ARTICULATION RENEWAL FORM
2015 – 2016 (Effective Fall 2015 through Spring 2017) (Renew Fall 2017)

High School: Sonora High School
High School Course: Emergency First Responder
Columbia College Course: EMS 157 – Emergency Medical Responder and CPR

Completed by High School Instructor

A. I have reviewed the current Articulation Agreement for this course with the appropriate Columbia College faculty and wish to report the following:

______ I verify that our course listed above has no changes in the title, department name, course number, course content, course standards, or other curricular modification. (Skip Part B and Go to Part C)

______ I verify that the following changes need to be made: (Check all that apply, fill in the specific change in the space provided and complete Part B and C)

Title: Emergency First Responder

Department Name: CTE

Course Number: 0599

Other:

B. I verify that changes have been made to the following: (Current and Updated Course Outline and All Examinations are required for any changes made to this section) (Please attached updated course outline/examination.)

______ Course Content ________ Textbook Change ________ Course Objectives

______ Examination/Portfolio ________ College Examination

C. Please provide all requested information below:

Textbook Title: Emergency Medical Responder

Author: American Academy of Orthopedic Surgeons

Publication Date: 2011 Edition: 5th

High School Instructor ___________________________ Date: 11/14/15

High School Chair Signature ___________________________ Date: 11/04/2015

Columbia College Instructor ___________________________ Date: 12/03/2015

Columbia College CTE Dean ___________________________ Date: 12/07/15
Discipline: Emergency Medical Services

Date Accepted: 5 / 10 / 2012
Renewal due during: Spring 2013
(one-year term agreement)

Articulation Request and Agreement

This request and agreement is submitted for consideration of the following course as an articulated course at Columbia College. Students would receive course credit at Columbia College.

Directions:
1. Use a separate form for each course.
2. Attach the course outline for the course.
3. Attach the course final if course is to be considered for credit.
4. Mail to: Dean of Instructional Services, Career Technical Education
   11600 Columbia College Drive
   Sonora, CA 95370

Completed by High School Instructor

<table>
<thead>
<tr>
<th>High School/ROP:</th>
<th>Sonora High School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructor Name:</td>
<td>Jackie Potts</td>
</tr>
<tr>
<td>Telephone Number:</td>
<td>209-743-2668</td>
</tr>
<tr>
<td>Email Address:</td>
<td><a href="mailto:ipotts@sonorahs.k12.ca.us">ipotts@sonorahs.k12.ca.us</a></td>
</tr>
<tr>
<td>Address:</td>
<td>430 N. Washington St.</td>
</tr>
<tr>
<td></td>
<td>Sonora, CA 95370</td>
</tr>
</tbody>
</table>

High School / ROP Course Title: ROP Emergency First Responder

High school / ROP Course Description:

This course provides students with the knowledge and skills to take appropriate action as the first responder to an emergency scene. Upon successful completion of the course, students will receive a certificate of completion for Emergency Medical Responder and American Heatt Association First Aid and CPR Certification as well as California Disaster Preparedness Incident Command Systems Certifications. This course is aligned with the EMS programs at Columbia College One hours class daily (180 hrs.)
I. PREPARATORY: Orientation Unit Objective: Discuss the role of a first responder, the objectives for the course, including student and teacher expectations, policies, and career opportunities.

Unit Competencies:
A. Define the roles and responsibilities of a first responder.
B. Review course objectives and competencies.
C. Demonstrate knowledge of course requirements and grading policies.
D. Discuss standard expectations, such as behavior, class rules, appropriate dress, and pre-course knowledge.
E. Discuss the career opportunities, certification requirements and education or training required for the next steps.
F. Discuss ROP Student Learning Goals (SLGs) and their relationship to the course and employability.

II. Occupational and Personal Safety Unit Objective:
Discuss the occupational and personal safety and health requirements for the first responder and the emergency medical services industry.

Unit Competencies:
A. Define the emotional aspects of emergency care encountered by patients, patients’ families, and first responders.
B. Explain the signs and symptoms of stress and the action to take to reduce or alleviate stress.
C. Identify potential safety and health hazards.
D. Describe the universal precautions for preventing infectious diseases from blood-borne and air-borne pathogens.
E. Describe the types of hazards to look for when assessing the scene for unsafe conditions.
F. Describe three phases of scene safety.
G. Demonstrate proper safety practices, procedures and use of safety equipment.

III. Legal and Ethical Issues Unit Objective: Discuss the basic legal principles and ethical responsibilities of the first responder.

Unit Competencies:
A. Define "duty to act" as it relates to a first responder.
B. Describe the ethical responsibilities of the first responder.
C. Discuss the legal aspects and types of consent involved in providing emergency medical services.
D. Describe the steps to be taken at a crime scene.
E. Discuss the importance of accurate documentation.

I.

The Anatomy and Function of Body Systems Unit

Objective: Identify the basic structure and describe the function and relationships among eight body systems.

Unit Competencies:

A. Identify and locate primary systems and structures of surface anatomy:
   - Identify standard anatomical body position and planes.
   - Identify the major body cavities and organs contained in each.
   - Identify the functions of the body systems.
   - Locate major bones of the skeletal system.
   - Locate landmarks of the skull, facial, neck, abdomen and extremities.

   - Locate and identify functions of the eye and ear structures.

B. Identify the basic structure and describe the basic functions of the nervous system:
   - Identify the cerebral, spinal cord, peripheral and autonomic nerves.
   - Identify the primary functions of the cerebral lobes.
   - Identify vital centers of the brainstem and their functions.
   - Identify signs/symptoms of neurological dysfunction.

C. Identify the basic structure and describe the basic functions of the circulatory system:
   - Locate the heart using surface landmarks.
   - Identify the primary function of the heart.
   - Identify the path of blood flow within the circulatory system.
   - Locate and identify the function of the atria, ventricles, and vena cava.
   - Identify the primary functions of arteries, veins and capillaries.

D. Identify the basic function of the respiratory system:
   - Identify the location and function of the upper/lower airway.
   - Identify the location and function of parts of the respiratory system.
   - Identify the structure which protects the respiratory system.
   - Identify the location of the lungs during inspiration and exhalation.

   - Identify signs and symptoms of respiratory distress.
   - Identify the signs of adequate oxygenation.

I.

AIRWAY: Airway Care and Rescue Breathing

Unit Objective: Demonstrate the steps for recognizing respiratory
arrest and performing rescue breathing on an adult patient, a child, and an infant.

**Unit Competencies:**
A. Identify the anatomic structures of the respiratory system and state the function of each structure.
B. State the differences in the respiratory systems of infants, adults, and children.
C. Describe the process used to check a patient's responsiveness.
D. Describe how to perform rescue breathing using mouth-to-mask, mouth-to-barrier, and mouth-to-mouth techniques.
E. State the differences between the signs and symptoms of partial airway obstruction and complete airway obstruction.
F. List special considerations of airway care and rescue breathing in children and infants.
G. Perform the steps needed to remove a foreign body airway obstruction in an adult patient, a child and an infant.

I.

**PATIENT ASSESSMENT:**

Assessing the Scene and Patient

**Unit Objective:** Identify, measure, and explain the significance of the following signs on adult, child, and infant patients: respiration, pulse, capillary refill, skin color, skin temperature, skin moisture, pupil size and reactivity, level of consciousness.

**Unit Competencies:**
A. Describe the factors involved in assessing the scene.
B. Identify the difference between a sign and a symptom.
C. Define terms associated with heart, blood pressure, and illness.
D. Identify the purpose and state the elements of a primary and secondary patient assessment.
E. List and describe the importance of the following steps of the initial patient assessment:
   - Forming a general impression of the patient.
   - Assessing the patient’s responsiveness and stabilizing the spine if necessary.
   - Assessing the patient’s airway, breathing and circulation

F. Describe the difference in checking airway, breathing, and circulation when the patient is an adult, a child, or an infant.
G. Describe the importance of obtaining the patient’s medical history.
H. List the information that should be addressed in your hand-off report about the patient’s condition.
I. List the differences between performing a patient assessment on a trauma patient and performing one on a medical patient.
J. Describe the components of on-going assessment.

I. **CIRCULATION: The Anatomy of the Circulatory System**

**Unit Objective:** Demonstrate the techniques of external chest compressions on an adult, a child, and an infant.

**Unit Competencies:**
A.
Describe the anatomy and function of the circulatory system.
B. List the reasons for a heart to stop beating.
C. Describe the components of C.P.R.
D. Explain the links in the cardiac chain of survival.
E. State the conditions under which you should start and stop C.P.R.
F. Demonstrate the steps of one-rescuer and two rescuer adult C.P.R. and discuss the difference in performing C.P.R. on infants and children.
G. Discuss the complications and explain the legal implications of performing C.P.R.

I. ILLNESS and INJURY: Medical & Environmental Emergencies
Unit Objective: Discuss the importance of the patient assessment and medical history in relation to providing treatment for medical emergencies.

Unit Competencies:
A. Explain the causes, symptoms, and treatment of a patient with the following conditions:
   • Altered mental status
   • Seizures
   • Exposure to heat
   • Exposure to cold
B. Explain the cause or major cause, signs, symptoms, and initial treatment of the following conditions:
   • Angina pectoris
   • Heart attack
   • Congestive heart failure
   • Dyspnea
   • Stroke
   • Insulin shock
   • Diabetic coma
   • Abdominal problem
C. Describe the signs, symptoms, and treatment of a patient who has:
   • Ingested poisons
   • Inhaled poisons
   • Injected poisons
   • Absorbed poisons
D. Describe the signs, symptoms, and treatment of a drug overdose caused by uppers, downers, hallucinogens, and abused inhalants.

I. Behavioral Emergencies Unit Objective: Explain the role of a first responder in dealing with a patient experiencing a behavioral emergency.

Unit Competencies:
A. Describe the principles for assessing patients experiencing a behavioral emergency.
B. Discuss safety precautions that should be taken when dealing with
a potentially violent patient.
C. Explain the importance of following communication skills: restatement, redirection, and empathy.
D. Discuss the medical and legal considerations related to dealing with behavioral emergencies.

I. Bleeding, Shock, and Soft-Tissue Injuries Unit Objective:
Demonstrate the ability to recognize and care for patients suffering from shock, bleeding, and soft-tissue injuries.

Unit Competencies:
A. Describe the function and relationship between the parts (heart, blood vessels, and blood) of the circulatory system.
B. List the signs, symptoms, and treatment for shock.
C. List the signs, symptoms, and treatment for internal bleeding.
D. Differentiate between arterial, venous, and capillary bleeding.
E. Explain the emergency care for external bleeding.
F. Discuss the emergency medical treatment for patients with different types of wounds.
G. Describe the signs, symptoms, possible complications and emergency medical care for patients with thermal, respiratory, chemical, and electrical burns.

II. Injuries to Muscles and Bones Unit Objective: Describe how to manage injuries to the upper and lower extremities, the head, the spinal cord, and the chest.

Unit Competencies:
A. Describe the mechanisms of injury for musculoskeletal injuries.
B. Define fracture, dislocation, and sprain.
C. Demonstrate body substance isolation techniques when treating a patient with musculoskeletal injuries.
D. Describe the signs, symptoms, and treatment for head, facial, spine, fractured ribs, flail chest, and penetrating chest wounds.
E. Evaluate the circulation and sensation of a patient with an extremity injury.
F. Describe the general principles of splinting.

I. Childbirth Unit Objective: Discuss the three stages of labor and the process of delivery.

Unit Competencies:
A. Explain the stages of labor and delivery.
B. Explain the importance of body substance isolation in childbirth situations.
C. State the steps you should take to prepare a pregnant woman for delivery.
D. Describe the steps you should take to assist a pregnant woman in childbirth and care for a newborn infant.
E. Demonstrate how to resuscitate a newborn infant.
F. Discuss the possible complications that can occur during childbirth.

II. Infant and Children - Pediatric Emergencies Unit Objective:
Describe the differences between a child’s and an adult’s anatomy that affect performing skills, such as opening the airway, basic life support, suction, and inserting an oral airway.

Unit Competencies:
A. Describe the signs, symptoms, and treatment of shock in pediatric
patients.
B. Describe how to determine a child's pulse rate, respiratory rate, and body temperature.
C. Demonstrate the following respiratory skills:
   • Opening the airways
   • Basic life support

  Suctioning
  • Inserting an oral airway
D. Demonstrate treatment for partial airway obstruction and complete airway obstruction in children and infants
E. Describe the process for cooling a child with a high fever.
F. Describe the patterns of pediatric injury.
G. Explain the steps that should be taken to care for a child who has signs of child abuse or sexual assault.

I. EMS OPERATIONS: The Role of the First Responder
Unit Objective: Describe the role of the emergency first responder in a multiple-casualty incident, the purpose of basic triage and the steps involved in the START triage system.
Unit Competencies:
A. List the medical and non-medical equipment needed to respond to a call.
B. Discuss the role of the first responder in extrication.
C. Describe the extrication procedures that a first responder can perform.
D. State the responsibilities of the first responder in incidents where hazardous materials are present.
E. Describe the role of the first responder in a multiple-casualty incident.
F. Describe the steps in the START triage system.

I. SUPPLEMENTAL SKILLS: Special Situations
Unit Objective: Describe the approach to use when dealing with special-needs patients or when assisting in special rescue situations.
Unit Competencies:
A. Describe the approach to use when dealing with the following patients:
   • Elderly patients
   • Chronic-care patients
   • Hearing-impaired patients
   • Visually-impaired patients
   • Non-English speaking patients
   • Developmentally disabled patients
   • Patients who display disruptive behavior
B. Describe the role of the first responder in responding to special rescue situations, such as water, ice, and confined space rescues.

II. Supplemental Skills Unit Objective: Demonstrate supplemental skills, including Cardiopulmonary Resuscitation (CPR) and Automated External Defibrillation (AED).
Unit Competencies:
A. Describe how to measure blood pressure by palpation and by auscultation.
B. Describe the indications for using supplemental oxygen.
C. Describe the equipment used to administer oxygen.
D. Describe the safety considerations and hazards of oxygen administration.
E. Explain the benefit of automated external defibrillation in the cardiac chain of survival and demonstrate the steps in using automated external defibrillation.
F. Demonstrate cardiopulmonary resuscitation (CPR) on an adult, child, and infant.

I. Incident Command System (ICS)
Unit Competencies:
A. Define Incident Command System (ICS) common terminology.
B. Identify and understand positions and relationships in the structure of ICS.
C. Demonstrate mastery of the requirements for ICS Certification.

I. Federal Emergency Management Agency Teen CERT
Unit Objective: Student obtains national certification by demonstrating critical skills in emergency preparedness and disaster response.
Unit Competencies:
A. Identify and anticipate hazards
B. Reduce fire hazards in the home, school and workplace
C. Extinguish small fires
D. Assist other emergency responders
E. Conduct light search and rescue
F. Set up medical treatment areas
G. Apply basic medical techniques
H. Help reduce survivor stress

I. Job Search, Retention, and Test Preparation Unit Objective:
Describe career opportunities for Emergency First Responders and demonstrate job search and retention skills, including the ability to pass required competency exams.
Unit Competencies:
A. Demonstrate the ability to pass the first responder competency examination.
B. Complete a certification application.
C. Complete a resume and practice interview skills.
D. Review employment practices, including current trends in employee compatibility, drug screening, and background checks.
E. Demonstrate appropriate attendance, punctuality, responsibility and accountability in the classroom and if applicable, at the worksite.
F. Identify and demonstrate leadership skills in the classroom and worksite.
Competencies and Skill Requirements (Use additional pages as necessary)
At the conclusion of this course, the student should be able to:

Course Objectives: Students shall demonstrate personal skills that promote success and growth in the workplace. Career planning that leads to Postsecondary education and/or employment. Application of academic skills and concepts necessary for entry into postsecondary education and/or employment. Demonstrate problem solving and critical thinking skills. Applied use of appropriate technology used in the 21st Century.

Student Requirements for completing course: Students will demonstrate proficient textbook knowledge within the Emergency First Responder scope of practice by written and oral exams. Students will actively participate in hands-on skill development related to field practices and demonstrate skills to proctors. Students will demonstrate ability to work as a member of a team and be receptive to taking direction. Students will also demonstrate ability to act independently within scope of practice.

Measurement Methods (include any industry certification or licensure):

Grading Practices:
Unit Summary quizzes = 40%
Skills practicum = 40%
Assignments & group activities 10%
Midterm & Final exams = 10%

In order to receive college credit, the student must pass exams and skills and be eligible to receive the Emergency First Responder Card from the county.

Sample Textbooks or Other Support Materials (including Software):

Course Materials:
Emergency Medical Responder, Fifth Edition
Authors: American Academy of Orthopaedic Surgeons
Published: 2011
Resource materials:
Textbook package includes student work book
Completed by Columbia College

This portion is completed after CC faculty and H.S. faculty meet and agree on the terms of the articulation agreement.

Department faculty:  
- Approved  
- Not Approved

Dean:  
- Approved  
- Not Approved

CTE Transition Coordinator:  
- Approved  
- Not Approved

Admissions and Records notification  
- date: 5-10-12

High school notification:  
- date: 5-10-12