

# Medical Assistant Clinical 1

## COURSE OUTLINE - UC

### **DESCRIPTION:**

Medical Assistant Clinical 1 covers medical terminology, a prerequisite for the medical assistant program, and administrative duties necessary for employment in the front office or reception area of a medical facility and physician's office. Students will study anatomy and physiology with an emphasis on the body systems, their interrelationships, diseases, and disorders while acquiring office skills with a focus on patient interaction, appointment control, document processing and recordkeeping. Activities in this course include work-based learning that connects students to industry and the local community. Students must complete all medical assistant clinical courses and the field ROP internship in the ordered sequence to receive the Medical Assistant certificate.

### **INFORMATION:**

PRE-REQUISITE: None

LENGTH: One Year

SECTOR: Health Science and Medical Technology

PATHWAY: Patient Care

ARTICULATED: Yes

UC A-G APPROVAL: Yes: College-Preparatory Elective (G) / Science – Biology / Life Sciences Requirement

### **O\*NET SOC CODES:**

29-2072.00 Medical Records Specialists

31-9092.00 Medical Assistants

31-9097.00 Phlebotomists

43-6013.00 Medical Secretaries

<p><b>Orientation</b></p>
<ul style="list-style-type: none"> <li>A. Introduce the course and facilities.</li> <li>B. Discuss the syllabus and major objectives.</li> <li>C. Explain applicable classroom management procedures, the ROP Student Rules of Conduct, and any operational guidelines.</li> <li>D. Review instructor/student expectations.</li> <li>E. Explain enrollment and attendance requirements and procedures.</li> <li>F. Review grading and student evaluation procedures.</li> <li>G. Discuss the community classroom aspect of the program if applicable.</li> <li>H. Discuss the “next steps” related to additional education, training, and employment.</li> <li>I. Review classroom safety, emergency and disaster procedures.</li> </ul>
<p><b>1. Communication Skills</b></p>
<ul style="list-style-type: none"> <li>A. Demonstrate positive verbal communication skills using appropriate vocabulary, demeanor, and vocal tone in the classroom and/or worksite.</li> <li>B. Read and interpret written information and directions.</li> <li>C. Practice various forms of written communication appropriate to the occupation.</li> <li>D. Practice positive body language skills.</li> <li>E. Practice professional verbal skills for resolving a conflict.</li> <li>F. Demonstrate active listening skills including techniques for checking for understanding, and for obtaining clarification of directions.</li> </ul>
<p><b>2. Interpersonal Skills</b></p>
<ul style="list-style-type: none"> <li>A. Demonstrate positive teamwork skills by contributing to a group effort.</li> <li>B. Practice the importance of diversity awareness and sensitivity in the workplace.</li> <li>C. Define sexual harassment in the workplace and identify the employee’s role and responsibility.</li> <li>D. Practice participation skills.</li> <li>E. Identify different personality types and strategies for working effectively with each type.</li> <li>F. Practice business and social etiquette skills appropriate to the occupation.</li> <li>G. Discuss the role of business and personal ethics in the decision-making process.</li> <li>H. Evaluate various job-related scenarios and justify decisions based on ethics.</li> <li>I. Demonstrate flexibility and adaptability in working with others.</li> <li>J. Demonstrate the use of time management skills.</li> </ul>

**3. Employability Skills**

- A. Demonstrate appropriate attendance and punctuality practices for the classroom and worksite if applicable.
- B. Prepare a resume, cover letter, and job application forms.
- C. Demonstrate interviewing techniques using appropriate tone and body language.
- D. Demonstrate appropriate dress and grooming standards in seeking employment and for the workplace.
- E. Identify strategies for employment retention.
- F. Analyze the impact of social networking on employability.
- G. Identify the need for continuing education, professional development, and professional growth in chosen field.
- H. Identify appropriate procedures for leaving a job.
- I. Identify sources of job information, including electronic sources.
- J. Review company policies and current trends in employee compatibility screening, drug screening, and background checks.

**4. Leadership**

- A. Define leadership and identify the responsibilities, competencies, and behaviors of successful leaders.
- B. Work with peers to promote divergent and creative perspectives.
- C. Demonstrate how to organize and structure work, individually and in teams, for effective performance and the attainment of goals.
- D. Explain multiple approaches to conflict resolution and their appropriateness for a variety of situations in the workplace.
- E. Employ ethical behaviors and actions that positively influence others.
- F. Use a variety of means to positively impact the direction and actions of a team or organization.
- G. Analyze the short-term and long-term effects a leader's actions and attitudes can have on productivity, morale, and organizational culture.

**5. Personal and Occupational Safety**

- A. Demonstrate procedures to be followed in the case of emergencies.
- B. Discuss ways to report a potential safety hazard to a supervisor.
- C. Identify and discuss cyber ethics, cyber safety, and cyber security.
- D. Apply personal safety practices to and from the job.
- E. Describe the procedure for reporting a work-related hazard or injury.
- F. Recognize the effects of substance abuse in the workplace.
- G. Recognize good housekeeping as a safety issue.
- H. Explain the importance of CAL-OSHA.
- I. Define and discuss ergonomics in relation to the working environment.
- J. Discuss the electrical hazards of working with electronic equipment.

<b>6. Becoming a Health Care Professional</b>
A. Describe and discuss different types of healthcare career pathways. B. Examine the roles and responsibilities of a healthcare professional. C. Name the various levels of education, training, and licensure. D. Describe the proper appearance of a healthcare worker. E. Discuss the importance of medical terms and the development of the language of healthcare.
<b>7. Introduction to Medical Terminology</b>
A. Demonstrate the ability to use medical terms in the proper context both verbally and in writing. B. Define and analyze commonly used roots, prefixes, and suffixes. C. Build medical terms using roots, prefixes, suffixes, and combining vowels. D. Demonstrate proper pronunciation of medical terms. E. Decipher and apply medical terms. F. Describe the financial implications of errors in the use of medical terminology.
<b>8. Terminology for Basic Human Anatomy and Physiology</b>
A. Identify anatomical descriptors and fundamental human body structure. B. Label and recognize the basic components of the major body systems. C. Describe the function of the major body systems. D. Define basic word elements related to anatomy and physiology. E. Name and comprehend anatomic reference systems and terms (e.g., anatomic position, body planes, directions, cavities). F. Identify, define, and spell word roots associated with the body structure and organization. G. Analyze, define, and spell medical terms relating to the integumentary system. H. Analyze, define, and spell medical terms relating to the respiratory system. I. Analyze, define, and spell medical terms relating to the digestive system. J. Analyze, define, and spell medical terms relating to the urinary system. K. Analyze, define, and spell medical terms relating to the cardiovascular system. L. Analyze, define, and spell medical terms relating to the musculo-skeletal system. M. Analyze, define, and spell medical terms relating to the reproductive systems. N. Analyze, define, and spell medical terms relating to the sensory systems. O. Analyze, define, and spell medical terms relating to the nervous system.
<b>9. Diseases and Disorders</b>

- A. Identify, define, and spell medical terms related to common diseases, disorders, and conditions of the integumentary system.
- B. Identify, define, and spell medical terms related to common diseases, disorders, and conditions of the respiratory system.
- C. Identify, define, and spell medical terms related to common diseases, disorders, and conditions of the digestive system.
- D. Identify, define, and spell medical terms related to common diseases, disorders, and conditions of the urinary system.
- E. Identify, define, and spell medical terms related to common diseases, disorders, and conditions of the cardiovascular system.
- F. Identify, define, and spell medical terms related to common diseases, disorders, and conditions of the musculo-skeletal system.
- G. Identify, define, and spell medical terms related to common diseases, disorders, and conditions of the reproductive systems.
- H. Identify, define, and spell medical terms related to common diseases, disorders, and conditions of the sensory systems.
- I. Identify, define, and spell medical terms related to common diseases, disorders, and conditions of the nervous system.

**10. Clinical and Diagnostic Procedures Terminology**

- A. Analyze, define, spell, and pronounce medical terms relating to diagnostic procedures associated with radiology, computed tomography, magnetic resonance imaging, nuclear medicine technology, and ultrasonography.
- B. Demonstrate understanding of medical terms used in various diagnostic and clinical reports and documents.
- C. Analyze, define, spell, and pronounce words related to clinical procedures associated with surgical procedures and laboratory tests.
- D. Describe the impact of technology on the use of terminology within the medical field.

**11. Medical Abbreviations**

- A. Identify and interpret common abbreviations used in medical, clerical, and clinical areas.
- B. Recognize abbreviations that can cause potential errors.

**12. Role of Administrative Medical Assistant**

- A. List personal traits and qualities of a medical assistant.
- B. Describe history and occupational trends of medical administrative assistants.
- C. Identify the professional role and responsibilities of the Administrative Medical Assistant and licensure/certifications available.
- D. Identify professional associations and employment opportunities for the Administrative Medical Assistant.

**13. Medical Office Skills**

- A. Demonstrate professional phone technique and appointment control.
- B. Explain the importance of patient medical forms and health histories.
- C. Identify basic office equipment (i.e. scanner, fax, etc.) and their proper use.
- D. Practice customer service by greeting patients in a courteous and professional manner.
- E. Explain procedures used to secure authorization for patient referrals to specialists and outside tests.
- F. Identify and understand the patterns of communication and languages.

G. Communicate and listen effectively and with sensitivity across cultures and all levels of care.

**14. Medical Law and Ethics**

- A. Differentiate between personal and professional ethics.
- B. Discuss the Patients' Bill of Rights, Advance Directives, and Hospice.
- C. Define HIPAA and describe Title 1 and Title 2.
- D. Demonstrate the use of specific patient consent and record release forms.
- E. Identify specific legal terms as they apply to basic medical law.
- F. Discuss Standard of Care and demonstrate scope of practice.
- G. Distinguish between ethical and legal issues, and the ramifications of each.

**15. Computer and Accounting Skills**

- A. Demonstrate the ability to use computer skills to create, proofread, edit, and save various medical documents.
- B. Identify and discuss various business letters used in the medical setting.
- C. Demonstrate the ability to balance a day sheet.
- D. Identify and define financial record keeping terms.
- E. Post transactions including charges, payments, and adjustments to patient accounts.
- F. Demonstrate the ability to pay bills and reconcile bank statements, both electronically and via hard copies.
- G. Practice using common accounting software.

**16. Introduction to Pharmacology**

- A. Demonstrate knowledge of pharmacology by interpreting abbreviations and identifying the sections of a written prescription.
- B. Identify, correctly spell, and describe the uses of commonly used medications.
- C. Demonstrate the ability to look up medications electronically using PDR.com, PDR Health, and WebMD.
- D. Take complete and accurate telephone information for prescription refills
- E. Correctly record refills and new prescriptions.

**17. Information Management**

- A. Demonstrate the ability to file alphabetically and numerically.
- B. Accurately and efficiently, chart patient information/data.
- C. Identify appropriate guidelines for releasing records or information.
- D. Demonstrate the ability to use basic computerized medical office software (e.g., Electronic Health Records, EHR).
- E. Demonstrate assembling contents of a patient's chart both manually and electronically.

<b>18. Basic Medical Insurance Forms</b>
<ul style="list-style-type: none"><li>A. Demonstrate completion of a medical insurance form.</li><li>B. Using the CPT, ICD9, and ICD10 manuals, accurately code a medical insurance form.</li><li>C. Demonstrate the ability to look up medical insurance codes electronically.</li><li>D. Identify the procedure for obtaining verification and authorization regarding insurance eligibility.</li><li>E. Demonstrate the ability to complete a State Disability form.</li><li>F. Demonstrate the ability to complete a Workers Compensation "First Report of Occupational Injury or Illness.</li><li>G. Differentiate between Health Maintenance Organization (HMO), Preferred Provider Organization (PPO), Independent Physicians Association (IPO), private insurance, MediCal/Medicare, and State Disability, Worker's Compensation.</li><li>H. Identify reliable resources of information on the Affordable Care Act (ACA) and Covered California.</li></ul>
<b>19. Advanced Skills</b>
<ul style="list-style-type: none"><li>A. Successfully complete on-the-job duties and responsibilities in a community classroom setting.</li><li>B. Practice employability and leadership skills that positively contribute to patient care.</li><li>C. Communicate effectively with patients regarding questions and concerns.</li><li>D. Accurately room a patient.</li></ul>
<b>20. Portfolio</b>
<ul style="list-style-type: none"><li>A. Create a professional digital portfolio reflecting employability skills in the relevant industry to include an "About Me" page.</li><li>B. Collect original works and documents that demonstrate technical skills and knowledge in the industry.</li><li>C. Demonstrate knowledge of competencies by accompanying each selected document or work with a journal entry or summary.</li><li>D. Write a brief resume and cover letter to be included in portfolio.</li><li>E. Develop interviewing techniques using portfolio materials.</li><li>F. Display portfolio materials for critique by a professional panel (industry partners and classmates).</li><li>G. Gather feedback and update portfolio.</li></ul>

**Key Assignments**

Assignment	Competencies	Career Ready Practices	Anchor Standards	Pathway Standards	CCSS
1. *Students will participate in mock interviews and community classroom activities that represent current industry practices (e.g., skills demonstrations, resumes, applications, portfolios, personal websites, etc.).	1A, B, D 3B, C, D, I, J 5 19 A-B 20	2 3 10	2 3		LS 11-12.6 SLS 11-12.2
2. *Students will identify the types of bones (long, short, flat, irregular), the structure and composition of bone, and the divisions of the skeletal system (axial versus appendicular skeleton). Students will identify the major muscle groups, discuss the regions of muscles, and describe the corresponding actions that help move the skeletal system. Students will create a model of the human body, label each muscle, and muscle type.	1A 7A-F 8A-F, K 9F	2	2	B2.0 B5.0	RLST 11.12.4
3. *In teams, students will research an assigned pathology affecting the integumentary system. Students will develop a digital presentation of their research, and present to the class.	1A 2A, D, I 4C 7A-F 8A-F, G 9A	2 4 9 11	2 4	B2.0 B5.0	LS 11-12.6 RLST 11.12.4 WS 11-12.6
4. Students will develop a working model of the respiratory system. They will demonstrate the inhalation and exhalation process and the muscles that are used. Students will write a 400-word essay explaining the harmful effects of smoking (vape, cigarettes, pipe, marijuana, secondhand smoke, etc.) to the respiratory system.	1C 7A-F 8A-F, H 9B	2 11	2	B2.0 B5.0	LS 11-12.6 RLST 11.12.4



Assignment	Competencies	Career Ready Practices	Anchor Standards	Pathway Standards	CCSS
5. *Students will develop a brochure intended to educate patients on kidney function, the process of urinalysis and its implications, and include various pathologies affecting the urinary system.	1C 7A-F 8A-F, J 9D	2	2	B2.0 B5.0	LS 11-12.6 RLST 11.12.4 WS 11-12.7
6. *Students will conduct research on sexually transmitted diseases (STDs) then write a 500 word-essay identifying types of STDs, how they are transmitted, how they are treated, and proper methods of prevention.	1C 7A-F 8A-F, M 9G	2 11	2	B2.0 B5.0	LS 11-12.6 RLST 11.12.4 WS 11-12.7
7. *Using a variety of resources, students will research blood flow through the human body and create an accurate diagram illustrating the components of the heart, the arteries, veins, and capillaries. Students will describe the functions of each in the circulation process and indicate oxygenated blood as well as deoxygenated blood.	1A, C 7A-F 8A-F, K 9E	2 11	2	B2.0 B5.0	LS 11-12.6 RLST 11.12.4
8. Students will identify the overall functions of the digestive system and its major organs (esophagus, intestines, stomach, etc.). Students will explain the specific function of each organ that begins the digestive process accompanied by a detailed and accurately labelled diagram or model of the organs that form the alimentary canal, as well as the accessory organs (liver, pancreas, gall bladder) that assist in the digestion/breakdown of the food particles.	1A, C 2A, D, I 7A-F 8A-F, I 9C	2 9	2 9	B2.0 B5.0	LS 11-12.6 RLST 11.12.4
9. Students will develop an educational brochure of the eyes and include information regarding proper eye care, common diseases resulting in loss of vision, and provide conceptual methods to aid blind individuals.	1C 6, 7, 8A-F, N 9H	2 11	2	B2.0 B5.0	LS 11-12.6 RLST 11.12.4 WS 11-12.7

Assignment	Competencies	Career Ready Practices	Anchor Standards	Pathway Standards	CCSS
10. Students will create a mock training to educate elementary school children on eating healthy and doing proper exercise to strengthen the cardiovascular system. The training will include information on obesity, the effects of diabetes, and preventative care.	1C 4C,F 6, 7 8A-F, K 9E	2 4 11	2 4	B2.0 B5.0	LS 11-12.6 WS 11-12.6 WS 11-12.7
11. *Students will generate relevant questions, conduct research, and prepare an informational campaign about a disease or condition that affects high school students. Students will implement their campaign on their campus.	1A-D, F 2A, B, D-G, I, J 4C, F 6, 7, 8 9A-I	1 2 9 11 12	2 4 5 7 9	C4.0 C12.0	LS 11-12.6 RLST 11-12.9 SLS 11-12.1 SLS 11-12.1b WS 11-12.6 WS 11-12.7
12. *Students will develop a two-page script that include acting outside the scope of practice and violations of HIPAA. Students will role-play the script in class, therefore actively demonstrating how to avoid medical lawsuits and HIPAA violations.	11	1 2 5 11	5	C12.0	LS 11-12.6 RLST 11-12.4 WS 11-12.7
13. *Taking the role of a healthcare professional, students will read and interpret a medical report that contains common medical abbreviations. Based on their interpretation, students will conduct research to determine what further clinical diagnostic procedures are necessary.	1B, C 6A-F 11 10 A-D	1 2 5 11	5	C12.0	LS 11-12.6 RLST 11-12.4 WS 11-12.7
14. *Students will evaluate a medical record for errors and omissions. Students will remedy errors and omissions and process claims and referrals.	1A-C 2F-H, J 3C 12-18	1 2 5	2 5 8 10	C1.0 C2.0 C3.0 C7.0 C8.0 C11.0 C12.0 C14.0	LS 11-12.2 LS 11-12.3 LS 11-12.6 RLST 11-12.4 WS 11-12.4

Assignment	Competencies	Career Ready Practices	Anchor Standards	Pathway Standards	CCSS
				C15.0	
15. *Using computer software, students will develop an inventory of medical office supplies needed to successfully run a medical clinic. Students will source vendors, purchase goods, and balance to a predetermined budget.	1B 2G, J 4C 6-9 11, 15, 17	11 12	2 4 5 7	C3.0 C12.0	ELA: RLST 11-12.7 RSIT 11-12.7 WS 11-12.6 WS 11-12.7 MATH: A-SSE 1 N-Q1
16. *While participating in a mock general practice clinic, students will: greet patients, make appointments, conduct mock interviews through role-play to obtain patient confidential health history, generate medical record and accurately room a patient. Students will correctly record telephonic prescriptions for refills and new prescriptions.	12, 13, 14, 16	1 2 9	2 8 9 10	B4.0 B5.0 C12.0	LS 11-12.6 RLST 11-12.3 RSTS 11-12.4 SLS 11-12.1d
*Indicate courses listed on UC a-g submission					

## Standards Assessed in this Program

### Career Ready Practices

1. Apply appropriate technical skills and academic knowledge.
2. Communicate clearly, effectively, and with reason.
3. Develop an education and career plan aligned to personal goals.
4. Apply technology to enhance productivity.
5. Utilize critical thinking to make sense of problems and persevere in solving them.
6. Practice personal health and understand financial well-being.
7. Act as a responsible citizen in the workplace and the community.
8. Model integrity, ethical leadership, and effective management.
9. Work productively in teams while integrating cultural/global competence.
10. Demonstrate creativity and innovation.
11. Employ valid and reliable research strategies.
12. Understand the environmental, social, and economic impacts of decisions.

### Anchor Standards

#### 2.0 Communications

- Acquire and use accurately sector terminology and protocols at the career and college readiness level for communicating effectively in oral, written, and multimedia formats.

#### 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.

#### 4.0 Technology

- Use existing and emerging technology, to investigate, research, and produce products and services, including new information, as required in the sector workplace environment.

#### 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 sector using critical and creative thinking, logical reasoning, analysis, inquiry, and problem-solving techniques.

#### 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 sector workplace environment.

#### 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 sector workplace environment and community settings.

#### 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.

## 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.

## 10.0 Technical Knowledge and Skills

- Apply essential technical knowledge and skills common to all pathways in the sector following procedures when carrying out experiments or performing technical tasks.

## Pathway Standards

### Health Science and Medical Technology – Patient Care

**B2.0** Understand the basic structure and function of the human body and relate normal function to common disorders.

**B5.0** Know the definition, spelling, pronunciation, and use of appropriate terminology in the health care setting.

### Health Science and Medical Technology - Healthcare Administrative Services Pathway

**C1.0** Understand healthcare systems as the organization of people, institutions, funding, and resources as well as the broad scope of operations in which healthcare services are delivered to meet the health needs of target populations.

**C2.0** Understand the various healthcare provider and support roles in patient care as an integrated, comprehensive healthcare system, to offer the very best options for treatment of patients.

**C3.0** Understand the overarching concepts of economic and financial management systems, system and information management, and the latest innovations in healthcare as they affect healthcare delivery.

**C4.0** Know the role and relationship of public policies and community engagement on the healthcare delivery system.

**C7.0** Follow the model of medical safety practices and processes that can help prevent system medication errors and understand the consequences of mistakes.

**C8.0** Understand the resources, routes, and flow of information within the healthcare system and participate in the design and implementation of effective systems or processes.

**C11.0** Know how to schedule and manage appointments for providers.

**C12.0** Understand how to use health information effectively.

**C14.0** Understand how to transfer information to third parties.

**C15.0** Code health information and bill payers using industry standard methods of classification of diseases, current procedural terminology, and common healthcare procedure coding system.

## Common Core State Standards

### ENGLISH LANGUAGE ARTS

**Language Standards**

**LS 11-12.2:** Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

**LS 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.

**LS 11-12.6:** Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the (career and college) readiness level, demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

**Reading Standards for Information Text**

**RSIT 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.

**Reading Standards for Literacy in Science and Technical Subjects**

**RLST 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.

**RLST 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.

**RLST 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.

**Speaking and Listening Standards**

**SLS 11-12.2:** Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions, and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.

**SLS 11-12.1:** Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners, building on others ideas and expressing their own clearly and persuasively.

**SLS 11-12.1b:** Work with peers to promote civil, democratic discussions and decision-making, set clear goals and deadlines, and establish individual roles as needed.

**SLS 11-12.1d:** Respond thoughtfully to diverse perspectives, synthesize comments, claims and evidence made on all sides of an issue, resolve contradictions when possible, and determine what additional information or research is required to deepen the investigation or complete the work.

**Writing Standards**

**WS 11-12.4:** Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

**WS 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 and information.

**WS 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.

**MATHEMATICS**

**Algebra - Seeing Structure in Expressions**

**A-SSE 1:** Interpret expressions that represent a quantity in terms of its context.

**Number and Quantity**

**N-Q1:** 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.