

# Pharmacology

Subject: Career Development and Career and Technical Education

Grade: 11

Expectations: 42

Breakouts: 84

## (a) Introduction.

1. Career and technical education instruction provides content aligned with challenging academic standards, +D2:D23industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
  3. The Pharmacology course is designed to study how natural and synthetic chemical agents such as c systems. Knowledge of the properties of therapeutic agents is vital in providing quality health care. growing body of information that continually demands greater amounts of time and education from
  4. Students are encouraged to participate in extended learning experiences such as career and techn and other leadership or extracurricular organizations.
  5. Statements that contain the word "including" reference content that must be mastered, while thos "such as" are intended as possible illustrative examples.

## (b) Knowledge and Skills Statements

- (1) The student applies professional standards/employability skills as required by the healthcare system expected to:
  - (A) apply appropriate verbal and non-verbal communication in a clear, concise, and effective
    - (i) apply appropriate verbal communication in a clear manner
    - (ii) apply appropriate verbal communication in a concise manner
    - (iii) apply appropriate verbal communication in a[n] effective manner
    - (iv) apply appropriate non-verbal communication in a clear manner
    - (v) apply appropriate non-verbal communication in a concise manner
    - (vi) apply appropriate non-verbal communication in a[n] effective manner
  - (B) apply appropriate adaptability skills such as problem solving and creative thinking;
    - (i) apply appropriate adaptability skills
  - (C)

- (D) demonstrate teamwork;
  - (i) demonstrate teamwork
- (E) create an occupation-specific resume; and
  - (i) create an occupation-specific resume
- (F) identify and apply soft skills desired by employers.
  - (i) identify soft skills desired by employers
  - (ii) apply soft skills desired by employers

(2) The student explores the field and foundation of pharmacology. The student is expected to:

- (A) differentiate between pharmacology subdivisions, including pharmacodynamics, pharmacokinetics, pharmaceuticals, and pharmacotherapeutics;
  - (i) differentiate between pharmacology subdivisions, including pharmacodynamics
  - (ii) differentiate between pharmacology subdivisions, including pharmacokinetics
  - (iii) differentiate between pharmacology subdivisions, including pharmaceuticals
  - (iv) differentiate between pharmacology subdivisions, including pharmacotherapeutics
- (B) use common drug information materials such as accredited scientific journals, institutions of higher learning, current events, news reports, published journal articles, textbooks, and marketing materials;
  - (i) use common drug information materials
- (C) list examples of primary, secondary, and tertiary drug information references;
  - (i) list examples of primary drug information references
  - (ii) list examples of secondary drug information references
  - (iii) list examples of tertiary drug information references
- (D) research and describe the history of pharmacy and contributions of the field;
  - (i) research the history of pharmacy
  - (ii) research the contributions of the [pharmacy] field
  - (iii) describe the history of pharmacy
  - (iv) describe the contributions of the [pharmacy] field
- (E) draw inferences based on data from promotional materials for products and services;
  - (i) draw inferences based on data from promotional materials for products
  - (ii) draw inferences based on data from promotional materials for services
- (F) analyze the societal impact of medication costs; and
  - (i) analyze the societal impact of medication costs
- (G)

- (ii) evaluate the impact of scientific research on society, including the natural environment, including drug disposal
- (3) The student identifies careers associated with pharmacology. The student is expected to:
- (A) evaluate career pathways utilizing pharmacology;
    - (i) evaluate career pathways utilizing pharmacology
  - (B) define the role of the pharmacy team; and
    - (i) define the role of the pharmacy team
  - (C) research and describe emerging opportunities within the pharmacy profession.
    - (i) research emerging opportunities within the pharmacy profession
    - (ii) describe emerging opportunities within the pharmacy profession
- (4) The student explains the ethical and legal responsibilities associated with pharmacology. The student is expected to:
- (A) explain the causes, effects, and consequences associated with medical errors, including medication errors;
    - (i) explain the causes associated with medical errors, including medication errors
    - (ii) explain the effects associated with medical errors, including medication errors
    - (iii) explain the consequences associated with medical errors, including medication errors
  - (B) define legal terminology associated with medical errors such as negligence, product liability, contributory negligence, and regulatory law;
    - (i) define legal terminology associated with medical errors
  - (C) analyze the principles of medical ethics, including beneficence, autonomy, malefi, (udi)3.5s6iaons





- (i) examine the consequences of unsafe practices
- (D) demonstrate safe procedures in the administration of client care in a simulated or clinical setting.
  - (i) demonstrate safe procedures in the administration of client care in a simulated or clinical setting