

# Respiratory Therapy II

Subject: Career Development and Career and Technical Education

Grade: 12

Expectations: 37

Breakouts: 113

## (a) Introduction.

1. Career and technical education provides content aligned with challenging academic standards, ~~irrelevant~~ technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
2. The Health Science Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.
3. Respiratory Therapy II is a technical lab course ~~that~~ addresses knowledge and skills related to critical care and cardiopulmonary medicine. Respiratory therapists are specialized healthcare practitioners trained in cardiopulmonary medicine to work therapeutically with people suffering from cardiopulmonary ~~diseases~~. Students will learn advanced knowledge and skills performed by respiratory therapists using equipment ~~Special and Technical students' Organizations & H~~ and other leadership or extracurricular organizations, including:
  - a. work-based experiences/learning; and
  - b. volunteering/shadowing opportunities.
5. Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

## (b) Knowledge and Skills Statements

- (1) The student demonstrates professional standards and employability skills required by the ~~respiratory~~ profession. The student is expected to:
  - (A) model professionalism associated with respiratory therapy such as adaptability, time management, punctuality, appreciation for diversity, decisionmaking, dedication, and organizational and leadership skills
    - (i) model professionalism associated with respiratory therapy
  - (B) demonstrate effective verbal and ~~nonverbal~~ communication in a clear and concise manner;
    - (i) demonstrate effective verbal communication in a clear manner
    - (ii) demonstrate effective verbal communication in a concise manner
    - (iii) demonstrate effective ~~nonverbal~~ communication in a clear manner
    - (iv) demonstrate effective ~~nonverbal~~ communication in a concise manner

- (C) demonstrate therapeutic communication appropriate to the situation, including communication with individuals with language differences or barriers and sensory loss;
  - (i) demonstrate therapeutic communication appropriate to the situation, including communication with individuals with language differences or barriers
  - (ii) demonstrate therapeutic communication appropriate to the situation, including communication with individuals with sensory loss
- (D)

- (A) evaluate and apply standards and guidelines from entities, including the American Association for Respiratory Care (AARC), World Health Organization (WHO), Centers for Disease Control and Prevention (CDC), U.S. Food and Drug Administration (FDA), and Texas Commission on Environmental Quality (TCEQ), as they apply to cardiopulmonary diseases;
- (i) evaluate standards and guidelines from entities, including the American Association for Respiratory Care (AARC), as they apply to cardiopulmonary diseases
  - (ii) evaluate standards and guidelines from entities, including the World Health Organization (WHO), as they apply to cardiopulmonary diseases
  - (iii) evaluate standards and guidelines from entities, including the Centers for Disease Control and Prevention (CDC), as they apply to cardiopulmonary diseases
  - (iv) evaluate standards and guidelines from entities, including the U.S. Food and Drug Administration (FDA), as they apply to cardiopulmonary diseases
  - (v) evaluate standards and guidelines from entities, including the Texas Commission on Environmental Quality (TCEQ), as they apply to cardiopulmonary diseases
  - (vi) apply standards and guidelines from entities, including the American Association for Respiratory Care (AARC), as they apply to cardiopulmonary diseases
  - (vii) apply standards and guidelines from entities, including the World Health Organization (WHO), as they apply to cardiopulmonary diseases
  - (viii) apply standards and guidelines from entities, including the Centers for Disease Control and Prevention (CDC), as they apply to cardiopulmonary diseases
  - (ix) apply standards and guidelines from entities, including the U.S. Food and Drug Administration (FDA), as they apply to cardiopulmonary diseases
  - (x) apply standards and guidelines from entities, including the Texas Commission on Environmental Quality (TCEQ), as they apply to cardiopulmonary diseases
- (B) demonstrate infection control standard and transmission-based precautions in the laboratory setting, including hand hygiene, equipment sterilization, and the use of personal protective equipment (PPE).

(C) model industry safety standards, including standards for body mechanics, fire prevention, electrical safety, oxygen safety, and the handling of hazardous materials.

- (i) model industry safety standards, including standards for body mechanics
- (ii) model industry safety standards, including standards for fire prevention
- (iii) model industry safety standards, including standards for electrical safety
- (iv) model industry safety standards, including standards for oxygen safety
- (v) model industry safety standards, including standards for the handling of hazardous materials

(4) The student explains the interactions between the cardiopulmonary and other body systems as they relate to wellness and diseases. The student is expected to:

(A) analyze the role of the autonomic nervous system in the regulation of the cardiopulmonary system as it pertains to health and illness;

- (i) analyze the role of the autonomic nervous system in the regulation of the cardiopulmonary system as it pertains to health
- (ii) analyze the role of the autonomic nervous system in the regulation of the cardiopulmonary system as it pertains to illness

(B) analyze the role of the urinary system in the regulation of the acid and fluid balance and in cardiopulmonary health and illness;

- (i) analyze the role of the urinary system in the regulation of the acid balance
- (ii) analyze the role of the urinary system in the regulation of the fluid balance
- (iii) analyze the role of the urinary system in cardiopulmonary health
- (iv) analyze the role of the urinary system in cardiopulmonary illness

(C) investigate the interactions between body systems and cardiopulmonary diseases and disorders such as Guillain-Barré syndrome, Myasthenia Gravis, SARS2 (Covid), Idiopathic Pulmonary Fibrosis (IPF), adult respiratory

(5)



(D)