collect and analyze data, draw conclusions, and clearly communicate results.
- Upon completion of the AS in Engineering, students are able to use a variety of technological tools to solve engineering problems.
- Upon completion of the Certificate of Achievement in Software Engineering, students are able to use a variety of technological tools to solve software engineering problems.

### **Engineering Technology - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Engineering Technology, students are able to apply fundamental principles from mathematics, science and engineering to solve an engineering technology-related problem.
- Upon completion of the Certificate of Achievement in Engineering Technology, students are able to set up appropriate laboratory equipment, collect and analyze data, draw conclusions, and clearly communicate results.
- Upon completion of the Certificate of Achievement in Engineering Technology, students are able to use a variety of technological tools to solve engineering technology problems.

### **Mechanical Engineering UC Pathway - AS**

- Upon completion of the AS in Mechanical Engineering UC Pathway, students are able to apply fundamental principles from mathematics, science and engineering to solve a mechanical engineering-related problem.
- Upon completion of the AS in Mechanical Engineering UC Pathway, students are able to set up appropriate laboratory equipment, collect and analyze mechanical engineering data, draw conclusions, and clearly communicate results.
- Upon completion of the AS in Mechanical Engineering UC Pathway, students are able to use a variety of technological tools to solve mechanical engineering problems.

### **Mechanical Engineering UC Pathway - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Mechanical Engineering UC Pathway, students are able to apply fundamental principles from mathematics, science and engineering to solve a mechanical engineering-related problem.
- Upon completion of the Certificate of Achievement in Mechanical Engineering UC Pathway, students are able to set up appropriate laboratory equipment, collect and analyze mechanical engineering data, draw conclusions, and clearly communicate results.
- Upon completion of the Certificate of Achievement in Mechanical Engineering UC Pathway, students are able to use a variety of technological tools to solve mechanical engineering problems.

### **Software Engineering - AS**

- Upon completion of the AS in Software Engineering, students are able to apply fundamental principles from mathematics, science and engineering to solve a software engineering-related problem.
- Upon completion of the AS in Software Engineering, students are able to set up appropriate laboratory equipment, collect and analyze software data, draw conclusions, and clearly communicate results.
- Upon completion of the AS in Software Engineering, students are able to use a variety of technological tools to solve software engineering problems.

### **Software Engineering - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Software Engineering, students are able to apply fundamental principles from mathematics, science and engineering to solve a software engineering-related problem.
- Upon completion of the Certificate of Achievement in Software Engineering, students are able to set up appropriate laboratory equipment, collect and analyze software data, draw conclusions, and clearly communicate results.
- Upon completion of the Certificate of Achievement in Software Engineering, students are able to use a variety of technological tools to solve software engineering problems.

## **Environmental Studies**

### **Environmental Science - AS**

- Upon completion of the AS in Environmental Science, students are able to analyze natural phenomena using appropriate mathematical and computational tools employed in the physical and biological sciences.
- Upon completion of the AS in Environmental Science, students are able to analyze natural phenomena using fundamental scientific principles in the physical and biological sciences.
- Upon completion of the AS in Environmental Science, students are able to conduct a literature search, identify and evaluate legitimate sources, and clearly communicate the results.
- Upon completion of the AS in Environmental Science, students are able to perform scientific experiments, mathematically analyze the data, and evaluate the results.

### **Environmental Studies - AA**

- Upon completion of the AA in Environmental Studies, students are able to analyze natural phenomena using fundamental scientific principles in the physical and biological sciences.



- Upon completion of the AA in Environmental Studies, students are able to conduct a literature search, identify and evaluate legitimate sources, and clearly communicate the results.
- Upon completion of the AA in Environmental Studies, students are able to construct arguments for environmental policy based on a sociopolitical and scientific understanding of human interactions with the environment.
- Upon completion of the AA in Environmental Studies, students are able to perform scientific experiments, analyze the data, and evaluate the results.

## Geography

### Geography - AA-T

- Upon completion of the AA-T in Geography, students are able to assemble and analyze spatial information (maps, data, surveys, qualitative observations, etc), using traditional and modern mapping technology methods.
- Upon completion of the AA-T in Geography, students are able to demonstrate knowledge of global physical and environmental processes, locations and develop an appreciation of landscapes.

## Geology

### Geology - AS-T

- Upon completion of the AS-T in Geology, students are able to demonstrate proficiency in basic earth processes (e.g., plate tectonics).
- Upon completion of the AS-T in Geology, students are able to demonstrate proficiency in the evaluation and identification of basic earth materials (e.g., rocks and minerals).

### Geology - Certificate of Achievement

- Upon completion of the Certificate of Achievement in Geology, students are able to demonstrate proficiency in fundamental global earth processes (e.g., plate tectonics, earthquakes, volcanoes, etc.)
- Upon completion of the Certificate of Achievement in Geology, students are able to 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

- Upon completion of the Certificate of Achievement in Geology Major, students are able to demonstrate proficiency in geologic processes and concepts (e.g., plate tectonics, earthquakes, volcanoes, landslides, hydrology, geochronology, etc).
- Upon completion of the Certificate of Achievement in Geology Major, students are able to 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.).

## Horticulture

### Horticulture - AS

- Upon completion of the AS in Horticulture, 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.
- Upon completion of the AS in Horticulture, students are able to 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 supervisory horticultural position.
- Upon completion of the AS in Horticulture, students are able to 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

- Upon completion of the Certificate of Achievement in Landscape Design, students are able to demonstrate an understanding of the concepts of sustainable landscaping, typical landscape construction techniques and irrigation systems.
- Upon completion of the Certificate of Achievement in Landscape Design, students are able to prepare landscape plans and detailed drawings.

### Landscape Maintenance and Construction - Certificate of Achievement

- Upon completion of the Certificate of Achievement in Landscape Maintenance and Construction, students are able to demonstrate an understanding of the maintenance requirements for trees, vines, shrubs, perennials, annuals, and turf.
- Upon completion of the Certificate of Achievement in Landscape Maintenance and Construction, students are able to 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

- Upon completion of the Certificate of Achievement in Nursery, Greenhouse, and Grower Operations, students are able to demonstrate an understanding of propagation, care, and marketing involved in the production and sale of nursery plants.
- Upon completion of the Certificate of Achievement in Nursery, Greenhouse, and Grower Operations, students are able to 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

- Upon completion of the Certificate of Achievement in Ornamental Horticulture, students are able to demonstrate a basic understanding of the field of horticulture and possible career opportunities.

- Upon completion of the Certificate of Achievement in Ornamental Horticulture, students are able to identify plants and be able to select their proper care and maintenance.
- Upon completion of the Certificate of Achievement in Ornamental Horticulture, students are able to recognize typical horticultural pests and diseases, and know how to research their treatment.

## Math

### Mathematics - AS-T

- Upon completion of the Mathematics AS-T, students are able to demonstrate the ability to use symbolic, graphical, numerical, and written representations of mathematical ideas.
- Upon completion of the Mathematics AS-T, students are able to learn mathematics through modeling real-world situations.
- Upon completion of the Mathematics AS-T, students are able to read, write, listen to, and speak mathematics with understanding.
- Upon completion of the Mathematics AS-T, students are able to use appropriate technology to enhance their mathematical thinking and understanding, solve mathematical problems, and judge the reasonableness of their results.
- Upon completion of the Mathematics AS-T, students are able to use mathematical reasoning and, when appropriate, a general problem solving process to solve problems.

## Noncredit Horticulture

### Horticulture - Certificate of Completion

- Upon completion of the Certificate of Completion in Horticulture, students are able to demonstrate a basic understanding of the field of horticulture and possible career opportunities.
- Upon completion of the Certificate of Completion in Horticulture, students are able to demonstrate an understanding of propagation of plants by seed and vegetative cuttings.
- Upon completion of the Certificate of Completion in Horticulture, students are able to demonstrate an understanding of the maintenance requirements for trees, vines, shrubs, perennials, annuals, and turf.
- Upon completion of the Certificate of Completion in Horticulture, students are able to identify plants and be able to select their proper care and maintenance.

## Noncredit Math

### College Mathematics Pathway - Certificate of Competency

- Upon completion of the Certificate of Competency in College Mathematics Pathway, students are able to learn mathematics through modeling real-world situations.
- Upon completion of the Certificate of Competency in College Mathematics Pathway, students are able to read, write, listen to, and speak mathematics with understanding.
- Upon completion of the Certificate of Competency in College Mathematics Pathway, students are able to use appropriate technology to enhance their mathematical thinking and understanding, solve mathematical problems, and judge the reasonableness of their results.
- Upon completion of the Certificate of Competency in College Mathematics Pathway, students are able to use mathematical reasoning and, when appropriate, a general problem solving process to solve problems.
- Upon completion of the Certificate of Competency in College Mathematics Pathway, students are able to use symbolic, graphical, numerical, and written representations of mathematical ideas.

### College Mathematics Support - Certificate of Competency

- Upon completion of the Certificate of Competency in College Mathematics Support, students are able to demonstrate the appropriate skills necessary to become a more productive, successful, and independent learner.
- Upon completion of the Certificate of Competency in College Mathematics Support, students are able to 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.
- Upon completion of the Certificate of Competency in College Mathematics Support, students are able to 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.).
- Upon completion of the Certificate of Competency in College Mathematics Support, students are able to use prerequisite topics effectively in their target mathematics course.

### Foundational Mathematics Pathway - Certificate of Competency

- Upon completion of the Certificate of Competency in College Mathematics Pathway, students are able to demonstrate the ability to use symbolic, graphical, numerical, and written representations of mathematical ideas.
- Upon completion of the Certificate of Competency in College Mathematics Pathway, students are able to learn mathematics through modeling real-world situations.
- Upon completion of the Certificate of Competency in College Mathematics Pathway, students are able to read, write, listen to, and speak mathematics with understanding.
- Upon completion of the Certificate of Competency in College Mathematics Pathway, students are able to use appropriate technology to enhance their mathematical thinking and understanding, solve mathematical problems, and judge the reasonableness of their results.

- Upon completion of the Certificate of Competency in College Mathematics Pathway, students are able to use mathematical reasoning and, when appropriate, a general problem solving process to solve problems.

### **Foundational Mathematics Support - Certificate of Competency**

- Upon completion of the Certificate of Competency in Foundational Mathematics Support, students are able to demonstrate the appropriate skills necessary to become a more productive, successful, and independent learner.
- Upon completion of the Certificate of Competency in Foundational Mathematics Support, students are able to 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.).
- Upon completion of the Certificate of Competency in Foundational Mathematics Support, students are able to 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 to obtain an Associate's degree.
- Upon completion of the Certificate of Competency in Foundational Mathematics Support, students are able to use prerequisite topics effectively in their target mathematics course.

### **Math Jam for College Mathematics - Certificate of Competency**

- Upon completion of the Certificate of Competency in Math Jam for College Mathematics, students are able to apply prerequisite mathematical topics at a higher level.
- Upon completion of the Certificate of Competency in Math Jam for College Mathematics, students are able to demonstrate the appropriate skills necessary to become a more productive, successful, and independent learner.
- Upon completion of the Certificate of Competency in Math Jam for College Mathematics, students are able to 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 to transfer.
- Upon completion of the Certificate of Competency in Math Jam for College Mathematics, students are able to learn 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.).

### **Math Jam for Foundational Mathematics - Certificate of Competency**

- Upon completion of the Certificate of Competency in Math Jam for Foundational Mathematics, students are able to apply basic skills mathematical concepts at a higher level.
- Upon completion of the Certificate of Competency in Math Jam for Foundational Mathematics, students are able to demonstrate the appropriate skills necessary to become a more productive, successful, and independent learner.
- Upon completion of the Certificate of Competency in Math Jam for Foundational Mathematics, students are able to 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 to obtain an Associate's degree.
- Upon completion of the Certificate of Competency in Math Jam for Foundational Mathematics, students are able to learn 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.).

### **Math Jam Tutor Pathway - Certificate of Completion**

- Upon completion of the Certificate of Completion in Math Jam Tutor Pathway, students are able to apply mathematical concepts at a higher level.
- Upon completion of the Certificate of Completion in Math Jam Tutor Pathway, students are able to assist students comfortably in a lab setting.
- Upon completion of the Certificate of Completion in Math Jam Tutor Pathway, students are able to coach students in how to be an effective learner, using Growth Mindset theory and intelligent practices to be successful.
- Upon completion of the Certificate of Completion in Math Jam Tutor Pathway, students are able to communicate effectively about theory of Growth Mindset, as an individual and as a tutor.
- Upon completion of the Certificate of Completion in Math Jam Tutor Pathway, students are able to model effective problem-solving, growth mindset and study skills.
- Upon completion of the Certificate of Completion in Math Jam Tutor Pathway, students are able to navigate an online support course environment effectively.
- Upon completion of the Certificate of Completion in Math Jam Tutor Pathway, students are able to provide guided math workshops to students on historically difficult topics with the support of instructors and fellow tutors.
- Upon completion of the Certificate of Completion in Math Jam Tutor Pathway, students are able to support students in math using best practices in teaching and learning pedagogy

## **Occupational Safety and Health**

### **Occupational Safety - Certificate of Accomplishment**

- Upon completion of the Certificate of Accomplishment in Occupational Safety, students are able to calculate and analyze widely accepted injury and illness rates for an organization.
- Upon completion of the Certificate of Accomplishment in Occupational Safety, students are able to describe the impact of an organization's Experience Modification Rate (EMR) on an organization's Workers' Compensation premium.
- Upon completion of the Certificate of Accomplishment in Occupational Safety, students are able to explain the requirements for recording injuries and illnesses on the OSHA 300 log.

- Upon completion of the Certificate of Accomplishment in Occupational Safety, students are able to explain the role of OSHA in workplace safety and how to develop effective, comprehensive health and safety programs leading to a proactive safety culture.
- Upon completion of the Certificate of Accomplishment in Occupational Safety, students are able to interpret OSHA's Hierarchy of Controls and how to appropriately apply them to work situations to minimize risk in the workplace.
- Upon completion of the Certificate of Accomplishment in Occupational Safety, students are able to prepare a job safety analysis (JSA) of specific work tasks to identify inherent hazards and appropriate controls.

### **Occupational Safety and Health - AS**

- Upon completion of the AS in Occupational Safety and Health, 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.
- Upon completion of the AS in Occupational Safety and Health, students are able to design programs to control, eliminate, and prevent occupational disease or injury caused by chemical, physical, radiological, and biological agents or ergonomic factors as well as prepare an emergency response plan.

### **Occupational Safety and Health - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Occupational Safety and Health, students are able to design programs to control, eliminate, and prevent disease or injury caused by chemical, physical, radiological, and biological agents or ergonomic factors as well as prepare an emergency response plan.

## **Physics**

### **Physics - AS**

- Upon completion of an AS in Physics, students are able to analyze physical situations quantitatively using fundamental physics principles, ranging from Newtonian mechanics to modern physics.
- Upon completion of an AS in Physics, students are able to design and conduct laboratory experiments, and analyze and interpret their data.
- Upon completion of an AS in Physics, students are able to effectively communicate the methods, analysis, results, and conclusions of their own scientific experiments.

## **Viticulture and Winery Tech**

### **Enology - AS**

- Upon completion of the AS in Enology, students are able to apply general chemistry principles, wine microbiology fundamentals, and laboratory techniques to produce sound wines.
- Upon completion of the AS in Enology, students are able to perform an accurate wine assessment utilizing acquired organoleptic skills.
- Upon completion of the AS in Enology, students are able to perform wine analysis methods including laboratory/quality control test during harvest, fermentations, cellaring, and prior to bottling.
- Upon completion of the AS in Enology, students are able to safely start-up, operate, and shutdown winery equipment; and effectively utilize the equipment during the winemaking process.

### **Enology - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Enology, students are able to apply general chemistry principles, wine microbiology fundamentals, and laboratory techniques to produce sound wines.
- Upon completion of the Certificate of Achievement in Enology, students are able to perform an accurate wine assessment utilizing acquired organoleptic skills.
- Upon completion of the Certificate of Achievement in Enology, students are able to perform wine analysis methods including laboratory/quality control test during harvest, fermentations, cellaring and prior to bottling.
- Upon completion of the Certificate of Achievement in Enology, students are able to safely start-up, operate and shut down winery equipment and effectively utilize the equipment during the wine making process.

### **Viticulture - AS**

- Upon completion of the AS in Viticulture, 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.
- Upon completion of the AS in Viticulture, students are able to describe the latest technological advances in vineyard practices and incorporate current technology into their farming plans.
- Upon completion of the AS in Viticulture, students are able to 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.
- Upon completion of the AS in Viticulture, students are able to show leadership capabilities by effectively training others to perform hands-on vineyard tasks.
- Upon completion of the AS in Viticulture, students are able to use proficient knowledge of the seasonal requirements of a working vineyard.
- Upon completion of the AS in Viticulture, students are able to work cooperatively and effectively with winery personnel to determine optimum harvest parameters and coordinate the operations required.

### **Viticulture - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Viticulture, students are able to describe the latest technological advances in vineyard practices and incorporate current technology into their farming plans.
- Upon completion of the Certificate of Achievement in Viticulture, students are able to 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.
- Upon completion of the Certificate of Achievement in Viticulture, students are able to show leadership capabilities by effectively training others to perform hands-on vineyard tasks.
- Upon completion of the Certificate of Achievement in Viticulture, students are able to work cooperatively and effectively with wineries to determine optimum harvest parameters and coordinate the operations required.

### **Wine Hospitality - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in Wine Hospitality, students are able to demonstrate proper wine service.
- Upon completion of the Certificate of Achievement in Wine Hospitality, students are able to describe a wine's qualities.

## **STUSVCS**

### **Psychology Counseling**

#### **Social Work and Human Services - AA-T**

- Upon completion of the AA-T in Social Work and Human Services, students are able to critically analyze societal factors that create and contribute to social service needs.
- Upon completion of the AA-T in Social Work and Human Services, students are able to demonstrate a foundational understanding of social work and human services outlining the evolution of social welfare and human services in the U.S.
- Upon completion of the AA-T in Social Work and Human Services, students are able to 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.
- Upon completion of the AA-T in Social Work and Human Services, students are able to demonstrate knowledge and understanding of theoretical perspectives, legal and ethical principles and social issues related to social work and human services fields.

### **University Transfer: CSU**

#### **CSU General Education Breadth - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in CSU General Education Breadth, students are able to analyze and appreciate works of philosophical, historical, literary, and cultural importance.
- Upon completion of the Certificate of Achievement in CSU General Education Breadth, students are able to critically apply ethical standards to identify problems and create solutions.
- Upon completion of the Certificate of Achievement in CSU General Education Breadth, students are able to identify strategies for continual sociological, psychological, and biological well-being.
- Upon completion of the Certificate of Achievement in CSU General Education Breadth, students are able to read, write, speak, and listen to communicate effectively.
- Upon completion of the Certificate of Achievement in CSU General Education Breadth, students are able to recognize ethical principles and behave responsibly.
- Upon completion of the Certificate of Achievement in CSU General Education Breadth, students are able to understand and appreciate the diversity of the human experience.
- Upon completion of the Certificate of Achievement in CSU General Education Breadth, students are able to use and criticize quantitative arguments and understand experimental methodology, the testing of hypotheses, and the power of systematic questioning.

### **University Transfer: IGETC**

#### **IGETC (Intersegmental General Education Curriculum) - Certificate of Achievement**

- Upon completion of the Certificate of Achievement in IGETC (Intersegmental General Education Curriculum), students are able to analyze and appreciate works of philosophical, historical, literary, and cultural importance.
- Upon completion of the Certificate of Achievement in IGETC (Intersegmental General Education Curriculum), students are able to critically apply ethical standards to identify problems and create solutions.
- Upon completion of the Certificate of Achievement in IGETC (Intersegmental General Education Curriculum), students are able to read, write, speak, and listen to communicate effectively.
- Upon completion of the Certificate of Achievement in IGETC (Intersegmental General Education Curriculum), students are able to recognize ethical principles and behave responsibly.
- Upon completion of the Certificate of Achievement in IGETC (Intersegmental General Education Curriculum), students are able to understand and appreciate the diversity of the human experience.
- Upon completion of the Certificate of Achievement in IGETC (Intersegmental General Education Curriculum), students are able to understand experimental methodology, the testing of hypotheses, and the power of systematic questioning.
- Upon completion of the Certificate of Achievement in IGETC (Intersegmental General Education Curriculum), students are able to use and criticize quantitative arguments.

