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Overview

The Career Technical Education (CTE) Model Curriculum Standards publication is organized for use as a complete document or for access to individual industry sectors and pathways. The document includes Standards for Career Ready Practice—which describe the knowledge and skills that students need prior to entering a career technical education program—as part of the career technical education sequence or as integrated elements of other course work in preparation for careers and college.

Each of the 15 industry sector sections includes a description, anchor standards, pathway standards, and an academic alignment matrix. The standards can be adjusted to be part of the curriculum (grades seven through twelve), provided through adult education, or included in community college programs. The document also lists the representatives who participated in each sector's content development and the references that were consulted to revise the CTE standards.

Standards for Career Ready Practice

California's Standards for Career Ready Practice, which follow this overview, are based on the Career Ready Practices of the Common Career Technical Core (CCTC), a state-led initiative sponsored by the National Association of State Directors of Career Technical Education Consortium (NASDCTEc):

> Career Ready Practices describe the career-ready skills that educators should seek to develop in their students. These practices are not exclusive to a Career Pathway, program of study, discipline or level of education. Career Ready Practices should be taught and reinforced in all career exploration and preparation programs with increasingly higher levels of complexity and expectation as a student advances through a program of study. (NASDCTEc 2012, 2)

California's 12 Standards for Career Ready Practice align with the state's CTE anchor standards and reflect the expectations from business and industry, labor and community organizations, and secondary and postsecondary education representatives from 42 participating states.

Anchor Standards

The 11 anchor standards build on the Standards for Career Ready Practice and are common across the 15 industry sectors. Content for these standards was drawn from several documents: "Preparing Students for the 21st Century Economy" (American Association of Colleges for Teacher Education and the Partnership for 21st Century Skills 2010); *How Should Colleges Prepare Students to Succeed in Today's Global Economy?* (Association of American Colleges and Universities and Peter D. Hart Research Associates, Inc. 2006); "Importance of Skills and Knowledge for College and Career Readiness," from *The MetLife Survey of the American Teacher: Preparing Students for College and Careers* (MetLife, Inc. 2011); and *Are They Really Ready to Work? Employers' Perspectives on the Basic Knowledge and Applied Skills of New Entrants to the 21st Century U.S. Workforce* (The Conference Board et al. 2006).

Each anchor standard is followed by performance indicators using action verbs from the Beyond Knowledge Construct, presented in a hierarchical progression of simple tasks to more complex tasks. Performance indicators provide guidance for curriculum design and standards measurement.

The industry-sector anchor standards have been customized with selected additions to better reflect the needs and special conditions of each industry sector.

Anchor Standard 1 (Academics) guides users to sector-specific core academic standards related to each industry sector, which are listed in the alignment matrix at the end of each sector section. Anchor standards 2–10 are deliberately aligned with one of the Common Core English language arts standards, using similar language demonstrating the natural connections between the two subjects. Anchor Standard 11 (Demonstration and Application) highlights classroom, laboratory, and workplace learning specific to the individual sector and pathways.

Pathway Standards

All 15 industry sectors contain multiple pathways. In order to be identified and listed for an industry sector, each pathway had to meet the following criteria:

- unique to an industry sector
- has an occupational focus
- consistent in size and scope
- composed of similar functions
- inclusive of all aspects of the industry
- includes 8–12 pathway-specific standards
- demonstrates sequence potential
- reasonable and appropriate for high school
- leads to high-skill, high-wage, or high-demand jobs
- sustainable and viable over the next 10 years

Academic Alignment Matrix

Each sector includes an academic alignment matrix that displays where a natural, obvious alignment occurs. Compiled by five teams of academic content experts in collaboration with industry-sector consultants, teachers, and other advisers, the alignment was selected if it was determined that the pathway standard would enhance, reinforce, or provide an application for a specific academic subject standard.

The alignment matrices include the subjects of Common Core English language arts and mathematics standards, history/social studies standards, and Next Generation Science Core Ideas. To assist with further review and implementation, each academic alignment is notated with specific pathway standards codes.
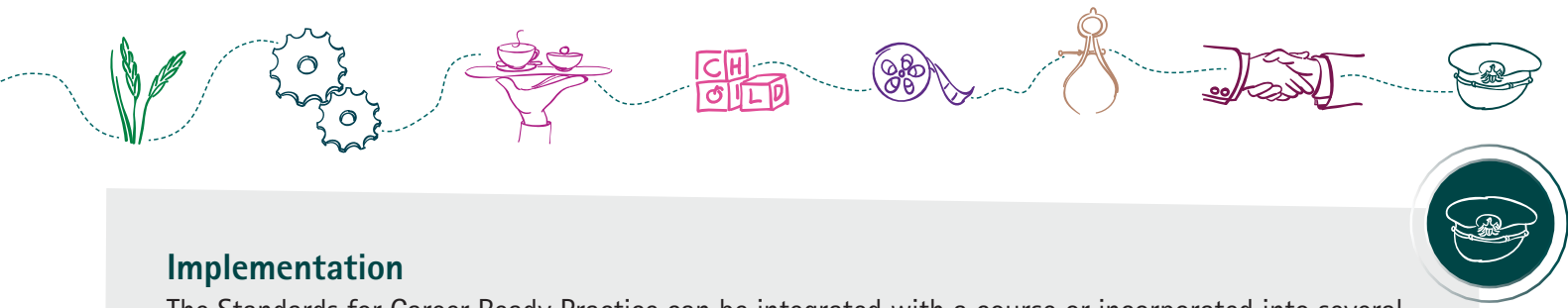
Implementation

The Standards for Career Ready Practice can be integrated with a course or incorporated into several courses over multiple school years (grades seven through twelve). The practices are expectations for all students, whether they are enrolled in a CTE program or following a more generalized course sequence. It is expected that all students who exit high school will be proficient in these practices.

The anchor standards are the basis for each of the pathways within each sector. These standards are designed to assist with the development of course curricula and instructional lesson plans; they describe what is to be taught and measured. In most cases, the teacher determines the sequence and strategies to be used to meet the needs of the student population he or she is serving.

The performance indicators that follow each standard offer guidance for both course design and student assessment. They are intended to guide course work as it is developed. The pathways organize the standards with a career focus, but they are not designed to be offered as single courses. Rather, the standards from each pathway are collected and organized into a sequence of learning. To meet local demands of business and industry and particular student populations, standards can be collected from more than one sector to create a course.

Using the academic alignment matrices as a resource, academic and CTE teachers can see where enhancements and support for both sets of standards can be initiated. CTE teachers can quickly identify academic standards that have a substantial relationship to their instruction. Likewise, academic teachers can specify individual academic standards and quickly identify related CTE standards, which will assist them in incorporating application and technology in their curricula and lessons.

The CTE Model Curriculum Standards are intended to serve the entire education community—from middle schools and high schools to postsecondary colleges and career training programs. A major aim of these standards is to prepare students for postsecondary education and training and to help them make a smooth transition into the workforce. In order for both the people and the economy of California to prosper, it is essential for all students to emerge from schools ready to pursue their career and college goals. Equipping all high school students with the knowledge and skills necessary to plan and manage their education and careers throughout their lives will help to guarantee these important outcomes. Strong CTE programs will continue to provide important educational opportunities to assist students as they pursue their dreams and strive for economic prosperity. The CTE Model Curriculum Standards are a resource for educators and the business world for ensuring high-quality CTE learning experiences and improved student outcomes in the twenty-first-century economy.

California Standards for Career Ready Practice

Standards for Career Ready Practice describe the fundamental knowledge and skills that a career-ready student needs in order to prepare for transition to postsecondary education, career training, or the workforce. These standards are not exclusive to a career pathway, a CTE program of study, a particular discipline, or level of education. Standards for Career Ready Practice are taught and reinforced in all career exploration and preparation programs with increasingly higher levels of complexity and expectation as a student advances through a program of study. Standards for Career Ready Practice are a valuable resource to CTE and academic teachers designing curricula and lessons in order to teach and reinforce the career-ready aims of the CTE Model Curriculum Standards and the Common Core State Standards.

1. Apply appropriate technical skills and academic knowledge.

Career-ready individuals readily access and use the knowledge and skills acquired through experience and education. They make connections between abstract concepts with real-world applications and recognize the value of academic preparation for solving problems, communicating with others, calculating measures, and other work-related practices.

## 2. Communicate clearly, effectively, and with reason.

Career-ready individuals communicate thoughts, ideas, and action plans with clarity, using written, verbal, electronic, and/or visual methods. They are skilled at interacting with others, are active listeners who speak clearly and with purpose, and are comfortable with the terminology common to the workplace environment. Career-ready individuals consider the audience for their communication and prepare accordingly to ensure the desired outcome.

3. Develop an education and career plan aligned with personal goals.

Career-ready individuals take personal ownership of their own educational and career goals and manage their individual plan to attain these goals. They recognize the value of each step in the educational and experiential process and understand that nearly all career paths require ongoing education and experience to adapt to practices, procedures, and expectations of an ever-changing work environment. They seek counselors, mentors, and other experts to assist in the planning and execution of education and career plans.

4. Apply technology to enhance productivity.

Career-ready individuals find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring and using new technology. They understand the inherent risks—personal and organizational—of technology applications, and they take actions to prevent or mitigate these risks.
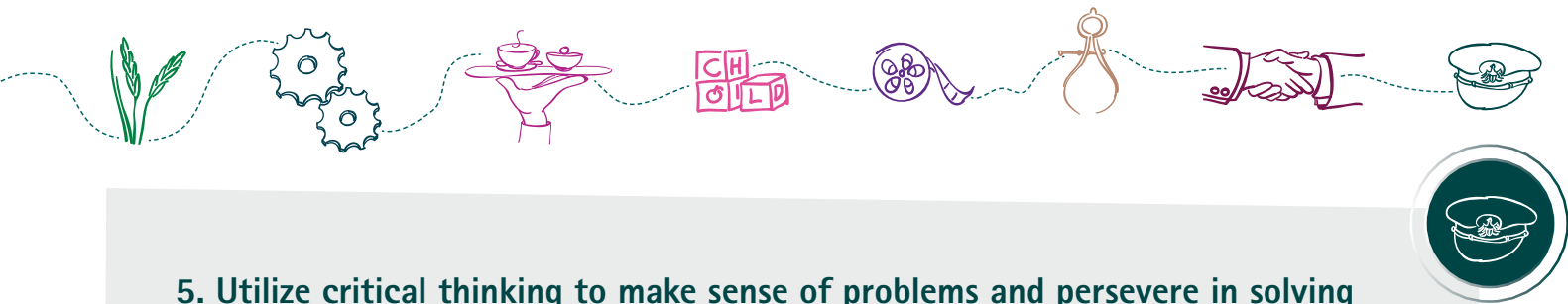
5. Utilize critical thinking to make sense of problems and persevere in solving them.

Career-ready individuals recognize problems in the workplace, understand the nature of the problems, and devise effective plans to solve the problems. They thoughtfully investigate the root cause of a problem prior to introducing solutions. They carefully consider options to solve the problem and, once agreed upon, follow through to ensure the problem is resolved.

6. Practice personal health and understand financial literacy.

Career-ready individuals understand the relationship between personal health and workplace performance. They contribute to their personal well-being through a healthy diet, regular exercise, and mental health activities. Career-ready individuals also understand that financial literacy leads to a secure future that enables career success.

7. Act as a responsible citizen in the workplace and the community.

Career-ready individuals understand the obligations and responsibilities of being a member of a community and demonstrate this understanding every day through their interactions with others. They are aware of the impacts of their decisions on others and the environment around them and think about the short-term and long-term consequences of their actions. They are reliable and consistent in going beyond minimum expectations and in participating in activities that serve the greater good.

8. Model integrity, ethical leadership, and effective management.

Career-ready individuals consistently act in ways that align with personal and community-held ideals and principles. They employ ethical behaviors and actions that positively influence others. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the direction and actions of a team or organization, and they recognize the short-term and long-term effects that management's actions and attitudes can have on productivity, morale, and organizational culture.

9. Work productively in teams while integrating cultural and global competence.

Career-ready individuals positively contribute to every team as both team leaders and team members. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They interact effectively and sensitively with all members of the team and find ways to increase the engagement and contribution of other members.

10. Demonstrate creativity and innovation.

Career-ready individuals recommend ideas that solve problems in new and different ways and contribute to the improvement of the organization. They consider unconventional ideas and suggestions by others as solutions to issues, tasks, or problems. They discern which ideas and suggestions may have the greatest value. They seek new methods, practices, and ideas from a variety of sources and apply those ideas to their own workplace practices.

11. Employ valid and reliable research strategies.

Career-ready individuals employ research practices to plan and carry out investigations, create solutions, and keep abreast of the most current findings related to workplace environments and practices. They use a reliable research process to search for new information and confirm the validity of sources when considering the use and adoption of external information or practices.

12. Understand the environmental, social, and economic impacts of decisions.

Career-ready individuals understand the interrelated nature of their actions and regularly make decisions that positively impact other people, organizations, the workplace, and the environment. They are aware of and utilize new technologies, understandings, procedures, and materials and adhere to regulations affecting the nature of their work. They are cognizant of impacts on the social condition, environment, workplace, and profitability of the organization.

Note: As stated previously, California's Standards for Career Ready Practice are based on the CCTC Career Ready Practices posted at https://careertech.org/ (accessed June 8, 2016).
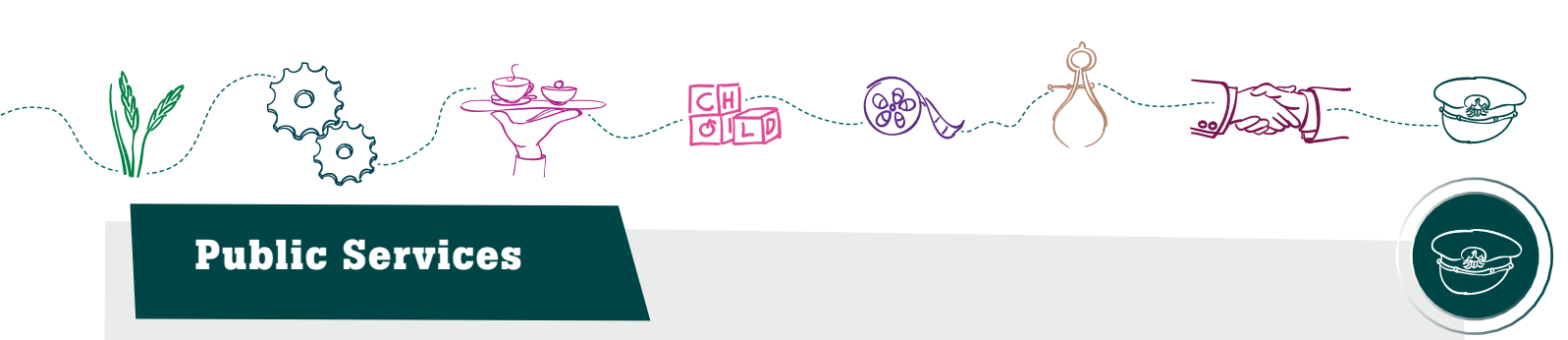
Public Services

Sector Description

A public service is one that is provided by government to its citizens, either directly or through the financing of another entity to provide that service. Careers in public service are unique because they center on challenging issues that define the public agenda and involve the provision of vital services to the public—from local to international levels. Public service professions offer many career opportunities, including the following career pathways: Public Safety, Emergency Response, and Legal Practices. Students engage in an instructional program that integrates academic and technical preparation and focuses on career awareness, career exploration, skill preparation in the industry, and preparation for post-secondary education and training. Knowledge and skills are learned and applied within a sequential, standards-based pathway program that integrates classroom, laboratory, and project- and work-based instruction. Standards in this sector are designed to prepare students for technical training, postsecondary education, and entry-level employment.
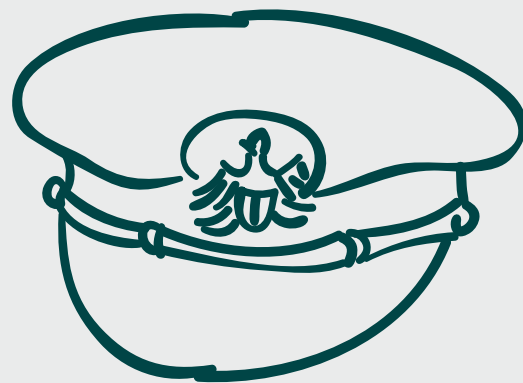
1.0 Academics

Analyze and apply appropriate academic standards required for successful industry sector pathway completion leading to postsecondary education and employment. Refer to the Public Services academic alignment matrix for identification of standards.

2.0 Communications

Acquire and accurately use Public Services sector terminology and protocols at the career and college readiness level for communicating effectively in oral, written, and multimedia formats. (Direct alignment with LS 9-10, 11-12.6)

2.1   Recognize the elements of communication using a sender–receiver model.

2.2   Identify barriers to accurate and appropriate communication.

2.3   Interpret verbal and nonverbal communications and respond appropriately.

2.4   Demonstrate elements of written and electronic communication such as accurate spelling, grammar, and format.

2.5   Communicate information and ideas effectively to multiple audiences using a variety of media and formats.

2.6   Advocate and practice safe, legal, and responsible use of digital media information and communications technologies.

3.0 Career Planning and Management

Integrate multiple sources of career information from diverse formats to make informed career decisions, solve problems, and manage personal career plans. (Direct alignment with SLS 11-12.2)

3.1   Identify personal interests, aptitudes, information, and skills necessary for informed career decision making.

3.2   Evaluate personal character traits such as trust, respect, and responsibility and understand the impact they can have on career success.

3.3   Explore how information and communication technologies are used in career planning and decision making.

3.4   Research the scope of career opportunities available and the requirements for education, training, certification, and licensure.

3.5   Integrate changing employment trends, societal needs, and economic conditions into career planning.

3.6   Recognize the role and function of professional organizations, industry associations, and organized labor in a productive society.

3.7   Recognize the importance of small business in the California and global economies.

3.8   Understand how digital media are used by potential employers and postsecondary agencies to evaluate candidates.

3.9   Develop a career plan that reflects career interests, pathways, and postsecondary options.

4.0 Technology

Use existing and emerging technology to investigate, research, and produce products and services, including new information, as required in the Public Services sector workplace environment. (Direct alignment with WS 11-12.6)

4.1 Use electronic reference materials to gather information and produce products and services.

4.2 Employ Web-based communications responsibly and effectively to explore complex systems and issues.

4.3 Use information and communication technologies to synthesize, summarize, compare, and contrast information from multiple sources.

4.4 Discern the quality and value of information collected using digital technologies, and recognize bias and intent of the associated sources.

4.5 Research past, present, and projected technological advances as they impact a particular pathway.

4.6 Assess the value of various information and communication technologies to interact with constituent populations as part of a search of the current literature or in relation to the information task.

5.0 Problem Solving and Critical Thinking

Conduct short, as well as more sustained, research to create alternative solutions to answer a question or solve a problem unique to the Public Services sector using critical and creative thinking, logical reasoning, analysis, inquiry, and problem-solving techniques. (Direct alignment with WS 11-12.7)

5.1 Identify and ask significant questions that clarify various points of view to solve problems.

5.2 Solve predictable and unpredictable work-related problems using various types of reasoning (inductive, deductive) as appropriate.

5.3 Use systems thinking to analyze how various components interact with each other to produce outcomes in a complex work environment.

5.4 Interpret information and draw conclusions, based on the best analysis, to make informed decisions.

6.0 Health and Safety

Demonstrate health and safety procedures, regulations, and personal health practices and determine the meaning of symbols, key terms, and domain-specific words and phrases as related to the Public Services sector workplace environment. (Direct alignment with RSTS 9-10, 11-12.4)

6.1 Locate, and adhere to, Material Safety Data Sheet (MSDS) instructions.

6.2 Interpret policies, procedures, and regulations for the workplace environment, including employer and employee responsibilities.

6.3 Use health and safety practices for storing, cleaning, and maintaining tools, equipment, and supplies.

6.4 Practice personal safety when lifting, bending, or moving equipment and supplies.

6.5   Demonstrate how to prevent and respond to work-related accidents or injuries; this includes demonstrating an understanding of ergonomics.

6.6   Maintain a safe and healthful working environment.

6.7   Be informed of laws/acts pertaining to the Occupational Safety and Health Administration (OSHA).

7.0 Responsibility and Flexibility

Initiate, and participate in, a range of collaborations demonstrating behaviors that reflect personal and professional responsibility, flexibility, and respect in the Public Services sector workplace environment and community settings. (Direct alignment with SLS 9-10, 11-12.1)

7.1   Recognize how financial management impacts the economy, workforce, and community.

7.2   Explain the importance of accountability and responsibility in fulfilling personal, community, and workplace roles.

7.3   Understand the need to adapt to changing and varied roles and responsibilities.

7.4   Practice time management and efficiency to fulfill responsibilities.

7.5   Apply high-quality techniques to product or presentation design and development.

7.6   Demonstrate knowledge and practice of responsible financial management.

7.7   Demonstrate the qualities and behaviors that constitute a positive and professional work demeanor, including appropriate attire for the profession.

7.8   Explore issues of global significance and document the impact on the Public Services sector.

8.0 Ethics and Legal Responsibilities

Practice professional, ethical, and legal behavior, responding thoughtfully to diverse perspectives and resolving contradictions when possible, consistent with applicable laws, regulations, and organizational norms. (Direct alignment with SLS 11-12.1d)

8.1   Access, analyze, and implement quality assurance standards of practice.

8.2   Identify local, district, state, and federal regulatory agencies, entities, laws, and regulations related to the Public Services industry sector.

8.3   Demonstrate ethical and legal practices consistent with Public Services sector workplace standards.

8.4   Explain the importance of personal integrity, confidentiality, and ethical behavior in the workplace.

8.5   Analyze organizational culture and practices within the workplace environment.

8.6   Adhere to copyright and intellectual property laws and regulations, and use and appropriately cite proprietary information.

8.7   Conform to rules and regulations regarding sharing of confidential information, as determined by Public Services sector laws and practices.

9.0 Leadership and Teamwork

Work with peers to promote divergent and creative perspectives, effective leadership, group dynamics, team and individual decision making, benefits of workforce diversity, and conflict resolution as practiced in the Cal-HOSA and SkillsUSA career technical student organizations. (Direct alignment with SLS 11-12.1b)

9.1　Define leadership and identify the responsibilities, competencies, and behaviors of successful leaders.

9.2　Identify the characteristics of successful teams, including leadership, cooperation, collaboration, and effective decision-making skills as applied in groups, teams, and career technical student organization activities.

9.3　Understand the characteristics and benefits of teamwork, leadership, and citizenship in the school, community, and workplace setting.

9.4　Explain how professional associations and organizations and associated leadership development and competitive career development activities enhance academic preparation, promote career choices, and contribute to employment opportunities.

9.5　Understand that the modern world is an international community and requires an expanded global view.

9.6　Respect individual and cultural differences and recognize the importance of diversity in the workplace.

9.7　Participate in interactive teamwork to solve real Public Services sector issues and problems.

10.0 Technical Knowledge and Skills

Apply essential technical knowledge and skills common to all pathways in the Public Services sector, following procedures when carrying out experiments or performing technical tasks. (Direct alignment with WS 11-12.6)

10.1　Interpret and explain terminology and practices specific to the Public Services sector.

10.2　Comply with the rules, regulations, and expectations of all aspects of the Public Services sector.

10.3　Construct projects and products specific to the Public Services sector requirements and expectations.

10.4　 Collaborate with industry experts for specific technical knowledge and skills.

11.0 Demonstration and Application

Demonstrate and apply the knowledge and skills contained in the Public Services anchor standards, pathway standards, and performance indicators in classroom, laboratory and workplace settings, and through the Cal-HOSA and SkillsUSA career technical student organizations.

11.1　Utilize work-based/workplace learning experiences to demonstrate and expand upon knowledge and skills gained during classroom instruction and laboratory practices specific to the Public Services sector program of study.

11.2　Demonstrate proficiency in a career technical pathway that leads to certification, licensure, and/or continued learning at the postsecondary level.

11.3　Demonstrate entrepreneurship skills and knowledge of self-employment options and innovative ventures.

11.4　Employ entrepreneurial practices and behaviors appropriate to Public Services sector opportunities.

11.5　Create a portfolio, or similar collection of work, that offers evidence through assessment and evaluation of skills and knowledge competency as contained in the anchor standards, pathway standards, and performance indicators.

A. Public Safety Pathway

The Public Safety pathway prepares students with a broad-based foundational knowledge in careers that involve public safety. The educational foundation will assist students who wish to pursue related professional training at the postsecondary level. Students will gain experience through classroom instruction, hands-on training, and community exercises. The evolving integration of state public safety organizations, their connections with federal and state intelligence and security agencies, interoperability and coordination of effort, and the shared mission to protect the public in a post-9/11 world are areas of emphasis for the pathway. The careers included in this pathway primarily address law enforcement services, homeland and cyber security services, and correctional services.

Sample occupations associated with this pathway:

- Animal Control Worker
- Correctional Officer/Probation Officer
- Law Enforcement Officer
- Loss Prevention Specialist
- Military Service

A1.0 Demonstrate an awareness of the personal, physical, and psychological qualities found in successful public safety job candidates, and recall critical types of decisions and outcomes which determine employability in public safety occupations.

A.1.1 State the major types of occupations found in the Public Safety Pathway and the number of those occupations that require background-investigation security clearance and personal records free of disqualifying information.

A.1.2 Identify a range of personal choices and conduct that would disqualify an individual from public safety occupations, and describe ways to avoid such behaviors.

A.1.3 Recognize the extent and scope of a background investigation, what sorts of information is collected, and how it may impact the evaluation of a candidate for a position in a public safety occupation.

A.1.4 Know personal and ethical behaviors that demonstrate commitment to professional ethics and legal responsibilities.

A.1.5 Demonstrate strategies and requirements for individuals and organizations to employ to respond to unethical and illegal actions in a variety of workplace situations.

A.1.6 Understand the necessity of maintaining strong academic records, high levels of physical fitness, and positive personal history to successfully pursue a career in a public safety.

A.1.7 Understand the selection process for many public safety occupations that require certifications, reading and writing assessments, psychological evaluations, medical evaluations, and probationary periods.

A1.8   Understand the importance of security and background checks, credit checks, and other assessments—including oral interviews and polygraph tests—that are required for some public safety occupations.

A1.9   Understand the characteristics and benefits of teamwork, leadership, and citizenship in the school, community, and workplace settings.

A1.10 Understand how loyalty, duty, honor, integrity, selfless service, and personal courage play an important role in many public safety occupations.

A1.11 Understand how to interact with others in ways that demonstrate respect for persons, property, individual lifestyle choices, and cultural differences.

A1.12 Compile a personal portfolio specific to the expectations for employment in a public safety career.

A2.0   Describe the history, shared mission, and roles of public safety agencies and professionals at the national, state, and local government levels.

A2.1   Recognize issues particular to policing and other public safety occupations, including accountability, codes of ethical conduct, jurisdiction, and civil rights of individuals.

A2.2   Describe the public safety agency role in saving lives, protecting lives and property, reducing the vulnerability of critical infrastructure, identifying key resources, and maintaining order.

A2.3   Describe public safety agency roles in preventing terrorism, enhancing security, managing border security, securing cyberspace, and preparing for and responding to emergencies and disasters.

A2.4   Identify the major public safety agencies at the international, national, state, and local levels, as well as scenarios (including response to catastrophic events with multiple casualties) that call for a referral to a higher-level agency or collaboration with other public safety agencies.

A2.5   Analyze information to make prompt, effective, and appropriate decisions.

A2.6   Use conflict-resolution and anger-management skills and procedures to resolve problems.

A2.7   Apply critical-thinking skills to manage emergency response situations.

A2.8   Survey the history of public safety agencies in the United States and their influence on the current systems.

A2.9   Analyze and evaluate ideas, proposals, and solutions to problems.

A2.10 Create a scenario that includes a potential threat from terrorism, a hostage situation, or danger at a school site, describing who should respond and actions that should be taken.

A3.0   Demonstrate an understanding of the appropriate level of nutrition, fitness, and agility required by the public safety career fields.

A3.1   Understand the need for physical fitness and proper nutrition in the public safety career areas.

A3.2 Recognize the different physical agility assessments required for entrance into a public safety career and understand the skills and techniques necessary for success in agility testing.

A3.3 Design and implement a personal plan for achieving and maintaining an acceptable level of agility and a lifetime fitness mindset.

A4.0 Employ active listening, concise reporting, and familiarity with professional equipment to communicate effectively.

A4.1 Know the basic techniques and methods of active listening to obtain and clarify information in oral communications.

A4.2 Demonstrate effective methods of communicating with the public with a variety of techniques, such as command presence, active listening, and empathy; projecting a professional tone of voice; paraphrasing; and the proper use of nonverbal body language.

A4.3 Demonstrate the use of clear, concise, and legible entries based on experience and observation to prepare and submit required reports.

A4.4 Understand the professional use of a variety of communication methods and equipment.

A4.5 Practice public safety verbal communication techniques that can be used when interacting with difficult individuals.

A4.6 Narrate a sequence of events consistent with agency reporting formats.

A4.7 Convey information and ideas from primary and secondary sources accurately and coherently, consistent with agency report-writing formats.

A5.0 Understand the laws, ordinances, regulations, and organizational policies that guide public safety career fields.

A5.1 Describe how federal, state, and local laws and regulations affect public safety operations.

A5.2 Explain the importance of individual liberties and civil rights provided in the Constitution and how public safety workers should safeguard these rights when interacting with the public.

A5.3 Prepare a chart showing the organizational chain of command and other administrative systems to assign tasks and responsibilities for maximum effectiveness.

A6.0 Know the skills and equipment needed to deal with various types of situations found in public safety occupations (e.g., working with special populations, responding to emergencies, and assisting with incidents).

A6.1 Know the principles of emergency communications management and the importance of technological interoperability for information sharing among public safety agencies and for effective public address/warning systems.

A6.2 Identify the skills required to deal effectively with emergency situations.

A6.3 Become familiar with personal safety procedures to meet prescribed regulations and situations.

A6.4   List the key elements of an action plan.

A6.5   Understand the safety and health issues related to serving persons with disabilities.

A6.6   Demonstrate the techniques for restraining individuals without violating their individual rights or jeopardizing safety.

A6.7   Practice basic emergency lifesaving techniques in order to apply those skills as needed in emergencies.

A6.8   Implement procedures for emergency response and know the requirements for handling hazardous materials—in normal and emergency situations—to avoid health and environmental risks (e.g., airborne and blood-borne pathogens, contamination).

A6.9   Explain the management of crisis negotiations to promote the safety of individuals and the public.

A6.10 Apply appropriate problem-solving strategies and critical-thinking skills to work-related issues and tasks.

A7.0   Demonstrate an understanding of the major elements and career opportunities within the United States Department of Defense (DOD), including the Army, Navy, Marine Corps, Air Force, and Coast Guard.

A7.1   Describe the mission and role of the DOD and the individual armed services.

A7.2   Understand the chain of command within organizations of the DOD.

A7.3   Understand the initial entry assessments of physical, educational, and legal for military recruitment and levels of service.

A7.4   Describe the structure and composition of the DOD.

A7.5   Understand and adhere to the following personal attributes within the DOD: leadership, teamwork, fitness, honor, integrity, respect, selfless service, and personal courage.

A7.6   Describe the need for, and the responsibilities of, the following functions within the DOD: armored security, maritime security and welfare, air superiority, space operations, and cyber security.

A7.7   Understand the role and structure of federal agencies and national organizations.

A8.0   Demonstrate an understanding of the functions and career opportunities within the U.S. Department of Homeland Security (DHS).

A8.1   Describe the mission, roles, and responsibilities of the U.S. Department of Homeland Security.

A8.2   Assess the local, state, national, and global perspectives on homeland security and the implications of protecting the public from natural and man-made threats to public safety.

A8.3   Recognize the impact of the September 11, 2001, terror attacks on the security and intelligence community structure and the resulting emphasis placed on coordination and cooperation between public safety agencies.

A8.4 Identify the current global and national issues and policies concerning terrorism and homeland security.

A8.5 List the various techniques and methods of infrastructure and facilities protection.

A8.6 Understand the role of cyber-security professionals within the homeland defense community and the methods and techniques used to combat public and private cyber attacks.

A8.7 Survey the roles, functions, and interdependency among local, federal, and international law enforcement, intelligence, and military agencies.

A8.8 Analyze the various elements of emergency preparedness, including emergency response and recovery, within the context of homeland security.

A9.0 Demonstrate an understanding of the functions of the U.S. Foreign Service.

A9.1 Describe the primary mission of the U.S. Department of State and the role of the Foreign Service within that Department.

A9.2 Describe the primary mission and role of the Foreign Service.

A9.3 Describe the roles and responsibilities of different career tracks within the Foreign Service: Consular Officers, Economic Officers, Management Officers, Political Officers, and Public Diplomacy Officers.

A9.4 Research the history of the Foreign Service and describe how its careers have evolved and how the Foreign Service has impacted the United States and other societies.

A9.5 Describe the countries and settings in which Foreign Service Officers serve.

A9.6 Understand the potential impact of assignments to "hardship posts" and dangerous posts on life and family choices.

B. Emergency Response Pathway

The Emergency Response pathway encompasses standards for designing student coursework in preparation for a number of careers in this field. The standards provide the foundation for further professional education and training at a postsecondary level, leading to certification and employment. By mastering these standards, students gain critical knowledge and skills through classroom and job-site experiences, simulations, and other learning modalities. Careers in this pathway include those in fire services, emergency medical services, wildland services, and emergency management.

Sample occupations associated with this pathway:

- Firefighter I, Firefighter II, Wildland Firefighter
- Emergency Medical Technician (EMT)
- Fire Prevention Technician
- Emergency Response Dispatcher
- Fire Management Officer

B1.0   Analyze the characteristics of different career fields within the Emergency Response pathway to develop a perspective on the nature of the work, entry-level requirements, career options, and expectations.

B1.1   Understand the responsibilities, requirements, and advancement opportunities in emergency response careers.

B1.2   List the standards for emergency response employee qualifications, training, and certification.

B1.3   Outline a realistic program of study (education plan) based on career choice, job-entry requirements, and personal commitment.

B1.4   Describe the roles and responsibilities of emergency response agencies.

B1.5   Summarize the laws, regulations, and organizational protocols that define the guidelines governing selected emergency agencies and services.

B2.0   Understand the processes by which emergency management organizations and emergency managers exert command and control over an emergency response and recovery operation.

B2.1   Describe the mechanisms by which emergency management stakeholder agencies and resources are coordinated for mutual aid.

B2.2   Understand the importance of an organized Command and Control System to provide for interoperability, efficiency, and effectiveness.

B2.3   Understand the core set of basic concepts, principles, terminology, and technologies of emergency response management.

B2.4   Recognize multiagency coordination; unified command, training, identification and management of resources; qualification and certification; and the collection, tracking, evaluation, and dissemination of information.

B2.5 Describe the principles and responsibilities of the Incident Command System (ICS) and the National Incident Management System (NIMS).

B2.6 Review a simulated local hazard mitigation plan based on a potential hazard to the community, and describe the appropriate response.

B2.7 Design an emergency plan for an earthquake in a major metropolitan area that has shut off access from all directions.

B3.0 Demonstrate necessary leadership qualities, team concepts, and personal integrity for emergency response personnel.

B3.1 Identify the characteristics of successful teams, including leadership, cooperation, collaboration, and effective decision-making skills as applied in emergency services.

B3.2 Understand the characteristics and benefits of teamwork, leadership, and citizenship in community and workplace settings.

B3.3 Employ active listening, concise reporting, and familiarity with emergency response communication equipment to interact efficiently and effectively.

B3.4 Describe emergency response techniques and methods of active listening to obtain and clarify information in oral communications.

B3.5 Demonstrate a variety of appropriate and effective methods of communicating with the public, including techniques such as professional demeanor, active listening, empathy, projecting a confident tone of voice, paraphrasing, and the proper use of nonverbal body language.

B3.6 Adhere to Health Insurance Portability and Accountability Act (HIPAA) regulations and agency guidelines regarding public and media communications.

B3.7 Use appropriate terminology in clear, concise, and legible report entries when preparing and submitting required reports.

B3.8 Use and maintain a variety of communication equipment, understanding the importance of using current and up-to-date technology and communication equipment.

B3.9 Practice verbal and nonverbal emergency terminology and communication techniques to be used when interacting with emergency response personnel in a variety of emergency situations.

B3.10 Gather information and ideas from primary and secondary sources accurately and coherently.

B4.0 Execute safety procedures and protocols associated with local, state, and federal regulations in order to effectively and safely conduct duties within fire and emergency services.

B4.1 Describe the basic elements of safety and survival for emergency response personnel.

B4.2 Know and use the appropriate personal protective equipment (PPE) required for emergency services duties.

B4.3 Know how to establish situational awareness, identify hazards, and assess personal, team, or environmental risks.

B4.4 Understand and adhere to comprehensive and systematic risk management strategies to reduce injury and fatalities for self, team, and community.

B4.5 Demonstrate strategies to identify and eliminate hazards.

B4.6 Complete certification in emergency care as appropriate—for example, cardiopulmonary resuscitation (CPR), automated external defibrillator (AED), and first aid.

B5.0 Develop the level of nutrition, fitness, strength, agility, and psychological health and well-being required for safely working in emergency response career fields.

B5.1 Understand that physical fitness and proper nutrition are needed to perform the duties of emergency response personnel.

B5.2 Recognize the different physical strength and agility assessments required for entrance into emergency response employment.

B5.3 Apply the skills and techniques necessary for success in strength and agility testing.

B5.4 Design and implement a personal plan for achieving and maintaining an acceptable level of nutrition, strength and agility, and a lifetime fitness mindset.

B5.5 Recognize and understand the importance of maintaining psychological health and well-being in emergency response occupations.

B6.0 Understand the roles of federal, state, and local agencies in catastrophic event planning, preparation, response, and recovery.

B6.1 Describe steps for each potential catastrophic event.

B6.2 Analyze the history and outcomes of catastrophic events and the appropriate emergency responses.

B6.3 Review a hazard mitigation plan to reduce death and injury for potential man-made and natural hazards.

B6.4 Prepare an emergency preparedness and response plan that includes the roles of emergency response personnel for a potential catastrophic event in the community.

B6.5 Recognize the importance and variety of recovery strategies to support individuals and communities impacted by a catastrophic event.

B7.0 Research and define what is considered to be hazardous materials incidents and threats.

B7.1 Describe commonly encountered hazardous materials.

B7.2 Describe the hazardous materials labeling system and identify definitions associated with various hazardous materials.

B7.3 Describe the type of damage and injury that can occur if hazardous materials are handled improperly.

B7.4 Explain the steps taken, including appropriate personnel and safety measures, for a hazardous-material release.

B7.5 Research and report on the most common incidents involving hazardous materials.

B8.0 Understand the fundamental mission of fire services occupations and the responsibility to preserve life and property, promote public safety, and reduce fire deaths.

B8.1 Understand the history, organization, and operation of fire services.

B8.2 Describe the skills and knowledge necessary for an entry-level firefighter to safely perform the tasks required of the job.

B8.3 Explain the fundamentals and scientific principles of fire behavior, combustible materials, extinguishing agents, hazardous and toxic materials, forms of energy, and fire prevention/suppression techniques for all types of fires and conditions.

B8.4 Demonstrate the operation of fire protection equipment and systems.

B8.5 Demonstrate the skills necessary to perform fire suppression and basic rescue operations using firefighting techniques and rescue equipment.

B8.6 Identify structural characteristics of building construction types as they relate to fire protection and suppression, and recognize the signs and causes of potential building collapse and other hazards.

B8.7 Apply principles of proper body mechanics, including ergonomics, equipment use, and techniques to prevent personal injury.

B8.8 Participate in public education aimed at reducing loss of life and property, through programs and activities on fire prevention and safety as well as other injury-prevention education.

B9.0 Demonstrate the immediate basic life support and interim medical care for a sick, injured, or compromised person until advanced medical care is provided or transport is initiated.

B9.1 Understand and use medical terminology and related knowledge of anatomy, physiology, diseases, diagnoses, pharmacology, therapeutics, and common abbreviations necessary for emergency medical services.

B9.2 Know the common acronyms used in fire and emergency services.

B9.3 Perform technical skill and equipment use required for emergency response occupations—for example, airway, oxygen, and ventilation procedures; suction; bleeding control; shock management; cardiac arrest management; immobilization techniques; traction; splinting; transport; defibrillation; and wound management.

B9.4 Follow instructions for immediate care procedure as transmitted by an emergency medical dispatcher during transport.

B9.5 Demonstrate administration of a limited number of drugs appropriate to the scope of practice.

B9.6 Manage an incident scene as the first responder, using emergency response skills appropriate to training and certification.

B9.7 Execute protocols in emergency management response when working with an on-scene accident.

B9.8 Demonstrate the ability to assess the nature and extent of an illness or injury to establish and prioritize medical response.

B9.9 Communicate with treatment-center staff to arrange reception of victims and to get instructions for further treatment.

B9.10 Demonstrate the ability to receive and provide patient-care information to other medical providers.

B9.11 Describe the function of emergency vehicles, use of medical and communication equipment, and the necessity of maintaining inventory as required for emergency services practices and procedures.

B10.0 Analyze and describe the functions and responsibilities of federal, state, and local wildland services.

B10.1 Describe wildland firefighter safety and survival preparations.

B10.2 Explain the role of fire personnel in wildland fires, structure fires, auto accidents, medical aid, swift-water rescue, civil disturbances, search and rescue operations, hazardous material spills, train wrecks, floods, and earthquakes.

B10.3 Describe fire prevention and planning procedures to save wildland structures during a forest fire.

B10.4 Assess the value of the resource management program, including the impact on timber, watershed, wildlife, and recreation.

B10.5 Create a state map showing the locations of wildland lookouts, and describe the lookouts' purpose and staffing.

B10.6 Evaluate the importance of the fire suppression aviation program.

B10.7 Recognize factors that influence the start and spread of wildland fires.

B10.8 Describe and evaluate the importance of the various types of equipment used to control and/or extinguish wildland fires.

B10.9 Build a plan describing processes and procedures to follow prior to, during, and after a wildfire event.

C. Legal Practices Pathway

The Legal Practices pathway prepares students with a broad-based foundation of knowledge pertaining to the various types of law and of legal practice and provides a foundation of basic skills necessary at all levels in the legal professions.

Sample occupations associated with this pathway:

- Paralegal
- Court Reporter
- Law Librarian
- Legal Researcher
- Lawyer

C1.0 Demonstrate an understanding of the state and federal justice system, the Rule of Law, and the environment/practice settings for legal professionals.

C1.1 Describe the different levels of federal courts and their jurisdictions.

C1.2 Identify the primary legal practice settings (e.g., private firms, government and public-sector entities, corporate counsel, and public interest practice), and explain the nature and scope of each practice area.

C1.3 Identify, by practice area, the types of clients served and related legal needs and issues.

C1.4 Become familiar with educational and experiential requirements needed to establish and maintain successful careers in each practice area.

C1.5 Explain the court system of the State of California, including the different types of state courts and their jurisdictions.

C1.6 Become familiar with the concept of equal access to justice.

C1.7 Present and defend the case for diversity in the legal professions.

C1.8 Contrast the fundamental features of civil, criminal, and administrative law.

C2.0 Demonstrate an understanding and ability to utilize legal research and writing.

C2.1 List the basic steps in legal research, including the legal publications most commonly used in the practice of law.

C2.2 Explain the importance and purpose of legal research.

C2.3 Explain the difference between legal publications, treatises, and other legal writings.

C2.4 Demonstrate a working knowledge of the legal research system by writing a short memorandum on a given question of law and explaining the steps taken to find sources and reach conclusions.

C2.5 Demonstrate the ability to use a uniform system of citing cases for updating and cross-referencing cases.

C2.6   Demonstrate the ability to locate and update legal authority using computer–assisted legal research tools.

C2.7   Demonstrate how to analogize or distinguish the facts and law of one case from the facts of a given legal problem.

C2.8   Demonstrate how to "brief" a case.

C2.9   Discuss the term "authority" as it is used in legal writing, and explain the hierarchy of authority and the difference between mandatory and persuasive authority.

C2.10 Discuss the purpose of a legal memorandum, brief or points, and authorities to a particular audience (how the memorandum may vary in emphasis and style, depending on the audience).

C2.11 Discuss case law, how it is made, its component parts, and how to use cases to resolve a legal problem.

C2.12 Contrast case law with statutory law and explain how to interpret statutes using intrinsic and extrinsic sources.

C2.13 Create a hypothetical case and identify the applicable statutory, regulatory, and case law.

C2.14 Prepare a legal brief to represent the defendant in the hypothetical case.

C3.0   Demonstrate an understanding of tort law and concepts and their application to factual situations.

C3.1   Define the tort concept of civil wrong and apply the concept to factual situations with persons, property, and defenses of an intentional tort.

C3.2   Describe the tort of negligence and the elements of negligence (e.g., "reasonable person," *res ipsa loquitur,* proximate cause).

C3.3   Describe defenses to negligence actions, including strict and product liability.

C4.0   Demonstrate knowledge of constitutional law, criminal law, immigration law, and related concepts, as well as their application to factual situations.

C4.1   Discuss the United States Constitution, including its philosophical underpinnings and structure.

C4.2   Analyze the Fourteenth Amendment, particularly (1) the Due Process Clause and Substantive Due Process, as contrasted with Procedural Due Process; and (2) the Equal Protection Clause.

C4.3   Discuss and define terms and concepts of criminal law, including the theory of criminal law (*Malum in se* and *Malum prohibitum*) and the evolving nature of criminal law (e.g., the legal definition of a viable human being).

C4.4   Describe types and elements of crimes against persons and property, overlapping crimes against people and their property, and inchoate crimes.

C4.5   Discuss each stage in a criminal proceeding, from investigation to disposition (e.g., arrest, prosecution of crimes, and defenses of criminal prosecution) and post–conviction procedure.

C4.6　Research court data regarding annual statewide numbers of criminal proceedings and demographics of defendants; discuss disproportionate minority contact.

C4.7　Discuss the concept of implicit bias and the impact it has on the criminal and civil justice systems.

C4.8　Define a variety of legal terms and concepts related to immigration law.

C4.9　Describe the various types of immigration visas.

C4.10　Explain the process and basis for political asylum.

C4.11　Prepare a chart displaying the process for applying for citizenship, including a display of the average number of immigrants who apply each year and the percentage of successful applicants.

C5.0　Demonstrate a familiarity with fundamental principles of contract law (including the uniform commercial code) and fundamentals of consumer protection law.

C5.1　Recognize the differences between void and voidable contracts.

C5.2　Recognize various types of contracts, such as adhesion, bilateral, unilateral, implied, and express.

C5.3　Identify emerging business practices that may result in consumer fraud or deception.

C5.4　Identify ways by which the Internet and social media can be used to inform consumers and address deceptive business practices.

C5.5　Describe the elements of a contract, including contract terminology.

C5.6　Explain the Statute of Frauds.

C5.7　Explain the Parole Evidence Rule.

C5.8　Interpret contract rules and expectations, including specific performance, breach of contract, remedies for breach of contract, third-party beneficiary, and requirements for modifications.

C5.9　Analyze deceptive business practices, including false advertising, "bait and switch" sales practices, and truth-in-lending disclosure requirements.

C5.10　Prepare a sample of a false advertisement.

C6.0　Demonstrate knowledge of property law and its application to property transactions, estate planning and probate administration, and housing law, including landlord/tenant and fair housing laws.

C6.1　Distinguish personal property from real property.

C6.2　Define a variety of terms associated with real estate transactions.

C6.3　Discuss real property concepts, including but not limited to the types of estates that can be conveyed under California law.

C6.4　Contrast the basic responsibilities of the lawyer and the real estate broker in the conveyance of real property, from the sales or option contract to the recording of the deed.

C6.5　Describe the basic requirements of a contract for sale of real property.

C6.6   Discuss the purpose of title insurance, a title search, and how the "search" is made.

C6.7   Explain how "recording" is accomplished and the importance of recording a deed, mortgage, or other real estate documents.

C6.8   Explain the most common forms of limitations on real property use, such as covenants, easements, zoning laws, and land-use regulations.

C6.9   Explain at least two types of encumbrances that can be placed against real property.

C6.10   Describe the steps and procedures in a typical real estate closing.

C6.11   Compare a variety of real property documents, such as a lease, a promissory note, an option contract, and an agreement for deed or a mortgage, and be able to prepare at least one.

C6.12   Define a variety of terms and concepts associated with wills, trusts, and probate administration.

C6.13   Define a simple Inter Vivos, and a Testamentary trust.

C6.14   Compare and contrast a trust and a will, including advantages and disadvantages for each.

C6.15   Explain the general procedures of the probate process.

C6.16   Explain the purposes of wills and codicils.

C6.17   Create a personal will, following legal guidelines.

C6.18   Identify the types of discrimination that renters and home buyers might face.

C6.19   Understand the basic rights and responsibilities of both landlords and tenants.

C6.20   Explain the basic procedures, claims, and responses in an unlawful detainer case.

C7.0   Understand the fundamental principles of the law of business organizations.

C7.1   Define a variety of terms associated with business organizations.

C7.2   Describe the procedures necessary to form, modify, and dissolve various types of business organizations.

C7.3   Compare the major advantages and disadvantages of the various types of business organizations.

C7.4   Discuss the rights, duties, and liabilities of the owners, officers, directors, and employees of various types of business organizations.

C7.5   Discuss the nature of the agency relationship, including the duties and liabilities of the principal, the agent, and third parties.

C8.0   Recognize the importance of laws and procedures related to intellectual property.

C8.1   Explore emerging issues of law related to personal access to, and use of, technology.

C8.2   Describe the economic barriers to equal public access to technology and legal strategies for overcoming them.

C8.3 Demonstrate an appreciation for balancing the First Amendment right to free speech vs. the interest of parents, schools, and the government regulating social media because of concerns about privacy, online bullying, defamation/slander, and harassment.

C8.4 Discuss how social media can be used by governments or individuals to suppress or enhance freedom of expressions.

C8.5 Understand the definition of "intellectual property": the legal concept that certain types of creations—musical, literary, and artistic works; discoveries and inventions; and words, phrases, symbols, and designs—are types of property "owned" by their creators and cannot be copied or used without the permission of the creators.

C8.6 Explain the ways in which creative rights can be compromised, such as plagiarism and "sampling."

C8.7 Identify emerging issues of law related to infringement of intellectual property and discuss how personal access to, and use of, technology makes intellectual property infringement easier.

C9.0 Demonstrate a general understanding of all phases of trial practice and procedure, as well as knowledge of and ability to perform litigation techniques and procedures.

C9.1 Define a variety of terms associated with litigation and trial practice.

C9.2 Describe the typical steps in jury and nonjury civil trials, from pretrial through the appeal.

C9.3 Explain the sequence and basic contents of pleadings.

C9.4 List and briefly explain six causes of action in civil cases.

C9.5 Explain the basic concept of the Statute of Limitations.

C9.6 Discuss the basic rules of procedure and evidence code.

C9.7 Describe how evidence and exhibits are organized for trial.

C9.8 Describe the purpose and contents of a trial notebook.

C9.9 Describe the techniques for asking questions and list the basic points for good listening.

C9.10 Describe the purpose of background investigations and analysis.

C9.11 List the sources of information for conducting background investigations.

C9.12 Describe how the results of background investigation and analysis can be presented to the attorney.

C9.13 Discuss the evaluation and use of evidence.

C9.14 Describe the role of a jury in a criminal case versus a civil case in state court proceedings.

C9.15 Understand the importance of the jury in relation to fairness and due process.

C9.16 Understand the purpose and process of jury *voir dire* and how it determines the makeup of the jury panel.

C9.17 Describe the judge's role, the role of the prosecutor, and that of the defense attorney.

C9.18 Create a hypothetical case and describe why you would or would not like to participate as a juror on that case.

C10.0 Demonstrate an understanding of the ethical and professional standards of the legal professions and knowledge of management techniques and procedures.

C10.1 Define a variety of legal terms and concepts related to professionalism and the unauthorized practice of law.

C10.2 Explain how judges, lawyers, and paralegal personnel function in our legal system.

C10.3 Understand the roles and responsibilities that lawyers (including judges) have in our society.

C10.4 Describe alternative methods for resolving ethical dilemmas within the legal environment.

C10.5 Define a variety of terms and concepts related to law-office management and structure.

C10.6 List and discuss techniques for improving the confidence that clients will have in the personnel of the law office.

C10.7 Describe how client files are opened, maintained, and closed.

C10.8 List the advantages of data management and microcomputer skills in a law office.

C10.9 List, discuss, and apply the rules of ethics in the legal profession, with special emphasis on client confidentiality.

C10.10 Discuss what constitutes legal malpractice, and illustrate the discussion with examples of malpractice.

C10.11 Discuss the various aspects of fee setting in the law office, including fixed fees, minimum fees, contingent fees, retainers, payment schedules, and billing practice.

PUBLIC SERVICES

	PATHWAYS		
	A. Public Safety	**B. Emergency Response**	**C. Legal Practices**
ENGLISH LANGUAGE ARTS			
Language Standards – LS – (Standard Area, Grade Level, Standard #)			
11–12.1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	A1.0, A2.0, A3.0, A4.0, A5.0, A6.0	B1.0, B2.0, B3.0, B4.0, B6.0, B8.0, B10.0	C1.0, C2.0, C3.0, C4.0, C5.0, C6.0, C7.0, C8.0, C9.0, C10.0
11–12.2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.	A1.0, A2.0, A3.0, A4.0, A5.0	B1.0, B2.0, B3.0, B4.0, B6.0, B8.0, B10.0	C1.0, C2.0, C3.0, C4.0, C5.0, C7.0, C8.0, C9.0, C10.0
11–12.3. Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.	A1.0, A 2.0, A3.0, A4.0, A 5.0	B1.0, B2.0, B3.0, B4.0, B6.0, B8.0,	C1.0, C2.0, C3.0, C4.0, C5.0, C6.0, C7.0, C8.0, C9.0, C10.0
11–12.4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grades 11–12 reading and content*, choosing flexibly from a range of strategies.	A5.0	B1.0, B2.0	C1.0, C2.0, C3.0, C4.0, C5.0, C6.0, C7.0, C8.0, C9.0, C10.0
11–12.5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.			C1.0, C2.0, C5.0, C6.0
11–12.6. Acquire and accurately use general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.	A1.0, A2.0, A3.0, A5.0, A6.0	B1.0, B2.0, B3.0, B4.0, B6.0, B8.0, B10.0	C1.0, C2.0, C3.0, C4.0, C5.0, C6.0, C7.0, C8.0, C9.0, C10.0
Reading Standards for Literature – RSL – (Standard Area, Grade Level, Standard #)			
11–12.2. Determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text.	A1.0, A2.0, A3.0, A4.0, A5.0, A6.0, A7.0	B1.0, B2.0	C2.0, C3.0, C5.0, C6.0
11–12.3. Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters/archetypes are introduced and developed).			
11–12.4. Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful.		B2.0, B3.0, B4.0	C2.0, C5.0, C6.0

Academic Alignment Matrix

PUBLIC SERVICES	PATHWAYS		
Reading Standards for Informational Text – RSIT – (Standard Area, Grade Level, Standard #)	A. Public Safety	B. Emergency Response	C. Legal Practices
11–12.1. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.	A1.0, A2.0, A3.0, A4.0, A5.0, A6.0, A7.0	B1.0, B2.0, B3.0	C1.0, C2.0, C3.0, C4.0, C5.0, C6.0, C7.0, C8.0, C9.0, C10.0
11–12.2. Determine two or more central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to provide a complex analysis; provide an objective summary of the text.	A1.0, A2.0, A3.0, A4.0, A5.0, A6.0, A7.0	B1.0, B2.0, B3.0, B8.0, B10.0	C2.0, C3.0, C4.0, C5.0, C6.0
11–12.3. Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text.	A1.0, A2.0, A3.0, A4.0, A5.0, A6.0, A7.0	B1.0, B2.0, B3.0, B4.0, B10.0	C1.0, C2.0, C3.0, C4.0, C5.0, C6.0
11–12.4. Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of a text (e.g., how Madison defines *faction* in *Federalist* No. 10). (See grade 11/12 Language standards 4–6 on page 46 for additional expectations.)	A1.0, A2.0, A3.0, A4.0, A5.0, A6.0, A7.0	B1.0, B2.0, B3.0	C1.0, C2.0, C3.0, C4.0, C5.0, C6.0, C7.0, C8.0, C9.0, C10.0
11–12.5. Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging.	A1.0, A2.0, A3.0, A4.0, A5.0, A6.0, A7.0	B1.0, B2.0, B3.0, B10.0	C1.0, C2.0, C3.0, C4.0, C5.0, C6.0, C7.0, C8.0
11–12.6. Determine an author's point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness, or beauty of the text.	A1.0, A2.0, A3.0, A4.0, A5.0, A6.0, A7.0	B1.0	C2.0
11–12.7. Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem.	A1.0, A2.0, A3.0, A4.0, A5.0, A6.0, A7.0	B1.0, B2.0, B3.0, B8.0, B9.0, B10.0	C1.0, C2.0, C3.0, C4.0, C5.0, C6.0, C7.0, C8.0, C10.0
11–12.8. Delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning (e.g., in U.S. Supreme Court majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., *The Federalist*, presidential addresses).	A1.0, A2.0, A3.0, A4.0, A5.0, A6.0, A7.0		C1.0, C2.0, C3.0, C4.0, C5.0, C6.0, C7.0, C8.0, C10.0
11–12.9 Analyze seventeenth-, eighteenth-, and nineteenth-century foundational U.S. documents of historical and literary significance (including the Declaration of Independence, the preamble to the Constitution, the Bill of Rights, and Lincoln's Second Inaugural Address) for their themes, purpose, and rhetorical features.	A1.0, A2.0, A3.0, A4.0, A5.0, A6.0, A7.0		C1.0, C2.0, C3.0, C4.0, C10.0

Academic Alignment Matrix

PUBLIC SERVICES	PATHWAYS		
	A. Public Safety	B. Emergency Response	C. Legal Practices
Reading Standards for Informational Text – RSIT – (Standard Area, Grade Level, Standard #) *(continued)*			
11–12.10 By the end of grade 11, read and comprehend literary nonfiction in the grades 11–CCR text complexity band proficiently, with scaffolding as needed at the high end of the range. By the end of grade 12, read and comprehend literary nonfiction at the high end of the grades 11–CCR text complexity band independently and proficiently.	A1.0, A2.0, A3.0, A4.0, A5.0, A6.0, A7.0		C1.0, C2.0, C3.0, C4.0
Reading Standards for Literacy in History/Social Studies – RHSS – (Standard Area, Grade Level, Standard #)			
11–12.1. Cite specific textual evidence to support analysis of primary and secondary sources, connecting insights gained from specific details to an understanding of the text as a whole.	A1.0, A2.0, A3.0, A4.0, A5.0, A6.0, A7.0	B1.0, B2.0, B3.0	C1.0, C2.0, C3.0, C4.0, C5.0, C6.0, C7.0, C8.0, C9.0, C10.0
11–12.2 Determine the central ideas or information of a primary or secondary source; provide an accurate summary that makes clear the relationships among the key details and ideas.	A3.0	B1.0, B2.0, B3.0, B8.0, B9.0	C1.0, C2.0, C3.0, C4.0, C5.0, C6.0, C7.0, C8.0, C9.0, C10.0
11–12.3. Evaluate various explanations for actions or events and determine which explanation best accords with textual evidence, acknowledging where the text leaves mattes uncertain.	A1.0, A2.0, A3.0, A4.0, A5.0, A6.0, A7.0	B2.0, B3.0	C1.0, C2.0, C3.0, C4.0, C5.0, C6.0, C7.0, C8.0, C9.0, C10.0
11–12.5. Analyze in detail how a complex primary source is structured, including how key sentences, paragraphs, and larger portions of the text contribute to the whole.			C1.0, C2.0, C3.0, C4.0, C5.0, C6.0, C7.0, C8.0, C9.0, C10.0
11–12.6. Evaluate authors' differing points of view on the same historical event or issue by assessing the authors' claims, reasoning, and evidence.			C1.0, C2.0, C3.0, C4.0, C5.0, C6.0, C7.0, C8.0, C9.0, C10.0
11–12.7. Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.	A1.0, A2.0, A3.0, A4.0, A5.0, A6.0, A7.0	B1.0, B2.0, B3.0, B8.0, B9.0, B10.0	C1.0, C2.0, C3.0, C4.0, C5.0, C6.0, C7.0, C8.0, C9.0, C10.0
11–12.8. Evaluate an author's premises, claims, and evidence by corroborating or challenging them with other information.			
11–12.9 Integrate information from diverse sources, both primary and secondary, into a coherent understanding of an idea or event, noting discrepancies among sources.	A2.0, A3.0, A4.0, A5.0, A6.0, A7.0	B1.0, B2.0, B3.0, B8.0, B9.0, B10.0	C1.0, C2.0, C3.0, C4.0, C5.0, C6.0, C7.0, C8.0, C9.0, C10.0
11–12.10. By the end of grade 12, read and comprehend history/social studies texts in the grades 11–12 text complexity band independently and proficiently.	A1.0, A2.0, A3.0, A4.0, A5.0, A6.0, A7.0		C1.0, C2.0, C3.0, C4.0, C5.0, C6.0, C7.0, C8.0, C9.0, C10.0

Academic Alignment Matrix

PUBLIC SERVICES

Reading Standards for Literacy in Science and Technical Subjects – RLST – (Standard Area, Grade Level, Standard #)	PATHWAYS		
	A. Public Safety	B. Emergency Response	C. Legal Practices
11–12.2. Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.	A1.0, A2.0, A3.0, A4.0, A5.0, A6.0, A7.0	B2.0, B3.0, B8.0, B9.0, B10.0	
11–12.3. Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.	A2.0, A3.0, A5.0, A6.0, A7.0		
11–12.4. Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11–12 texts and topics.	A5.0, A6.0, A7.0	B2.0, B3.0	
11–12.5. Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	A1.0, A2.0, A3.0, A4.0, A5.0, A6.0, A7.0	B2.0, B3.0, B10.0	
11–12.7. Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.	A1.0, A2.0, A3.0, A4.0, A5.0, A6.0, A7.0	B1.0, B2.0, B3.0, B10.0	
11–12.8. Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information.	A2.0, A3.0, A6.0, A7.0	B2.0, B3.0	
11–12.9 Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.	A1.0, A2.0, A3.0, A4.0, A5.0, A6.0, A7.0	B1.0, B2.0, B3.0, B8.0, B9.0, B10.0	
11–12.10. By the end of grade 12, read and comprehend science/technical texts in the grades 11–12 text complexity band independently and proficiently.	A1.0, A2.0, A3.0, A4.0, A5.0, A6.0, A7.0	B1.0	

Academic Alignment Matrix

PUBLIC SERVICES	PATHWAYS		
Writing Standards – WS – (Standard Area, Grade Level, Standard #)	**A. Public Safety**	**B. Emergency Response**	**C. Legal Practices**
11–12.1. Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.			
a. Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence.			
b. Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level, concerns, values, and possible biases.	A2.0, A3.0	B1.0, B2.0, B3.0, B5.0, B6.0, B8.0, B9.0, B10.0	C2.0, C3.0, C4.0, C5.0, C6.0, C7.0, C8.0, C10.0
c. Use specific rhetorical devices to support assertions (e.g., appeal to logic through reasoning; appeal to emotion or ethical belief; relate a personal anecdote. Case study or analogy).			
d. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.			
e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.			
f. Provide a concluding statement or section that follows from and supports the argument presented.			
11–12.2. Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.			
a. Introduce a topic or thesis statement; organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.			
b. Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.	A1.0, A4.0, A7.0	B1.0, B2.0, B3.0, B4.0, B5.0, B6.0, B8.0, B9.0	C2.0, C3.0, C4.0, C5.0, C6.0, C7.0, C8.0, C9.0, C10.0
c. Use appropriate and varied transitions and syntax to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.			
d. Use precise language, domain-specific vocabulary, and techniques such as metaphor, simile, and analogy to manage the complexity of the topic.			
e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.			
f. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).			

Academic Alignment Matrix

PUBLIC SERVICES	PATHWAYS		
Writing Standards – WS – (Standard Area, Grade Level, Standard #) *(continued)*	A. Public Safety	B. Emergency Response	C. Legal Practices
11–12.3 Write narratives to develop real or imaged experiences or events using effective technique, well–chosen details, and well–structured event sequences.	A5.0	B2.0, B3.0	
11–12.4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	A1.0	B1.0, B2.0, B3.0, B5.0, B6.0, B8.0, B9.0, B10.0	C2.0, C3.0, C4.0, C5.0, C6.0, C7.0, C8.0, C9.0, C10.0
11–12.5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.		B1.0, B2.0, B3.0, B5.0, B6.0, B8.0, B9.0, B10.0	
11–12.6. Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.	A3.0, A5.0, A7.0	B3.0, B6.0	
11–12.7. Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating under–standing of the subject under investigation.	A3.0, A5.0, A7.0	B2.0, B3.0, B5.0, B6.0, B10.0	C2.0, C3.0, C4.0, C5.0, C6.0, C7.0, C8.0, C9.0, C10.0
11–12.8. Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation including footnotes and endnotes.	A3.0, A5.0, A7.0	B2.0, B3.0, B5.0, B6.0, B7.0, B8.0, B9.0, B10.0	C1.0, C2.0, C10.0
11–12.9. Draw evidence from literary or informational texts to support analysis, reflec–tion, and research.	A5.0, A7.0	B6.0	C2.0, C3.0, C4.0, C5.0, C6.0, C7.0, C8.0, C9.0, C10.0
11–12.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.		B2.0, B3.0	

Academic Alignment Matrix

PUBLIC SERVICES

Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects – WHSST – (Standard Area, Grade Level, Standard #)	A. Public Safety	B. Emergency Response	C. Legal Practices
11–12.1. Write arguments focused on discipline-specific content.	A2.0, A3.0, A4.0, A5.0	B2.0, B3.0	C1.0, C2.0, C3.0, C4.0, C5.0, C6.0, C7.0, C8.0, C9.0, C10.0
11–12.2. Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.	A1.0, A2.0, A3.0, A4.0, A5.0, A6.0, A7.0	B1.0, B2.0, B3.0, B5.0, B6.0, B8.0, B9.0, B10.0	C1.0, C2.0, C3.0, C4.0, C5.0, C6.0, C7.0, C8.0, C9.0, C10.0
11–12.3. Incorporate narrative elements effectively into arguments and informative/explanatory texts.	A1.0, A2.0, A3.0, A4.0, A5.0, A6.0, A7.0	B5.0	C2.0, C9.0, C10.0
11–12.4. Produce clear and coherent writing in which the development, organization, and style are appropriate tot task, purpose, and audience.	A1.0, A2.0, A3.0, A4.0, A5.0, A6.0, A7.0	B1.0, B2.0, B3.0, B5.0, B6.0, B7.0, B8.0, B9.0, B10.0	C1.0, C2.0, C3.0, C4.0, C5.0, C6.0, C7.0, C8.0, C9.0, C10.0
11–12.5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.		B1.0, B2.0, B3.0, B5.0, B6.0, B7.0, B8.0, B9.0, B10.0	C1.0, C2.0, C3.0, C4.0, C5.0, C6.0, C7.0, C8.0, C9.0, C10.0
11–12.6. Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.	A2.0, A3.0	B2.0, B3.0, B5.0, B6.0, B7.0, B10.0	C1.0, C2.0, C3.0, C4.0, C5.0, C6.0, C7.0, C8.0, C9.0, C10.0
11–12.7. Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	A2.0, A3.0, A5.0, A7.0		C1.0, C2.0, C3.0, C4.0, C5.0, C6.0, C7.0, C8.0, C9.0, C10.0
11–12.8. Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.			C1.0, C2.0, C3.0, C4.0, C5.0, C6.0, C7.0, C8.0, C9.0, C10.0
11–12.9. Draw evidence from informational texts to support analysis, reflection, and research.			

Academic Alignment Matrix

PUBLIC SERVICES	PATHWAYS		
	A. Public Safety	B. Emergency Response	C. Legal Practices
MATHEMATICS			
Algebra – A–SSE – Seeing Structure in Expressions			
Interpret the structure of expressions			
1. Interpret expressions that represent a quantity in terms of its context.			
a. Interpret parts of an expression, such as terms, factors, and coefficients.			
b. Interpret complicated expressions by viewing one or more of their parts as a single entity. *For example, interpret $P(1+r)^n$ as the product of P and a factor not depending on P.*			C4.0
Write expressions in equivalent forms to solve problems			
Algebra – A–CED – Creating Equations			
Create equations that describe numbers or relationships			
1. Create equations and inequalities in one variable including ones with absolute value and use them to solve problems in and out of context, including equations arising from linear functions.			
1.1 Judge the validity of an argument according to whether the properties of real numbers, exponents, and logarithms have been applied correctly at each step. (CA Standard Algebra II – 11.2)		B2.0, B6.0	C10.0
2. Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.		B2.0, B6.0	C4.0
3. Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context. For example, represent inequalities describing nutritional and cost constraints on combinations of different foods.		B2.0, B6.0	
4. Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. For example, rearrange Ohm's law V = IR to highlight resistance R.		B2.0, B6.0, B8.0	
Algebra – A–REI – Reasoning with Equations and Inequalities			
Understand solving equations as a process of reasoning and explain the reasoning			
1. Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method.		B2.0, B6.0, B8.0	

Academic Alignment Matrix

PUBLIC SERVICES	PATHWAYS		
	A. Public Safety	B. Emergency Response	C. Legal Practices
Algebra – A-REI – Reasoning with Equations and Inequalities *(continued)*			
Solve equations and inequalities in one variable			
3. Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.		B2.0, B6.0, B7.0, B8.0, B9.0, B10.0	C10.0
3.1 Solve equations and inequalities involving absolute value. (CA Standard Algebra I - 3.0 and CA Standard Algebra II - 1.0)			
Solve systems of equations			
5. Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions.			
6. Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.			C4.0
Functions – F-IF – Interpreting Functions			
Understand the concept of a function and use function notation			
1. Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If f is a function and x is an element of its domain, then $f(x)$ denotes the output of f corresponding to the input x. The graph of f is the graph of the equation $y = f(x)$.		B2.0, B6.0, B10.0	
2. Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.		B2.0, B6.0, B10.0	C2.0, C4.0
Interpret functions that arise in applications in terms of the context			
4. For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity.		B2.0, B6.0, B7.0, B8.0, B10.0	C4.0
5. Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. For example, if the function $h(n)$ gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function.		B2.0, B6.0, B7.0, B8.0, B10.0	C4.0
6. Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.		B2.0, B6.0, B7.0, B8.0, B10.0	

Academic Alignment Matrix

PUBLIC SERVICES

	PATHWAYS		
	A. Public Safety	B. Emergency Response	C. Legal Practices
Geometry – G–CO – Congruence			
Experiment with transformations in the plane			
1. Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc.	A2.0, A9.0	B2.0, B6.0, B7.0, B8.0, B9.0, B10.0	
Geometry – G–GMD – Geometric Measurement and Dimensions			
Visualize relationships between two–dimensional and three–dimensional objects			
1. Give an informal argument for the formulas for the circumference of a Circle, area of a circle, volume of a cylinder, pyramid, and cone. use dissection arguments, Cavalieri's principle, and informal limit arguments.		B2.0, B6.0, B7.0, B8.0, B9.0, B10.0	
3. Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems.		B2.0, B6.0, B7.0, B8.0, B9.0, B10.0	
5. Determine how changes in dimensions affect the perimeter, area, and volume of common geometric figures and solids.		B2.0, B6.0, B9.0, B10.0	
Geometry – G–GPE – Expressing Geometric Properties with Equations			
7. Use coordinates to compute perimeters of polygons and areas of triangles and rectangles, e.g., using the distance formula.	A2.0, A9.0	B2.0, B6.0, B7.0, B8.0, B10.0	
Geometry – G–MG – Modeling with Geometry			
Apply geometric concepts in modeling situations			
2. Apply concepts of density based on area and volume in modeling situations (e.g., persons per square mile, BTUs per cubic foot).	A2.0	B6.0, B8.0, B9.0, B10.0	
Number and Quantity – N–Q – Quantities			
Reason quantitatively and use units to solve problems			
1. Use units as a way to understand problems and to guide the solution of multi–step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.	A2.0, A8.0, A9.0	B2.0, B6.0, B7.0, B8.0, B9.0, B10.0	
2. Define appropriate quantities for the purpose of descriptive modeling.	A2.0, A8.0, A9.0	B2.0, B6.0, B7.0, B8.0, B9.0, B10.0	
3. Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.	A2.0, A7.0, A8.0, A9.0	B2.0, B6.0, B7.0, B8.0, B9.0, B10.0	

PUBLIC SERVICES

	PATHWAYS		
	A. Public Safety	B. Emergency Response	C. Legal Practices
Statistics and Probability – S–IC – Making Inferences and Justifying Conclusions			
Understand and evaluate random processes underlying statistical experiments			
1. Understand statistics as a process for making inferences about population parameters based on a random sample from that population.	A2.0, A7.0, A8.0, A9.0	B2.0, B6.0, B7.0, B10.0	C4.0
2. Decide if a specified model is consistent with results from a given data-generating process, e.g., using simulation. For example, a model says a spinning coin falls heads up with probability 0.5. Would a result of 5 tails in a row cause you to question the model?	A8.0, A9.0	B2.0, B6.0, B10.0	C4.0
Make inferences and justify conclusions from sample surveys, experiments, and observational studies			
3. Recognize the purposes of and differences among sample surveys, experiments, and observational studies; explain how randomization relates to each.	A2.0, A8.0, A9.0	B2.0, B6.0, B7.0, B10.0	
5. Use data from a randomized experiment to compare two treatments; use simulations to decide if differences between parameters are significant.	A2.0		
6. Evaluate reports based on data.	A2.0, A8.0, A9.0	B2.0, B6.0, B7.0, B10.0	C4.0, C8.0
Statistics and Probability – S–ID – Interpreting Categorical and Quantitative Data			
Summarize, represent, and interpret data on a single count or measurement variable			
1. Represent data with plots on the real number line (dot plots, histograms, and box plots).	A1.0, A7.0, A8.0, A9.0	B2.0, B6.0, B7.0, B10.0	C4.0, C8.0
2. Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets.	A1.0, A8.0, A9.0	B2.0, B6.0, B7.0, B10.0	C4.0, C8.0
3. Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).	A1.0, A8.0, A9.0	B2.0, B6.0, B7.0, B10.0	C4.0, C8.0
4. Use the mean and standard deviation of a data set to fit it to a normal distribution and to estimate population percentages. Recognize that there are data sets for which such a procedure is not appropriate. Use calculators, spreadsheets, and tables to estimate areas under the normal curve.	A1.0, A8.0, A9.0	B2.0, B6.0, B7.0, B10.0	C4.0, C8.0

Academic Alignment Matrix

PUBLIC SERVICES

	PATHWAYS		
	A. Public Safety	B. Emergency Response	C. Legal Practices
Statistics and Probability – S–ID – Interpreting Categorical and Quantitative Data *(continued)*			
Summarize, represent, and interpret data on two categorical and quantitative variables			
5. Summarize categorical data for two categories in two-way frequency tables. Interpret relative frequencies in the context of the data (including joint, marginal, and conditional relative frequencies). Recognize possible associations and trends in the data.			C4.0
6. Represent data on two quantitative variables on a scatter plot, and describe how the variables are related.			C4.0
a. Fit a function to the data; use functions fitted to data to solve problems in the context of the data. Use given functions or choose a function suggested by the context. Emphasize linear, quadratic, and exponential models.			
b. Informally assess the fit of a function by plotting and analyzing residuals.			
c. Fit a linear function for a scatter plot that suggests a linear association.			
Interpret linear models			
7. Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data.			C4.0
8. Compute (using technology) and interpret the correlation coefficient of a linear fit.			C4.0
9. Distinguish between correlation and causation.			C4.0
Statistics and Probability – S–CP – Conditional Probability and the Rules of Probability			
Understand independence and conditional probability and use them to interpret data			
5. Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations. For example, compare the chance of having lung cancer if you are a smoker with the chance of being a smoker if you have lung cancer.			C4.0
Statistics and Probability – S–MD – Using Probability to Make Decisions			
Calculate expected values and use them to solve problems			
1. (+) Define a random variable for a quantity of interest by assigning a numerical value to each event in a sample space; graph the corresponding probability distribution using the same graphical displays as for data distributions.		B2.0, B6.0, B10.0	

Academic Alignment Matrix

PUBLIC SERVICES	PATHWAYS		
	A. Public Safety	B. Emergency Response	C. Legal Practices
Statistics and Probability – S–MD – Using Probability to Make Decisions *(continued)*			
2. (+) Calculate the expected value of a random variable; interpret it as the mean of the probability distribution.		B2.0, B6.0, B10.0	
3. (+) Develop a probability distribution for a random variable defined for a sample space in which theoretical probabilities can be calculated; find the expected value. For example, find the theoretical probability distribution for the number of correct answers obtained by guessing on all five questions of a multiple-choice test where each question has four choices, and find the expected grade under various grading schemes.		B2.0, B6.0, B10.0	
4. (+) Develop a probability distribution for a random variable defined for a sample space in which probabilities are assigned empirically; find the expected value. For example, find a current data distribution on the number of TV sets per household in the United States, and calculate the expected number of sets per household. How many TV sets would you expect to find in 100 randomly selected households?		B2.0, B6.0, B10.0	
Use probability to evaluate outcomes of decisions			
5. (+) Weigh the possible outcomes of a decision by assigning probabilities to payoff values and finding expected values. a. Find the expected payoff for a game of chance. For example, find the expected winnings from a state lottery ticket or a game at a fast-food restaurant. b. Evaluate and compare strategies on the basis of expected values. For example, compare a high deductible versus a low-deductible automobile insurance policy using various, but reasonable, chances of having a minor or a major accident.	A2.0, A8.0, A9.0	B2.0, B4.0, B6.0, B10.0	
6. (+) Use probabilities to make fair decisions (e.g., drawing by lots, using a random number generator).	A2.0		
7. (+) Analyze decisions and strategies using probability concepts (e.g., product testing, medical testing, pulling a hockey goalie at the end of a game).	A2.0, A8.0, A9.0	B2.0, B4.0, B6.0, B10.0	C4.0, C10.0
Statistics and Probability – APPS – Advanced Placement Probability and Statistics			
10.0 Students know the definitions of the mean, median and mode of distribution of data and can compute each of them in particular situations.	A2.0, A7.0, A8.0, A9.0	B2.0, B6.0, B7.0, B10.0	

Academic Alignment Matrix

PUBLIC SERVICES	PATHWAYS		
	A. Public Safety	B. Emergency Response	C. Legal Practices
SCIENCE			
Scientific and Engineering Practices – SEP			
7. Engaging in argument from evidence	A2.0		C2.0
8. Obtaining, evaluating, and communicating information	A2.0		C2.0
Physical Sciences – PS			
PS1: Matter and Its Interactions			
PS1.A: Structure and Properties of Matter	A4.0, A7.0	B7.0	
PS1.B: Chemical Reactions	A1.0, A4.0	B7.0	
PS2: Motion and Stability: Forces and Interactions			
PS2.A: Forces and Motion	A4.0, A7.0		
PS2.B: Types of interactions			
PS2.C: Stability and Instability in Physical Systems	A2.0, A3.0, A7.0	B8.0	
PS3: Energy			
PS3.C: Relationship Between Energy and Forces	A7.0	B8.0	
PS3.D: Energy in Chemical Processes and Everyday Life	A1.0, A4.0, A7.0		
PS4: Waves and Their Applications in Technologies for Information Transfer			
PS4.C: Information Technologies and Instrumentation	A1.0, A3.0, A5.0		
Life Sciences – LS			
LS1: From Molecules to Organisms: Structures and Processes			
LS1.A: Structure and Function	A6.0, A2.0	B4.0, B5.0, B9.0	
LS1.B: Growth and Development of Organisms	A6.0, A4.0	B4.0, B5.0, B9.0	
LS1.C: Organization for Matter and Energy Flow in Organisms		B4.0, B5.0, B9.0	
LS1.D: Information Processing	A5.0		
LS2: Ecosystems: Interactions, Energy, and Dynamics			
LS2.A: Interdependent Relationships in Ecosystems	A3.0, A6.0		
LS2.B: Cycles of Matter and Energy Transfer in Ecosystems	A1.0		
LS2.D: Social Interactions and Group Behavior	A7.0		

Academic Alignment Matrix

PUBLIC SERVICES	A. Public Safety	PATHWAYS B. Emergency Response	C. Legal Practices
Engineering, Technology, and the Applications of Science – ETS			
ETS1: Engineering Design ETS1.A: Defining and Delimiting an Engineering Problem ETS1.B: Developing Possible Solutions ETS1.C: Optimizing the Design Solution	A3.0, A7.0		
HISTORY/SOCIAL SCIENCE			
Principles of American Democracy and Economics – AD			
12.1 Students explain the fundamental principles and moral values of American democracy as expressed in the U.S. Constitution and other essential documents of American democracy			
12.1.1. Analyze the influence of ancient Greek, Roman, English, and leading European political thinkers such as John Locke, Charles–Louis Montesquieu, Niccolo Machiavelli, and William Blackstone on the development of American government.			C4.0
12.1.2. Discuss the character of American democracy and its promise and perils as articulated by Alexis de Tocqueville.	A2.0		C4.0
12.1.3. Explain how the U.S. Constitution reflects a balance between the classical republican concern with promotion of the public good and the classical liberal concern with protecting individual rights; and discuss how the basic premises of liberal constitutionalism and democracy are joined in the Declaration of Independence as "self-evident truths."	A5.0		C1.0, C4.0, C4.0
12.1.5. Describe the systems of separated and shared powers, the role of organized interests (Federalist Paper Number 10), checks and balances (Federalist Paper Number 51), the importance of an independent judiciary (Federalist Paper Number 78), enumerated powers, rule of law, federalism, and civilian control of the military.			C4.0
12.1.6. Understand that the Bill of Rights limits the powers of the federal government and state governments.	A5.0, A3.0, A6.0		C1.0, C4.0
12.2 Students evaluate and take and defend positions on the scope and limits of rights and obligations as democratic citizens, the relationships among them, and how they are secured.	A3.0, A6.0		
12.2.1. Discuss the meaning and importance of each of the rights guaranteed under the Bill of Rights and how each is secured (e.g., freedom of religion, speech, press, assembly, petition, privacy).	A5.0		C1.0, C4.0, C8.0 C4.0, C9.0

PUBLIC SERVICES

| | PATHWAYS | | |
	A. Public Safety	B. Emergency Response	C. Legal Practices
Principles of American Democracy and Economics – AD *(continued)*			
12.2.2. Explain how economic rights are secured and their importance to the individual and to society (e.g., the right to acquire, use, transfer, and dispose of properly; right to choose one's work; right to join or not join labor unions; copyright and patent).			C4.0, C4.0, C9.0
12.2.3. Discuss the individual's legal obligations to obey the law, serve as a juror, and pay taxes.	A1.0		C4.0, C4.0, C9.0
12.2.4. Understand the obligations of civic-mindedness, including voting, being informed on civic issues, volunteering and performing public service, and serving in the military or alternative service.	A1.0		C4.0, C9.0
12.2.5. Describe the reciprocity between rights and obligations; that is, why enjoyment of one's rights entails respect for the rights of others.	A1.0		C4.0, C9.0
12.2.6. Explain how one becomes a citizen of the United States, including the process of naturalization (e.g., literacy, language, and other requirements).	A1.0		C4.0
12.3 Students evaluate and take and defend positions on what the fundamental values and principles of civil society are (i.e., the autonomous sphere of voluntary personal, social, and economic relations that are not part of government), their Interdependence, and the meaning and importance of those values and principles for a free society.			C4.0, C5.0, C8.0
12.3.3. Discuss the historical role of religion and religious diversity.	A1.0		
12.4 Students analyze the unique roles and responsibilities of the three branches of government as established by the U.S. Constitution.	A1.0		
12.4.1. Discuss Article I of the Constitution as it relates to the legislative branch, including eligibility for office and lengths of terms of representatives and senators; election to office; the roles of the House and Senate in impeachment proceedings; the role of the vice president; the enumerated legislative powers; and the process by which a bill becomes a law.	A6.0		C1.0, C4.0, C1.0, C4.0, C6.0, C7.0
12.4.3. Identify their current representatives in the legislative branch of the national government.			C1.0, C4.0
12.4.4. Discuss Article II of the Constitution as it relates to the executive branch, including eligibility for office and length of term, election to and removal from office, the oath of office, and the enumerated executive powers.	A3.0		C1.0, C4.0
12.4.5. Discuss Article III of the Constitution as it relates to judicial power, including the length of terms of judges and the jurisdiction of the Supreme Court.	A6.0		C1.0, C4.0

Academic Alignment Matrix

PUBLIC SERVICES	PATHWAYS		
	A. Public Safety	B. Emergency Response	C. Legal Practices
Principles of American Democracy and Economics – AD *(continued)*			
12.5 Students summarize landmark U.S. Supreme Court interpretations of the Constitution and its amendments.			C2.0, C4.0, C8.0, C9.0
12.5.1. Explain how civil society provides opportunities for individuals to associate for social, cultural, religious, economic, and political purposes.	A3.0, A6.0		C2.0, C4.0, C8.0, C9.0
12.5.4. Explain the controversies that have resulted over changing interpretations of civil rights, including those in Plessy v. Ferguson, Brown v. Board of Education, Miranda v. Arizona, Regents of the University of California v. Bakke, Adarand Constructors, Inc. v. Pena, and United States v. Virginia (VMI).	A2.0, A3.0		C2.0, C4.0, C8.0, C9.0
12.6 Students evaluate issues regarding campaigns for national, state, and local elective offices.			
12.6.3. Evaluate the roles of polls, campaign advertising, and the controversies over campaign funding.	A1.0		C8.0
12.6.4. Describe the means that citizens use to participate in the political process (e.g., voting, campaigning, lobbying, filing a legal challenge, demonstrating, petitioning, picketing, running for political office).			C8.0
12.7 Students analyze and compare the powers and procedures of the national, state, tribal, and local governments.	A2.0, A3.0, A6.0		
12.7.1. Explain how conflicts between levels of government and branches of government are resolved			C1.0, C4.0
12.7.2. Identify the major responsibilities and sources of revenue for state and local governments.		B6.0	C1.0, C4.0
12.7.3. Discuss reserved powers and concurrent powers of state governments.	A2.0, A5.0		C1.0, C4.0
12.7.5. Explain how public policy is formed, including the setting of the public agenda and implementation of it through regulations and executive orders.	A2.0, A5.0, A8.0	B6.0	C1.0, C2.0, C3.0, C4.0, C5.0, C6.0, C7.0, C8.0, C9.0, C10.0
12.7.6. Compare the processes of lawmaking at each of the three levels of government, including the role of lobbying and the media.	A2.0		C1.0, C4.0
12.7.7. Identify the organization and jurisdiction of federal, state, and local (e.g., California) courts and the interrelationships among them.	A7.0, A8.0		C1.0, C4.0, C9.0

Academic Alignment Matrix

PUBLIC SERVICES

PUBLIC SERVICES	PATHWAYS		
	A. Public Safety	B. Emergency Response	C. Legal Practices
Principles of American Democracy and Economics – AD *(continued)*			
12.8 Students evaluate and take and defend positions on the influence of the media on American political life.			
12.8.1. Discuss the meaning and importance of a free and responsible press.	A3.0, A5.0, A7.0		C8.0
12.8.2. Describe the roles of broadcast, print, and electronic media, including the Internet, as means of communication in American politics.			C8.0
12.8.3. Explain how public officials use the media to communicate with the citizenry and to shape public opinion.	A5.0		C8.0
12.9 Students analyze the origins, characteristics, and development of different political systems across time, with emphasis on the quest for political democracy, its advances, and its obstacles.	A3.0		C1.0, C4.0
Principles of Economics – PE			
12.1 Students understand common economic terms and concepts and economic reasoning.			
12.1.4. Evaluate the role of private property as an incentive in conserving and improving scarce resources, including renewable and nonrenewable natural resources.			C6.0
12.3 Students analyze the influence of the federal government on the American economy.			
12.3.1. Understand how the role of government in a market economy often includes providing for national defense, addressing environmental concerns, defining and enforcing property rights, attempting to make markets more competitive, and protecting consumers' rights.	A1.0, A2.0, A3.0, A6.0		C4.0
12.3.2. Identify the factors that may cause the costs of government actions to outweigh the benefits.	A3.0, A6.0		
12.3.3. Describe the aims of government fiscal policies (taxation, borrowing, spending) and their influence on production, employment, and price levels.	A3.0, A6.0		
12.3.4. Understand the aims and tools of monetary policy and their influence on economic activity (e.g., the Federal Reserve).			
12.4 Students analyze the elements of the U.S. labor market in a global setting.			
12.4.1. Understand the operations of the labor market, including the circumstances surrounding the establishment of principal American labor unions, procedures that unions use to gain benefits for their members, the effects of unionization, the minimum wage, and unemployment insurance.	A7.0		

Academic Alignment Matrix

PUBLIC SERVICES	PATHWAYS		
	A. Public Safety	B. Emergency Response	C. Legal Practices
Principles of Economics – PE *(continued)*			
12.4.2. Describe the current economy and labor market, including the types of goods and services produced, the types of skills workers need, the effects of rapid techno-logical change, and the impact of international competition.	A7.0		
12.4.3. Discuss wage differences among jobs and professions, using the laws of demand and supply and the concept of productivity.	A7.0		
12.6 Students analyze issues of international trade and explain how the U.S. economy affects, and is affected by, economic forces beyond the United States Borders.			
12.6.3. Understand the changing role of international political borders and territorial sovereignty in a global economy.	A3.0, A7.0		
U.S. History and Geography – US			
11.1 Students analyze the significant events in the founding of the nation and its attempts to realize the philosophy of government described in the Declaration of Independence.			
11.1.1. Describe the Enlightenment and the rise of democratic ideas as the context in which the nation was founded.			C1.0
11.1.2. Analyze the ideological origins of the American Revolution, the Founding Fathers' philosophy of divinely bestowed unalienable natural rights, the debates on the drafting and ratification of the Constitution, and the addition of the Bill of Rights.	A3.0, A6.0		C1.0, C4.0
11.1.3. Understand the history of the Constitution after 1787 with emphasis on federal versus state authority and growing democratization.	A3.0, A6.0		C1.0, C4.0
11.2 Students analyze the relationship among the rise of industrialization, large-scale rural-to-urban migration, and massive immigration from Southern and Eastern Europe.			
11.2.2. Describe the changing landscape, including the growth of cities linked by industry and trade, and the development of cities divided according to race, ethnicity, and class.	A1.0, A2.0		C4.0
11.2.9. Understand the effect of political programs and activities of the Progres-sives (e.g., federal regulation of railroad transport, Children's Bureau, the Sixteenth Amendment, Theodore Roosevelt, Hiram Johnson).	A2.0		

Academic Alignment Matrix

PUBLIC SERVICES

History and Geography – US *(continued)*

	PATHWAYS		
	A. Public Safety	B. Emergency Response	C. Legal Practices
11.3 Students analyze the role religion played in the founding of America, its lasting moral, social, and political impacts, and issues regarding religious liberty.			
11.3.4. Discuss the expanding religious pluralism in the United States and California that resulted from large-scale immigration in the twentieth century.	A1.0		
11.5 Students analyze the major political, social, economic, technological, and cultural developments of the 1920s.			C2.0
11.5.1. Discuss the policies of Presidents Warren Harding, Calvin Coolidge, and Herbert Hoover.			C2.0, C4.0
11.5.2. Analyze the international and domestic events, interests, and philosophies that prompted attacks on civil liberties, including the Palmer Raids, Marcus Garvey's "back-to-Africa" movement, the Ku Klux Klan, and immigration quotas and the responses of organizations such as the American Civil Liberties Union, the National Association for the Advancement of Colored People, and the Anti-Defamation League to those attacks.			C4.0
11.5.3. Examine the passage of the Eighteenth Amendment to the Constitution and the Volstead Act (Prohibition).			C4.0
11.5.4. Analyze the passage of the Nineteenth Amendment and the changing role of women in society.	A6.0		C4.0
11.5.5. Describe the Harlem Renaissance and new trends in literature, music, and art, with special attention to the work of writers (e.g., Zora Neale Hurston, Langston Hughes).	A1.0		
11.5.7. Discuss the rise of mass production techniques, the growth of cities, the impact of new technologies (e.g., the automobile, electricity), and the resulting prosperity and effect on the American landscape.	A2.0		
11.6 Students analyze the different explanations for the Great Depression and how the New Deal fundamentally changed the role of the federal government.			
11.6.4. Analyze the effects of and the controversies arising from New Deal economic policies and the expanded role of the federal government in society and the economy since the 1930s (e.g., Works Progress Administration, Social Security, National Labor Relations Board, farm programs, regional development policies, and energy development projects such as the Tennessee Valley Authority, California Central Valley Project, and Bonneville Dam).			C4.0

PUBLIC SERVICES	PATHWAYS		
	A. Public Safety	B. Emergency Response	C. Legal Practices
History and Geography – US *(continued)*			
11.7 Students analyze America's participation in World War II.			
11.7.1. Examine the origins of American involvement in the war, with an emphasis on the events that precipitated the attack on Pearl Harbor.	A2.0, A3.0, A7.0		
11.7.5. Discuss the constitutional issues and impact of events on the U.S. home front, including the internment of Japanese Americans (e.g., Fred Korematsu v. United States of America) and the restrictions on German and Italian resident aliens; the response of the administration to Hitler's atrocities against Jews and other groups; the roles of women in military production; and the roles and growing political demands of African American.	A1.0, A3.0		C4.0
11.7.7. Discuss the decision to drop atomic bombs and the consequences of the decision (Hiroshima and Nagasaki).	A2.0, A3.0, A7.0		
11.8 Students analyze the economic boom and social transformation of post–World War II America.			
11.8.2. Describe the significance of Mexican immigration and its relationship to the agricultural economy, especially in California.	A1.0		C4.0
11.9 Student analyze U.S. foreign policy since World War II.			
11.9.7. Examine relations between the United States and Mexico in the twentieth century, including key economic, political, immigration, and environmental issues.	A3.0, A7.0		C4.0
11.10 Students analyze the development of federal civil rights and voting rights.	A1.0, A6.0		
11.10.6. Analyze the passage and effects of civil rights and voting rights legislation (e.g., 1964 Civil Rights Act, Voting Rights Act of 1965) and the Twenty–Fourth Amendment, with an emphasis on equality of access to education and to the political process.			C4.0
11.11 Students analyze the major social problems and domestic policy issues in contemporary American society.			
11.11.1. Discuss the reasons for the nation's changing immigration policy, with emphasis on how the Immigration Act of 1965 and successor acts have transformed American society.	A1.0, A3.0		C4.0
11.11.3. Describe the changing roles of women in society as reflected in the entry of more women into the labor force and the changing family structure.	A1.0, A6.0		C4.0

Academic Alignment Matrix

PUBLIC SERVICES

History and Geography – US *(continued)*	PATHWAYS		
	A. Public Safety	B. Emergency Response	C. Legal Practices
11.11.5. Trace the impact of, need for, and controversies associated with environ-mental conservation, expansion of the national park system, and the development of environmental protection laws, with particular attention to the interaction between environmental protection advocates and property rights advocates.	A1.0		C4.0
11.11.6. Analyze the persistence of poverty and how different analyses of this issue influence welfare reform, health insurance reform, and other social policies.	A1.0		C4.0
11.11.7. Explain how the federal, state, and local governments have responded to demographic and social changes such as population shifts to the suburbs, racial concentrations in the cities, Frostbelt-to-Sunbelt migration, international migration, decline of family farms, increases in out-of-wedlock births, and drug abuse.	A3.0		C4.0
World History, Culture, and Geography – WH			
10.3 Students analyze the effects of the Industrial Revolution in England, France, Germany, Japan, and the United States.			
10.3.1. Analyze why England was the first country to industrialize.	A1.0, A2.0		
10.3.2. Examine how scientific and technological changes and new forms of energy brought about massive social, economic, and cultural change (e.g., the inventions and discoveries of James Watt, Eli Whitney, Henry Bessemer, Louis Pasteur, Thomas Edison).	A1.0, A2.0		
10.3.3. Describe the growth of population, rural to urban migration, and growth of cities associated with the Industrial Revolution.	A1.0, A2.0		
10.3.4. Trace the evolution of work and labor, including the demise of the slave trade and the effects of immigration, mining and manufacturing, division of labor, and the union movement.	A1.0, A2.0		
10.3.5. Understand the connections among natural resources, entrepreneurship, labor, and capital in an industrial economy.	A1.0, A2.0		
10.3.6. Analyze the emergence of capitalism as a dominant economic pattern and the responses to it, including Utopianism, Social Democracy, Socialism, and Communism.	A1.0, A2.0		
10.3.7. Describe the emergence of Romanticism in art and literature (e.g., the poetry of William Blake and William Wordsworth), social criticism (e.g., the novels of Charles Dickens), and the move away from Classicism in Europe.	A1.0, A2.0		

Academic Alignment Matrix

PUBLIC SERVICES

World History, Culture, and Geography – WH *(continued)*	PATHWAYS		
	A. Public Safety	B. Emergency Response	C. Legal Practices
10.10 Students analyze instances of nation–building in the contemporary world in at least two of the following regions or countries: the Middle East, Africa, Mexico and other parts of Latin America, and China.			
10.10.1. Understand the challenges in the regions, including their geopolitical, cultural, military, and economic significance and the international relationships in which they are involved.	A2.0, A3.0, A6.0		
10.10.2. Describe the recent history of the regions, including political divisions and systems, key leaders, religious issues, natural features, resources, and population patterns.	A2.0, A3.0, A6.0		
10.10.3. Discuss the important trends in the regions today and whether they appear to serve the cause of individual freedom and democracy.	A2.0, A3.0, A6.0		
10.11 Students analyze the integration of countries into the world economy and the information, technological, and communications revolutions (e.g., television, satellites, computers).	A1.0, A2.0, A3.0, A6.0, A7.0		

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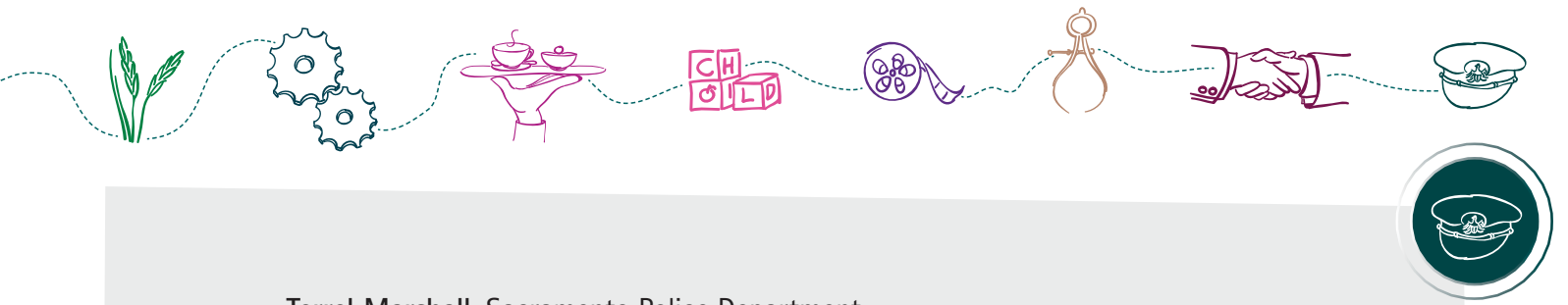
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References

ACT. 2010. *A First Look at the Common Core and College and Career Readiness.* http://www.act.org/research/policymakers/pdf/FirstLook.pdf (accessed December 4, 2012).

American Association of Colleges for Teacher Education (AACTE) and the Partnership for 21st Century Skills. 2010. "Preparing Students for the 21st Century Economy." http://www.edsynergy.org/wp-content/uploads/2011/07/PREPARING-STUDENTS-FOR-THE-21ST-CENTURY-ECONOMY-3.doc (accessed December 4, 2012).

Anderson, Lorin W., David R. Krathwohl, Peter W. Airasian, Kathleen A. Cruikshank, Richard E. Mayer, Paul R. Pintrich, James Rahts, and Merlin C. Wittrock. 2001. *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives.* New York: Pearson.

Association of American Colleges and Universities. 2007. *College Learning for the New Global Century.* http://www.aacu.org/advocacy/leap/documents/GlobalCentury_final.pdf (accessed December 4, 2012).

Association of American Colleges and Universities and Peter D. Hart Research Associates, Inc. 2006. *How Should Colleges Prepare Students to Succeed in Today's Global Economy?* http://www.aacu.org/leap/documents/Re8097abcombined.pdf (accessed December 4, 2012).

California Department of Education. 2006. *California Career Technical Education Model Curriculum Standards, Grades Seven Through Twelve.* http://www.cde.ca.gov/ci/ct/sf/documents/ctestandards.pdf (accessed December 4, 2012).

———. 2007. *Career Technical Education Framework for California Public Schools, Grades Seven Through Twelve.* http://www.cde.ca.gov/ci/ct/sf/documents/cteframework.pdf (accessed December 4, 2012).

California Department of Forestry and Fire Protection. 2009. "CAL FIRE Firefighter Training." http://osfm.fire.ca.gov/training/training.php (accessed January 2, 2013).

California Emergency Management Agency. 2011. "Standardized Emergency Management System." http://www.calema.ca.gov [Link no longer valid] (accessed December 24, 2012).

California Employment Development Department. 2010. *California's Green Economy: Summary of Survey Results.* http://www.labormarketinfo.edd.ca.gov/contentpub/GreenDigest/CA-Green-Economy-SummarySurveyResults.pdf (accessed December 4, 2012).

Children Now. 2010. *California Report Card 2011–12: Setting the Agenda for Children.* http://www.childrennow.org/uploads/documents/reportcard_2011.pdf [Link no longer valid] (accessed December 4, 2012).

The Conference Board, Partnership for 21st Century Skills, Corporate Voices for Working Families, and the Society for Human Resource Management. 2006. *Are They Really Ready to Work? Employers' Perspectives on the Basic Knowledge and Applied Skills of New Entrants to the 21st Century U.S. Workforce.* http://www.shrm.org/research/surveyfindings/documents/are they really ready to work survey report.pdf (accessed December 4, 2012).

Conley, David T. 2010. *College and Career Ready: Helping All Students Succeed Beyond High School.* San Francisco: Jossey-Bass.
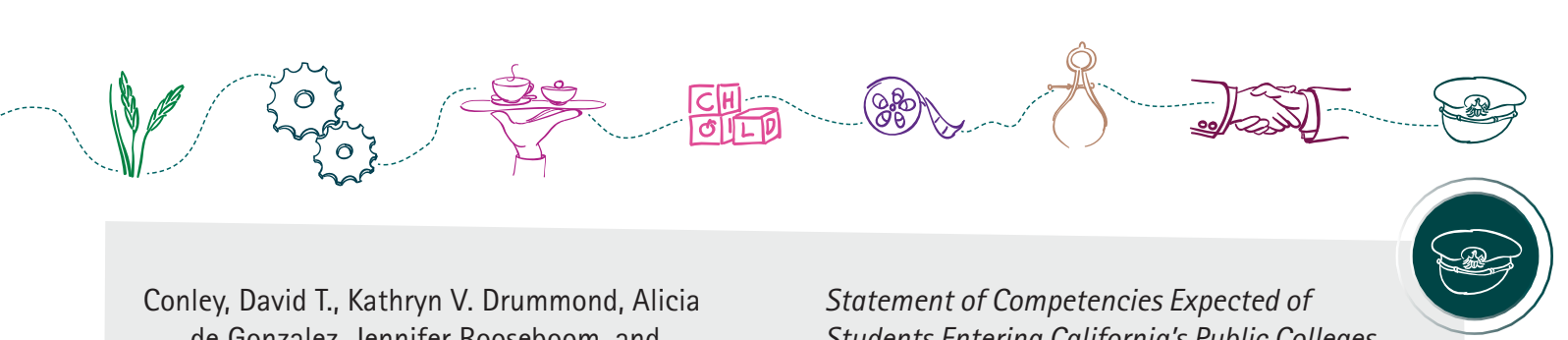
Conley, David T., Kathryn V. Drummond, Alicia de Gonzalez, Jennifer Rooseboom, and Odile Stout. 2011. *Reaching the Goal: The Applicability and Importance of the Common Core State Standards to College and Career Readiness.* Eugene, OR: Educational Policy Improvement Center. http://www.epiconline.org/publications/documents/ReachingtheGoal-FullReport.pdf (accessed December 4, 2012).

Council on Social Work Education. 2010. *Educational Policy and Accreditation Standards.* Alexandria, VA. http://www.cswe.org/File.aspx?id=13780 (accessed December 24, 2012).

——. 2012. "Accreditation." http://www.cswe.org/Accreditation.aspx (accessed December 24, 2012).

Darling-Hammond, Linda, Ruth Chung Wei, Alethea Andree, Nikole Richardson, and Stelios Orphanos. 2009. *Professional Learning in the Learning Profession: A Status Report on Teacher Development in the United States and Abroad.* Palo Alto, CA: National Staff Development Council and the School Redesign Network at Stanford University. http://learningforward.org/docs/pdf/nsdcstudy2009.pdf (accessed December 4, 2012).

Institute of Education Sciences, National Center for Education Statistics. 2012. *The Condition of Education.* http://nces.ed.gov/programs/coe/ (accessed December 4, 2012).

International Center for Leadership in Education. 2012. "Rigor/Relevance Framework." Rexford, NY. http://www.leadered.com/rrr.html [Link no longer valid] (accessed December 4, 2012).

Intersegmental Committee of the Academic Senates (ICAS) of the California Community Colleges. 2002. *Academic Literacy: A Statement of Competencies Expected of Students Entering California's Public Colleges and Universities.* http://asccc.org/sites/default/files/AcademicLiteracy.pdf (accessed December 4, 2012).

Kober, Nancy, and Diane Stark Rentner. 2011. *States' Progress and Challenges in Implementing Common Core State Standards.* Washington, DC: Center on Education Policy. http://www.cep-dc.org/displayDocument.cfm?DocumentID=343 (accessed December 4, 2012).

Marzano, Robert J., and John S. Kendall. 2007. *The New Taxonomy of Educational Objectives.* 2nd ed. Thousand Oaks, CA: Corwin Press. http://www.marzanoresearch.com/site/default.aspx [Link no longer valid] (accessed December 4, 2012).

MetLife, Inc. 2011. *The MetLife Survey of the American Teacher: Preparing Students for College and Careers.* https://www.metlife.com/assets/cao/contributions/foundation/american-teacher/MetLife_Teacher_Survey_2010.pdf (accessed December 6, 2012).

National Association of State Directors of Career Technical Education Consortium (NASDCTEc). 2011. "CTE and College and Career Ready Standards: Preparing Students for Further Education and Careers." Silver Spring, MD. http://www.careertech.org/ (accessed December 4, 2012).

——. 2012. "Introduction to the Common Career Technical Core."

National Center for Education Statistics. 2008. *Trends in International Mathematics and Science Study 2007.* http://nces.ed.gov/timss/index.asp (accessed December 4, 2012).

National Governors Association, Council of Chief State School Officers, and Achieve, Inc. 2008. *Benchmarking for Success: Ensuring U.S. Students Receive a World-Class Education.* Washington, DC: National Governors Association. http://www.nga.org/files/live/sites/NGA/files/pdf/0812BENCHMARKING.PDF (accessed December 4, 2012).

Organisation for Economic Co-operation and Development (OECD). 2011. *Strong Performers and Successful Reformers in Education: Lessons from PISA for the United States.* Paris, France. http://www.oecd.org/pisa/46623978.pdf (accessed December 4, 2012).

Owen Wilson, Leslie. 2006. "Dr. Leslie Owen Wilson's Curriculum Pages: Beyond Bloom—A New Version of the Cognitive Taxonomy." Stevens Point, WI: University of Wisconsin–Stevens Point. http://www4.uwsp.edu/education/lwilson/curric/newtaxonomy.htm (accessed December 4, 2012).

Public Broadcasting Service (PBS). 2012. PBS TeacherLine: Professional development for PreK–12 educators. http://www.pbs.org/teacherline (accessed December 4, 2012).

United States Department of Labor, Employment and Training Administration. 2009. "Secretary's Commission on Achieving Necessary Skills." http://wdr.doleta.gov/SCANS/ (accessed December 4, 2012).

WestEd, the California Department of Education, and the California Community Colleges Chancellor's Office. 2008. *2008–2012 California State Plan for Career Technical Education.* http://www.schoolsmovingup.net/cte/downloads/cteplan_122808.pdf (accessed December 5, 2012).