

# **KY Valid Course List**

## Kentucky Uniform Academic Course Codes

[704 KAR 3:540](#) states the following:

*Section 1. (1) Local districts and schools shall use uniform academic course codes, listed and described in the Academic Course Code List, to classify all courses offered in each school when reporting to the Kentucky Department of Education.*

*(2) Reporting to the Kentucky Department of Education shall include the listing and linking of uniform academic courses if the listing of academic courses is required.*

*Section 2. The linking of local district and school codes to the uniform academic course codes shall be performed by district and school staff using the student information system.*

*Section 3. The Kentucky Department of Education shall annually audit the use of uniform academic course codes by districts and schools.*

*Section 4. Incorporation by Reference. (1) "Academic Course Code List", April 2010, is incorporated by reference. (2) This material may be inspected, copied, or obtained, subject to applicable copyright law, at the Office of Teaching and Learning, 18th Floor, Capital Plaza Tower, 500 Mero Street, Frankfort, Kentucky 40601, Monday through Friday, 8 a.m. through 4:30 p.m. (36 Ky.R. 2260; Am. 37 Ky.R. 60; eff. 7-12-2010.)*

The Kentucky Uniform Academic Course Code List contains a listing of course descriptions and parameters along with certifications that fit the parameters for a given course. Please note that the table of contents and the bookmarks in each PDF document are clickable for ease of navigation. The content listed for a course cannot be changed; however, the grade range and population information listed for each course are not absolute and can vary slightly depending on the needs of the school. District should choose the course that most closely represents the students in a given course. ***The description and content of a course are the determining factors in what should be selected.***

### Contact Information:

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- Districts may contact Kiley Whitaker at (502) 564- 4286 or [kiley.whitaker@education.ky.gov](mailto:kiley.whitaker@education.ky.gov) with questions pertaining to technical issues.
- Districts may contact the EPSB Division of Certification at (502) 564-4606 or [dcert@ky.gov](mailto:dcert@ky.gov) with question pertaining to certification.
- Districts may contact Megan Cummins at (502) 696-7397 or [mcummins@kheaa.com](mailto:mcummins@kheaa.com) with questions pertaining to KEES eligibility.

Detailed information about course code considerations for specific programs and areas can be found on the Kentucky Uniform Academic Course Codes website at

<http://education.ky.gov/curriculum/modcurrframe/Pages/Kentucky-Uniform-Academic-Course-Codes.aspx>

## 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 5<sup>th</sup>, 6<sup>th</sup>, and 7<sup>th</sup> 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 6<sup>th</sup> – 12<sup>th</sup>.

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.***

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# **Health Science**

## **(170000)**

# Health Science - Career Major Electives (170100)

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## 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 Teaching Allied Health Science
X210	Emergency Certificate For Teaching Health Services

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## 170131 - Medical Terminology

**Grade Level:** 10 - 12

**Credits:** 0.5-1

**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 Teaching Allied Health Science
X210	Emergency Certificate For Teaching Health Services

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## 170141 - Emergency Procedures

**Grade Level:** 9 - 12

**Credits:** 0.5-1

**Description:** This course is intended to combine all existing courses in the Health Science Cluster to include foundational emergency skills for all Health Science Career Pathway students. This course will include certifications in: Cardiopulmonary Resuscitation for the Healthcare Provider; AED; blood borne pathogen; first aid; and emergency care as outlined by an approved first aid/CPR/Blood borne Pathogen certifying agency as put forth by the American Heart Association, National Safety Council or American Red Cross.

**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 Teaching Allied Health Science
X210	Emergency Certificate For Teaching Health Services

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## 170167 - Body Structures and Functions

**Grade Level:** 10 - 12

**Credits:** 1

**Description:** This course is designed to provide knowledge of the structure and function of the human body with an emphasis on normalcy. The interactions of all body systems in maintaining homeostasis will promote an understanding of the basic human needs necessary for health maintenance. Academic knowledge from life science core content as it relates to the human body (including anatomy and physiology) are included. Laboratory activities should be a part of the course when appropriate.

**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 Teaching Allied Health Science
X210	Emergency Certificate For Teaching Health Services

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## 170169 - Medical Math

**Grade Level:** 9 - 12

**Credits:** 0.5-1

**Description:** This course is designed to focus, utilize and build on mathematical skills commonly used in all health occupations. Students will use applied techniques, problem-solving and critical thinking to perform mathematical operations such as computations, ratio and proportion, weights and measurements and conversions. This course is strongly recommended for all Health Science majors. Successful completion of Algebra I is suggested prior to enrolling in this course. This course may meet the requirements for the fourth elective mathematics credit required for graduation with an allied health major.

**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 Teaching Allied Health Science
X210	Emergency Certificate For Teaching Health Services

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## 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 - Sports Medicine (170300)

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## 170301 - Essentials of Sports Medicine

**Grade Level:** 10 - 12

**Credits:** 1

**Description:** An instructional program that prepares individuals to perform routine sports medicine related services for the physically active, under the training and supervision of an approved licensed athletic trainer. The purpose of this program is to give individuals knowledge and skills to prevent, recognize, and provide basic care for injuries and sudden illness.

**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 Teaching Allied Health Science
X210	Emergency Certificate For Teaching Health Services

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## 170302 - Applied Sports Medicine

**Grade Level:** 11 - 12

**Credits:** 1

**Description:** An instructional program that emphasizes the prevention, assessment and care for injuries and illness to the physically active including the components of exercise science, anatomy, and principles of safety under the supervision of an approved licensed athletic trainer. Subject matter also includes legal issues, acute care skills, nutrition, human performance, taping and wrapping, therapeutic modalities, and application of sports medicine concepts.

**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 Teaching Allied Health Science
X210	Emergency Certificate For Teaching Health Services

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## 170303 - Internship: Sports Medicine

**Grade Level:** 11 - 12

**Credits:** 0.5-1

**Description:** The internship provides supervised on-the-job work experience related to the students' education objectives. Students participating in internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a trimester/semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (trimester/semester or less).

**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 Teaching Allied Health Science
X210	Emergency Certificate For Teaching Health Services

# 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 - Allied Health Core Skills

**Grade Level:** 11 - 12

**Credits:** 0.5-1

**Description:** Allied Health Core Skills is designed to provide knowledge, concepts and psychomotor skills necessary for gainful employment as an entry-level health care worker. Assisting students in selecting a career major, classroom instruction and educational objectives are combined with learning experiences and observations and clinical rotations. This course is designed for students not enrolled in the Medicaid Nurse Aide program and who have completed Principles of Health Science and Emergency Procedures.

**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 Teaching Allied Health Science
X210	Emergency Certificate For Teaching Health Services

## 170550 - Internship: Allied Health

**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 Teaching Allied Health Science
X210	Emergency Certificate For Teaching Health Services

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## 170551 - Internship: 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 Teaching Allied Health Science
X210	Emergency Certificate For Teaching Health Services

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## 170552 - Internship: Dental Assistant

**Grade Level:** 10 - 12

**Credits:** 1

**Description:** This internship provides supervised on-the-job work experience related to the students' education objectives in the area of Dental Assisting. Students participating in internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a trimester/semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (trimester/semester or less).

**Content:** Dental

**Population:** None

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## 170555 - EKG 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 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 Teaching Allied Health Science
X210	Emergency Certificate For Teaching Health Services

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## 170558 - Pharmacy Technician

**Grade Level:** 11 - 12

**Credits:** 1

**Description:** This is an online (computer assisted) or traditional course with a pharmacy internship that prepares students for the National Pharmacy Technician Certification (CPhT). You will gain the skills and knowledge to qualify for entry-level positions in a hospital or retail 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 Teaching Allied Health Science
X210	Emergency Certificate For Teaching Health Services

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## 170567 - Medical Laboratory Aide (Phlebotomist)

**Grade Level:** 11 - 12

**Credits:** 1

**Description:** The internship provides supervised on-the-job work experience related to the students' education objectives in the area of Medical Laboratory Aide/Phlebotomist. Students participating in internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a trimester/semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (trimester/semester or less).

**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 Teaching Allied Health Science
X210	Emergency Certificate For Teaching Health Services

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## 170591 - Special Topics in Allied Health

**Grade Level:** 10 - 12

**Credits:** 0.5-1

**Description:** Special Topics in Allied Health is an expanded course offering the study of current world health-related issues. Topics may vary at the discretion of the instructor. (.5 to 1 credit)

**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 Teaching Allied Health Science
X210	Emergency Certificate For Teaching Health Services

# 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.

## 170601 - Co-op (Nursing)

**Grade Level:** 11 - 12

**Credits:** 1

**Description:** Cooperative Education for CTE courses provide supervised work site experience related to the student's identified career pathway. A student must be enrolled in an approved capstone course during the same school year that the co-op experience is completed. Students who participate receive a salary for these experiences, in accordance with local, state and federal minimum wage requirements.

**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 Teaching Allied Health Science
X210	Emergency Certificate For Teaching Health Services

## 170610 - Introduction to Nursing and Health Care System

**Grade Level:** 10 - 12

**Credits:** 1

**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 Teaching Allied Health Science
X210	Emergency Certificate For Teaching Health Services

## 170611 - Development of Care Giver Role

**Grade Level:** 10 - 12

**Credits:** 1

**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 Teaching Allied Health Science
X210	Emergency Certificate For Teaching Health Services

## 170614 - Pharmacological and Other Therapeutic Modalities

**Grade Level:** 10 - 12

**Credits:** 1

**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 Teaching Allied Health Science
X210	Emergency Certificate For Teaching Health Services

## 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 Teaching Allied Health Science
X210	Emergency Certificate For Teaching Health Services

## 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 Teaching 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 Teaching Allied Health Science
X210	Emergency Certificate For Teaching Health Services

# 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.

NOTE TO SCHOOL - this course requires a District agreement with PLTW. You MUST have a current agreement with PLTW to offer this course.

**Content:** Biomedical Science

**Population:** General

210	Health Science
220	Biomedical Science
250	Practical Nursing
A50	Area Specialization: Science
A70	Area Specialization: Mathematics-Physical Science
A78	Area Specialization: Health Occupations
ABMS	Approval for PLTW Biomedical Science
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

## 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.

NOTE TO SCHOOL - this course requires a District agreement with PLTW. You MUST have a current agreement with PLTW to offer this course.

**Content:** Biomedical Science

**Population:** General

210	Health Science
220	Biomedical Science
250	Practical Nursing
A50	Area Specialization: Science
A70	Area Specialization: Mathematics-Physical Science
A78	Area Specialization: Health Occupations
ABMS	Approval for PLTW Biomedical Science
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

## 170703 - Medical Interventions

**Grade Level:** 11 - 12

**Credits:** 1

**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.

NOTE TO SCHOOL - this course requires a District agreement with PLTW. You MUST have a current agreement with PLTW to offer this course.

**Content:** Biomedical Science

**Population:** General

210	Health Science
220	Biomedical Science
250	Practical Nursing
A50	Area Specialization: Science
A70	Area Specialization: Mathematics-Physical Science
A78	Area Specialization: Health Occupations
ABMS	Approval for PLTW Biomedical Science
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

## 170704 - Biomedical Innovations

**Grade Level:** 11 - 12

**Credits:** 1

**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.

NOTE TO SCHOOL - this course requires a District agreement with PLTW. You MUST have a current agreement with PLTW to offer this course.

**Content:** Biomedical Science

**Population:** General

210	Health Science
220	Biomedical Science
250	Practical Nursing
A50	Area Specialization: Science
A70	Area Specialization: Mathematics-Physical Science
A78	Area Specialization: Health Occupations
ABMS	Approval for PLTW Biomedical Science
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

# Health Science - Veterinary Assisting (170800)

## 170801 - Principles of Veterinary Assisting

**Grade Level:** 9 - 12

**Credits:** 1

**Description:** This is a fundamental course provides a Health Science student with an opportunity to develop and demonstrate knowledge and skills in veterinary assisting. Students are introduced to Animal Behavior & Restraint, Sanitation and Safety as pertains to Veterinary Hospital, and Radiology. Small Animal Nutrition, Canine Breeds, and Zoonotic diseases are covered. This is the first of three courses to prepare students for the NAVTA (National Association of Veterinary Technicians in America) Approved Veterinary Assistant (AVA) certification.

**Content:** Animal Science

**Population:** General

216	Veterinary Assistant
A90	Area Specialization: Agriculture Vocational
A98	Area Specialization: Agriculture Non-Vocational
AJAG	Adjunct Instructor For Agriculture, Grades 5-12
B90	Teaching Major: Agriculture Vocational
B98	Teaching Major: Agriculture Non-Vocational
C98	Teaching Minor: Agriculture Non-Vocational
CAG	Professional Certificate For College Faculty, Agriculture, Grades 5-12
CAGI	Provisional Internship Certificate For College Faculty, Agriculture, Grades 5-12
COAG	Conditional One-Year Certificate For Teaching Agriculture, Grades 5-12
KAG	Professional Certificate For Teaching Agriculture, Grades 5 Through 12
KAGI	Provisional Internship Certificate For Teaching Agriculture, Grades 5 Through 12
S901	Approval For Teaching Agricultural Resources
S906	Approval For Teaching Horticulture
S908	Approval For Teaching Agricultural Mechanics
S909	Approval For Teaching Forestry
TEAG	Temporary Certificate For Agriculture, Grades 5-12
TPAG	Temporary Provisional Certificate For Teaching Agriculture, Grades 5-12
WAG	Professional Certificate For Teaching Agriculture, Grades 5 Through 12
WAGI	Provisional Internship Certificate For Teaching Agriculture, Grades 5 Through 12
X216	Emergency Certificate For Teaching Animal Science/Veterinary Assistant
X90	Emergency Certificate For Teaching Agriculture

## 170802 - Veterinary Assisting Skills

**Grade Level:** 9 - 12

**Credits:** 1

**Description:** This skills-based course offers students the ability to master skills involved in veterinary assisting. Skills involving grooming, proper restraining, preliminary physical examination, employability, surgical preparation and assisting, and laboratory techniques are introduced and practiced in the clinical setting. Units in Pharmacology, Small Animal Diseases and Parasitology are also covered along with Feline Breeds. This is the final course to prepare students for the NAVTA (National Association of Veterinary Technicians in America) Approved Veterinary Assistant (AVA) certification. Qualified students will take this examination at the end of this course.

**Content:** Animal Science

**Population:** General

216	Veterinary Assistant
A90	Area Specialization: Agriculture Vocational
A98	Area Specialization: Agriculture Non-Vocational
AJAG	Adjunct Instructor For Agriculture, Grades 5-12
B90	Teaching Major: Agriculture Vocational
B98	Teaching Major: Agriculture Non-Vocational
C98	Teaching Minor: Agriculture Non-Vocational
CAG	Professional Certificate For College Faculty, Agriculture, Grades 5-12
CAGI	Provisional Internship Certificate For College Faculty, Agriculture, Grades 5-12
COAG	Conditional One-Year Certificate For Teaching Agriculture, Grades 5-12
KAG	Professional Certificate For Teaching Agriculture, Grades 5 Through 12
KAGI	Provisional Internship Certificate For Teaching Agriculture, Grades 5 Through 12
S901	Approval For Teaching Agricultural Resources
S906	Approval For Teaching Horticulture
S908	Approval For Teaching Agricultural Mechanics
S909	Approval For Teaching Forestry
TEAG	Temporary Certificate For Agriculture, Grades 5-12
TPAG	Temporary Provisional Certificate For Teaching Agriculture, Grades 5-12
WAG	Professional Certificate For Teaching Agriculture, Grades 5 Through 12
WAGI	Provisional Internship Certificate For Teaching Agriculture, Grades 5 Through 12
X216	Emergency Certificate For Teaching Animal Science/Veterinary Assistant
X90	Emergency Certificate For Teaching Agriculture

## 170803 - Advanced Veterinary Assisting Skills

**Grade Level:** 9 - 12

**Credits:** 1

**Description:** This course offers the student the opportunity to expand knowledge of veterinary assisting by discussing the history and domestication of animals, identifying breeds (Equine, Bovine, Porcine), anatomy and physiology/ pharmacology, dentistry, as well as Livestock parasitology and nutrition. The student will continue perfecting their skills in the clinical setting.

**Content:** Animal Science

**Population:** General

216	Veterinary Assistant
A90	Area Specialization: Agriculture Vocational
A98	Area Specialization: Agriculture Non-Vocational
AJAG	Adjunct Instructor For Agriculture, Grades 5-12
B90	Teaching Major: Agriculture Vocational
B98	Teaching Major: Agriculture Non-Vocational
C98	Teaching Minor: Agriculture Non-Vocational
CAG	Professional Certificate For College Faculty, Agriculture, Grades 5-12
CAGI	Provisional Internship Certificate For College Faculty, Agriculture, Grades 5-12
COAG	Conditional One-Year Certificate For Teaching Agriculture, Grades 5-12
KAG	Professional Certificate For Teaching Agriculture, Grades 5 Through 12
KAGI	Provisional Internship Certificate For Teaching Agriculture, Grades 5 Through 12
S901	Approval For Teaching Agricultural Resources
S906	Approval For Teaching Horticulture
S908	Approval For Teaching Agricultural Mechanics
S909	Approval For Teaching Forestry
TEAG	Temporary Certificate For Agriculture, Grades 5-12
TPAG	Temporary Provisional Certificate For Teaching Agriculture, Grades 5-12
WAG	Professional Certificate For Teaching Agriculture, Grades 5 Through 12
WAGI	Provisional Internship Certificate For Teaching Agriculture, Grades 5 Through 12
X216	Emergency Certificate For Teaching Animal Science/Veterinary Assistant
X90	Emergency Certificate For Teaching Agriculture

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## 170804 - Veterinary Assisting Internship

**Grade Level:** 11 - 12

**Credits:** 1

**Description:** The internship provides supervised on-the-job work experience related to the students' education objectives in the area of veterinary assistant. The student's participating in the internship should have successfully completed the prior courses in the Veterinary Assisting pathway.

**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 Teaching Allied Health Science
X210	Emergency Certificate For Teaching Health Services

# Health Science - Medical Administrative Assistant (170900)

## 170920 - Medical Office Procedures

**Grade Level:** 11 - 12

**Credits:** 1

**Description:** Provides a working knowledge of the duties required in a medical office. Includes professional and career responsibilities, interpersonal communication, administrative responsibilities, and financial administration.

**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 Teaching Allied Health Science
X210	Emergency Certificate For Teaching Health Services

## 170922 - Internship: Medical Administrative Assistant

**Grade Level:** 12 - 12

**Credits:** 1

**Description:** The internship provides supervised work site experience related to the students education objectives in the area of medical administrative assistant. Students participating in internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a trimester/semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (trimester/semester or less).

**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 Teaching Allied Health Science
X210	Emergency Certificate For Teaching Health Services