

KY Valid Course List

HOW TO USE THIS DOCUMENT

This document contains a listing of course descriptions and parameters along with certifications that fit the parameters for a given course. The grade range and population information listed for each course are not absolute. Please choose the course that most closely represents the students in a given course.

EXAMPLE

John Q Middle School had 5th, 6th, and 7th grade students taking a Creative Art course. This course would be linked to course number **500711: Creative Art – Comprehensive**, which shows with a recommended grade range of 6th – 12th.

The courses listed in this document are not meant to replace the course titles and course numbers already in use at the school level. Schools will link their courses on the Infinite Campus “Course Master” tab OR in the “Course” tab to courses listed in this document.

Schools may have created courses that are very unique in order to meet students’ needs. If a course does not meet the definition or content of one contained in this document, please use course number **909999: School Defined Course**, and code the correct content through the LEAD report.

CERTIFICATIONS

It is important to note that the certificates listed are the ones that fit **ALL** of the parameters for a specific course – there may be other certificates that can teach it with slightly more restrictive parameters.

It is very important to note that not all of the certificates listed under a specific course will meet the Highly Qualified Teacher standards as defined by The No Child Left Behind Act of 2001. Please refer to the Highly Qualified guidance documents located on the Education Professional Standards Board (EPSB) website at <http://www.epsb.ky.gov/nclb.asp>.

In addition to Highly Qualified considerations, please take note of the following information from **The Kentucky Core Academic Standards** with regard to middle school courses that are offered for high school credit.

High School Credit Earned in Middle School

It is expected that most students will earn these credits during their high school years. However, local school districts may offer these courses to middle level students if the following criteria are met:

- the content and the rigor of the course is the same as established in the *Kentucky Core Academic Standards*
- the students demonstrate mastery of the middle level content as specified in the *Kentucky Core Academic Standards*
- the district has criteria in place to make reasonable determination that the middle level student is capable of success in the high school course
- **the middle level course is taught by teachers with either secondary or middle level certification with appropriate content specialization**

Although middle level courses list the Provisional and Standard Elementary Certificates, Grades 1-8 as allowable under the parameters of these courses, they will not meet the above requirements for courses that are offered for high school credit.

This document is a guide; therefore the EPSB disclaims any warranties as to the validity of the information in this document. Users of this document are responsible for verifying information received through cross-referencing the official record in the EPSB’s Division of Certification. The EPSB shall not be liable to the recipient, or to any third party using this document or information obtained therefrom, for any damages whatsoever arising out of the use of this document.

Please contact Robin Chandler, policy advisor for the Office of Next Generation Learners in KDE, at 502-564-2106 with any questions on content and curricula.

Please contact EPSB’s Division of Certification at 502-564-4606 with any questions on credentials or permissions.

Table of Contents

Table of Contents	3
Health Science (170000)	4
Health Science - Career Major Electives (170100).....	5
Health Science - Allied Health (170500).....	12
Health Science - Pre-Nursing (170600).....	18
Health Science - Biomedical Science (170700)	22

Health Science

(170000)

Health Science - Career Major Electives (170100)

170111 - Principles of Health Science

Grade Level: 9 - 12

Credits: 1

Description: Orientation and foundation for occupations and functions across the health care cluster. Includes broad health care core standards which specify the knowledge and skills that the vast majority of health care workers should have. Prerequisite to additional courses in the Health Science Program.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170131 - Medical Terminology

Grade Level: 10 - 12

Credits: 1/2 - 1

Description: An intense study of the medical language used in all health career major areas. Pronunciation, spelling and application rules of medical terminology are included.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170132 - Medical Terminology II

Grade Level: 10 - 12

Credits: 1

Description: A study of anatomical, physiological, and pathological terminology with emphasis on word structures and definition of root words, suffixes, and prefixes from Greek and Latin. Basic medical word techniques emphasizing anatomical, physiological and medical terms.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170140 - CPR for Healthcare Professionals

Grade Level: 10 - 12

Credits: 0.5

Description: Emergency Procedures is designed to teach cardiopulmonary resuscitation (Adult/Infant/Child) using current emergency techniques relative to cardiac and/or respiratory arrest, as put forth by the American Heart Association, National Safety Council or American Red Cross. The American Heart Association, National Safety Council or American Red Cross standardized course qualifies a student for certification of cardiopulmonary resuscitation and safety and first aid.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170141 - Emergency Procedures

Grade Level: 10 - 12

Credits: 1/2-1

Description: Cardiopulmonary resuscitation; first aid; emergency care procedures as outlined by approved First Aid/CPR certifying agency.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology

230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170142 - Safety and First Aid

Grade Level: 10 - 12

Credits: 0.5

Description: Safety and First Aid is a course designed to teach current strategies relative to designated emergency situations as put forth by the National Safety Council or American Red Cross. The National Safety Council or American Red Cross standardized course qualifies a student for certification in safety and first aid.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170161 - Medical Science for the Life Science Component within the Science Requirement

Grade Level: 10 - 12

Credits: 2

Description: Basic anatomy and physiology of the human body with emphasis on the pathology of each system. Integration of life science core content.

Content: Medical Science for the Life Science Component within the Science Requirement

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
A50	Area Specialization: Science
A78	Area Specialization: Health Occupations
AJBI	Adjunct Instructor For Biology, Grades 8-12
B50	Teaching Major: Science
B51	Teaching Major: Biology
B54	Teaching Major: Biology-Health
C50	Teaching Minor: Science
C51	Teaching Minor: Biology
CBI	Professional Certificate For College Faculty, Biology, Grades 8-12
CBII	Provisional Internship Certificate For College Faculty, Biology, Grades 8-12
CFBI	Provisional One-Year College Faculty Certificate for Teaching Biological Science, Grades 8-12
COBI	Conditional One-Year Certificate For Biology, Grades 8-12
KBI	Professional Certificate For Teaching Biological Science, Grades 8 Through 12
KBII	Provisional Internship Certificate For Teaching Biological Science, Grades 8 Through 12
KBIL	Certificate For Teaching Kentucky Biology Limited, Grades 8-12

QBI	Teaching Field: Biology
R51	Area Specialization: Science Limited To Biology
T8BI	Temporary Provisional Certificate For Teaching Biological Science, Grades 8-12 (Option 8)
TEBI	Temporary Certificate For Biology, Grades 8-12
TPBI	Temporary Provisional Certificate For Biology, Grades 8-12
WBI	Professional Certificate For Teaching Biological Science, Grades 8 Through 12
WBII	Provisional Internship Certificate For Teaching Biological Science, Grades 8 Through 12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
X51	Emergency Certificate For Teaching Biology

170162 - Medical Science for CTE Credit

Grade Level: 10 - 12

Credits: 1

Description: Basic anatomy and physiology of the human body with emphasis on the pathology of each system.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170167 - Health Science Anatomy and Physiology

Grade Level: 10 - 12

Credits: 1

Description: This Area Technology Center Course - Basic Anatomy and Physiology is designed to provide knowledge of the structure and function of the human body with an emphasis on normalcy. The course includes interaction of all body systems in maintaining homeostasis and promotes an understanding of the basic human needs necessary for health maintenance. Explain the basic principles of inorganic and organic chemistry as they apply to physiological processes.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170168 - Health and Wellness/Human Growth and Development

Grade Level: 10 - 12

Credits: 0.5

Description: This Area Technology Center Course focus is promotion of health through assessment of individuals' growth and development across the life span. Consideration is given to the family, cultural, environmental, spiritual, and genetic influences when meeting basic human needs.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170169 - Medical Math I

Grade Level: 10 - 12

Credits: 0.5

Description: This Area Technology Center course is designed to provide a review of basic mathematic skills related to dosage calculations, a thorough knowledge of the systems of measurement and conversion, and application skills to perform dosage calculations.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170171 - Health and Wellness - for Health Component within the Health Requirement

Grade Level: 10 - 12

Credits: 1/2 - 1

Description: Promotion of a healthy lifestyle through proper nutrition, physical activity, and lifestyle choices. Emphasis on holistic health care and the health care industry. Contains Health core content.

Content: Health and Wellness for the Health Component within the Health Requirement

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
A78	Area Specialization: Health Occupations
A86	Area Specialization: Health-Physical Education-Recreation
A87	Area Specialization: Health-Physical Education
AJHE	Adjunct Instructor For Health, All Grades
AM89	Approval For Teaching Health In The Middle Grades 5-6
B54	Teaching Major: Biology-Health
B85	Teaching Major: Health-Safety
B87	Teaching Major: Health-Physical Education
B89	Teaching Major: Health
C87	Teaching Minor: Health-Physical Education
C89	Teaching Minor: Health
CHE	Professional Certificate For College Faculty, Health, All Grades
CHEI	Provisional Internship Certificate For College Faculty, Health, All Grades
COHE	Conditional One-Year Certificate For Health, All Grades
E89	Endorsement For Teaching Health Education, Grades K-8
J89	Junior High Major: Health
K89	Junior High Semi-Major: Health
KHE	Professional Certificate For Teaching Health, All Grades
KHEI	Provisional Internship Certificate For Teaching Health, All Grades
TEHE	Temporary Certificate For Health, All Grades
TPHE	Temporary Provisional Certificate For Teaching Health, All Grades
WHE	Professional Certificate For Teaching Health, All Grades
WHEI	Provisional Internship Certificate For Teaching Health, All Grades
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
X89	Emergency Certificate For Teaching Health

170172 - Health and Wellness - for CTE Credit

Grade Level: 10 - 12

Credits: 1/2 - 1

Description: Promotion of a healthy lifestyle through proper nutrition, physical activity, and lifestyle choices. Emphasis on holistic health care and the health care industry.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170181 - Medical Math

Grade Level: 10 - 12

Credits: 1/2 - 1

Description: Applied mathematics related to health care; metric measurements, conversions, ratio/proportion.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170199 - Leadership Dynamics - Health Science

Grade Level: 9 - 12

Credits: 1/2 - 1

Description: This course is designed to assist students with developing skills needed to be successful leaders and responsible members of society. This student will develop personal attributes and social skills. Emphasis will be placed on interpersonal skills, team building, communication, personal development and leadership. This course will include opportunities for students to apply their knowledge.

Content: Leadership Dynamics

Population: General

Due to the large number of certificates permitted to teach this course, no certificates are listed. Please check the certificate permissions on the EPSB website to verify a teacher's permission to teach this course. (Must be a CTE certified teacher)

Health Science - Allied Health (170500)

A group of courses for students interested in pursuing a health career that serve as a foundation for further studies in the broad health care field. Courses are aligned with national Health Science Core Standards.

170501 - Health Care Fundamentals

Grade Level: 11 - 12

Credits: 1--2

Description: Knowledge, concepts and psychomotor skills needed for gainful employment as an entry-level health care worker. Classroom instruction is combined with clinical experience and observation. Students should complete Health Science Introduction and Emergency Procedures prior to enrolling in this course.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170521 - Advanced Allied Health

Grade Level: 12 - 12

Credits: 1-2

Description: Expanded practical application of health care skills; enrichment and refinement of academic skills. Unpaid work-based learning in the health care field. Students must complete either MNA or Fundamentals of Health Care prior to enrolling in this course.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170550 - Practicum

Grade Level: 10 - 12

Credits: 0.5-1

Description: The practicum provides supervised on-the-job work experience related to the students' education objectives. Students participating in the practicum do not receive compensation.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170551 - Practicum 1--Child Care Worker

Grade Level: 10 - 12

Credits: 1

Description: The practicum provides supervised on-the-job work experience related to the students' education objectives in the area of child care. Students participating in the practicum do not receive compensation.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170552 - Practicum 1--Dental Assistant

Grade Level: 10 - 12

Credits: 1

Description: The practicum provides supervised on-the-job work experience related to the students' education objectives in the area of dental assistant. Students participating in the practicum do not receive compensation.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing

A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170553 - Practicum 1--Dietetic Technician

Grade Level: 10 - 12

Credits: 1

Description: The practicum provides supervised on-the-job work experience related to the students' education objectives in the area of dietetic technician. Students participating in the practicum do not receive compensation.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170554 - Practicum 1--Dispensing Optician

Grade Level: 10 - 12

Credits: 1

Description: The practicum provides supervised on-the-job work experience related to the students' education objectives in the area of dispensing optician. Students participating in the practicum do not receive compensation.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170555 - Practicum 1-EKG

Grade Level: 10 - 12

Credits: 1

Description: The practicum provides supervised on-the-job work experience related to the students' education objectives in the area of EKG. Students participating in the practicum do not receive compensation.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170556 - Practicum 1--Medical Assistant

Grade Level: 10 - 12

Credits: 1

Description: The practicum provides supervised on-the-job work experience related to the students' education objectives in the area of medical assistant. Students participating in the practicum do not receive compensation.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170557 - Practicum 1--Personal and Home Care Aide

Grade Level: 10 - 12

Credits: 1

Description: The practicum provides supervised on-the-job work experience related to the students' education objectives in the area of personal and home care aide. Students participating in the practicum do not receive compensation.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170558 - Practicum 1--Pharmacy

Grade Level: 10 - 12

Credits: 1

Description: The practicum provides supervised on-the-job work experience related to the students' education objectives in the area of pharmacy. Students participating in the practicum do not receive compensation.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170559 - Practicum 1--Physical Therapy

Grade Level: 10 - 12

Credits: 1

Description: The practicum provides supervised on-the-job work experience related to the students' education objectives in the area of physical therapy. Students participating in the practicum do not receive compensation.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170560 - Practicum 1--Psychiatric Aide

Grade Level: 10 - 12

Credits: 1

Description: The practicum provides supervised on-the-job work experience related to the students' education objectives in the area of psychiatric aide. Students participating in the practicum do not receive compensation.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant

250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170563 - Practicum 1-Veterinary Assistant & Laboratory Animal Caretaker

Grade Level: 10 - 12

Credits: 1

Description: The practicum provides supervised on-the-job work experience related to the students' education objectives in the area of veterinary assistant and laboratory animal caretaker. Students participating in the practicum do not receive compensation.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170591 - Special Topics in Allied Health

Grade Level: 11 - 12

Credits: 1-2

Description: Individualized instruction related to Health Science/Allied Health major but not described in the above courses.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

Health Science - Pre-Nursing (170600)

An instructional program that prepares students to work as an entry-level nursing assistant upon successful completion of the state Medicaid Nurse Aid program and examination. Additional courses to complete a career major are found under Allied Health career major.

170610 - Introduction to Nursing and Health Care System

Grade Level: 10 - 12

Credits: 0.5

Description: Historical overview of current health care including medical economics, ethical and legal parameters, roles and responsibilities of health care team members with an emphasis on reflective nursing practice. Medical terminology, therapeutic communication techniques, concepts of health, health assessment, self care and basic needs related to activities of daily living (ADL) across the lifespan are explored.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170611 - Development of Care Giver Role

Grade Level: 10 - 12

Credits: 2

Description: Introduction to nursing and the nursing process as related to client activities of daily living across the life span; opportunity to develop and practice psychomotor skills related to health assessment, promotion, maintenance, and illness prevention.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170612 - Kentucky Medication Aide

Grade Level: 10 - 12

Credits: 1

Description: This course is designed to prepare a Kentucky Medicaid Nurse Aide to administer specific medications in the long-term care facility.

Content: Medicaid Nurse Aide

Population: General

210	Health Science
A78	Area Specialization: Health Occupations
X210	Emergency Certificate For Health Services

170613 - Nursing Assistant Skills II

Grade Level: 10 - 12

Credits: 1

Description: Provides knowledge and skills for nurse aides to assume the role and responsibility required in a variety of health care settings. Builds upon MNA 100/NAA 100 and prepares the student to perform basic nursing skills at an advanced level.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170614 - Pharmacological and Other Therapeutic Modalities

Grade Level: 10 - 12

Credits: 0.5

Description: Introduction to techniques used to administer commonly used drugs; dosage calculations; diagnostic studies and other related medical therapies; legal responsibilities.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170620 - Advanced Nursing Assistant

Grade Level: 10 - 12

Credits: 3

Description: Provides knowledge and skills for nurse aides to assume the role and responsibility required in a variety of health care settings. The focus is communication, infection control, safety, resident/patient rights, and basic nursing skills. Prepares the student to perform basic nursing skills at an advanced level.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170621 - Advanced Pre-Nursing

Grade Level: 11 - 12

Credits: 1

Description: A Pre-Nursing practicum is designed to integrate meaningful experiences and academic knowledge with prior educational objectives. Students shall have completed all prerequisites for the Pre-Nursing Career Major. These experiences shall be aligned with an approved practicum task list. Emphasis will be on the students' ability to develop, enhance and expand skills in a health care setting.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170631 - Medicaid Nurse Aide

Grade Level: 11 - 12

Credits: 1-2

Description: An instructional program that prepares individuals to perform routine nursing-related services to patients in hospitals or long-term care facilities, under the training and supervision of an approved registered nurse or licensed practical nurse. State Registry is available upon successful completion of state written and performance examination. Prior to offering this course, the instructor and health science program must be approved for meeting state requirements set by the Cabinet for Health and Family Services.

Content: Medicaid Nurse Aide

Population: General

210	Health Science
A78	Area Specialization: Health Occupations
X210	Emergency Certificate For Health Services

170640 - Health Science Microbiology/Infection Control

Grade Level: 10 - 12

Credits: 0.5

Description: This course is designed to promote an understanding of the effects of microorganisms on the human body. The study includes standard precautions necessary for health maintenance and infection control. The focus is on reduction of diseases that interfere with basic human needs.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

170691 - Special Topics in Health Science/Pre-Nursing Major

Grade Level: 11 - 12

Credits: 1-2

Description: Individualized instruction related to Health Science/Pre-Nursing major but not described in the above courses.

Content: Health Science (CTE)

Population: General

200	Allied Health Science
210	Health Science
211	Radiology Technology
230	Medical Assistant
250	Practical Nursing
A78	Area Specialization: Health Occupations
AJAH	Adjunct Instructor For Allied Health, Grades 5-12
X200	Emergency Certificate for Allied Health Science
X210	Emergency Certificate For Health Services
XWVO	Waiver For Vocational Education, Grades 5-12, 6-Month

Health Science - Biomedical Science (170700)

170701 - Principles of Biomedical Science

Grade Level: 9 - 11

Credits: 1

Description: Student work involves the study of human medicine, research processes and an introduction to bioinformatics. Students investigate the human body systems and various health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. A theme through the course is to determine the factors that led to the death of a fictional person. After determining the factors responsible for the death, the students investigate lifestyle choices and medical treatments that might have prolonged the person's life. Key biological concepts including: homeostasis, metabolism, inheritance of traits, feedback systems, and defense against disease are embedded in the curriculum. Engineering principles including: the design process, feedback loops, fluid dynamics, and the relationship of structure to function are incorporated in the curriculum where appropriate. The course is designed to provide an overview of all the courses in the Biomedical Sciences program and to lay the scientific foundation necessary for student success in the subsequent courses

Content: Biomedical Science

Population: General

210	Health Science
250	Practical Nursing
A50	Area Specialization: Science
A70	Area Specialization: Mathematics-Physical Science
A78	Area Specialization: Health Occupations
AJBI	Adjunct Instructor For Biology, Grades 8-12
B50	Teaching Major: Science
B51	Teaching Major: Biology
B54	Teaching Major: Biology-Health
C50	Teaching Minor: Science
C51	Teaching Minor: Biology
CBI	Professional Certificate For College Faculty, Biology, Grades 8-12
CBII	Provisional Internship Certificate For College Faculty, Biology, Grades 8-12
COBI	Conditional One-Year Certificate For Biology, Grades 8-12
KBI	Professional Certificate For Teaching Biological Science, Grades 8 Through 12
KBII	Provisional Internship Certificate For Teaching Biological Science, Grades 8 Through 12
KBIL	Certificate For Teaching Kentucky Biology Limited, Grades 8-12
QBI	Teaching Field: Biology
R51	Area Specialization: Science Limited To Biology
T8BI	Temporary Provisional Certificate For Teaching Biological Science, Grades 8-12 (Option 8)
TEBI	Temporary Certificate For Biology, Grades 8-12
TPBI	Temporary Provisional Certificate For Biology, Grades 8-12
WBI	Professional Certificate For Teaching Biological Science, Grades 8 Through 12
WBII	Provisional Internship Certificate For Teaching Biological Science, Grades 8 Through 12

170702 - Human Body Systems

Grade Level: 10 - 11

Credits: 1

Description: Students will engage in the study of the processes, structures, and interactions of the human body systems. Important concepts in the course include: communication, transport of

substances, locomotion, metabolic processes, defense, and protection. The central theme is how the body systems work together to maintain homeostasis and good health. The systems will be studied as “parts of a whole” working together to keep the amazing human machine functioning at an optimal level. Students will design experiments, investigate the structures and functions of body systems, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary actions, and respiratory operation. Students will work through interesting real world cases and often play the role of biomedical professionals to solve medical mysteries.

Content: Biomedical Science

Population: General

210	Health Science
250	Practical Nursing
A50	Area Specialization: Science
A70	Area Specialization: Mathematics-Physical Science
A78	Area Specialization: Health Occupations
AJBI	Adjunct Instructor For Biology, Grades 8-12
B50	Teaching Major: Science
B51	Teaching Major: Biology
B54	Teaching Major: Biology-Health
C50	Teaching Minor: Science
C51	Teaching Minor: Biology
CBI	Professional Certificate For College Faculty, Biology, Grades 8-12
CBII	Provisional Internship Certificate For College Faculty, Biology, Grades 8-12
COBI	Conditional One-Year Certificate For Biology, Grades 8-12
KBI	Professional Certificate For Teaching Biological Science, Grades 8 Through 12
KBII	Provisional Internship Certificate For Teaching Biological Science, Grades 8 Through 12
KBIL	Certificate For Teaching Kentucky Biology Limited, Grades 8-12
QBI	Teaching Field: Biology
R51	Area Specialization: Science Limited To Biology
T8BI	Temporary Provisional Certificate For Teaching Biological Science, Grades 8-12 (Option 8)
TEBI	Temporary Certificate For Biology, Grades 8-12
TPBI	Temporary Provisional Certificate For Biology, Grades 8-12
WBI	Professional Certificate For Teaching Biological Science, Grades 8 Through 12
WBII	Provisional Internship Certificate For Teaching Biological Science, Grades 8 Through 12

170703 - Medical Interventions

Grade Level: 11 - 12

Credits: 1

Description: Description: Student projects will investigate various medical interventions that extend and improve quality of life, including gene therapy, pharmacology, surgery, prosthetics, rehabilitation, and supportive care. Students will study the design and development of various medical interventions including vascular stents, cochlear implants, and prosthetic limbs. They will review the history of organ transplants and gene therapy, and read current scientific literature to be aware of cutting edge developments. Using 3-D imaging software and current scientific research students will design and build a model of a therapeutic protein.

Content: Biomedical Science

Population: General

210	Health Science
250	Practical Nursing
A50	Area Specialization: Science
A70	Area Specialization: Mathematics-Physical Science
A78	Area Specialization: Health Occupations
AJBI	Adjunct Instructor For Biology, Grades 8-12
B50	Teaching Major: Science
B51	Teaching Major: Biology
B54	Teaching Major: Biology-Health
C50	Teaching Minor: Science

C51	Teaching Minor: Biology
CBI	Professional Certificate For College Faculty, Biology, Grades 8-12
CBII	Provisional Internship Certificate For College Faculty, Biology, Grades 8-12
COBI	Conditional One-Year Certificate For Biology, Grades 8-12
KBI	Professional Certificate For Teaching Biological Science, Grades 8 Through 12
KBII	Provisional Internship Certificate For Teaching Biological Science, Grades 8 Through 12
KBIL	Certificate For Teaching Kentucky Biology Limited, Grades 8-12
QBI	Teaching Field: Biology
R51	Area Specialization: Science Limited To Biology
T8BI	Temporary Provisional Certificate For Teaching Biological Science, Grades 8-12 (Option 8)
TEBI	Temporary Certificate For Biology, Grades 8-12
TPBI	Temporary Provisional Certificate For Biology, Grades 8-12
WBI	Professional Certificate For Teaching Biological Science, Grades 8 Through 12
WBII	Provisional Internship Certificate For Teaching Biological Science, Grades 8 Through 12

170704 - Biomedical Innovations

Grade Level: 12 - 12

Credits: 1

Description: Description: This capstone course gives student teams the opportunity to work with a mentor, identify a science research topic, conduct research, write a scientific paper, and defend team conclusions and recommendations to a panel of outside reviewers. Each team will have one or more mentors from the scientific and/or medical community guiding their scientific research. This course may be combined with the capstone course from the pre-engineering pathway, allowing students from both pathways to work together to engineer a product that could impact healthcare.

Content: Biomedical Science

Population: General

210	Health Science
250	Practical Nursing
A50	Area Specialization: Science
A70	Area Specialization: Mathematics-Physical Science
A78	Area Specialization: Health Occupations
AJBI	Adjunct Instructor For Biology, Grades 8-12
B50	Teaching Major: Science
B51	Teaching Major: Biology
B54	Teaching Major: Biology-Health
C50	Teaching Minor: Science
C51	Teaching Minor: Biology
CBI	Professional Certificate For College Faculty, Biology, Grades 8-12
CBII	Provisional Internship Certificate For College Faculty, Biology, Grades 8-12
COBI	Conditional One-Year Certificate For Biology, Grades 8-12
KBI	Professional Certificate For Teaching Biological Science, Grades 8 Through 12
KBII	Provisional Internship Certificate For Teaching Biological Science, Grades 8 Through 12
KBIL	Certificate For Teaching Kentucky Biology Limited, Grades 8-12
QBI	Teaching Field: Biology
R51	Area Specialization: Science Limited To Biology
T8BI	Temporary Provisional Certificate For Teaching Biological Science, Grades 8-12 (Option 8)
TEBI	Temporary Certificate For Biology, Grades 8-12
TPBI	Temporary Provisional Certificate For Biology, Grades 8-12
WBI	Professional Certificate For Teaching Biological Science, Grades 8 Through 12
WBII	Provisional Internship Certificate For Teaching Biological Science, Grades 8 Through 12