

<b>Medical Interventions 1</b>		<b>HC2211/HC2212</b>
<p>This course investigates a variety of interventions involved in the prevention, diagnosis and treatment of disease, methodology for maintaining overall health, and homeostasis in the body. Students explore how to prevent and fight infection; screen and evaluate the code in human DNA; prevent, diagnose and treat cancer; and prevail when the organs of the body begin to fail. Through these scenarios, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical services and diagnostics.</p>		
<p><b>COURSE NOTE:</b> This course is taught at the Lawrence College &amp; Career Center. Transportation is provided from Lawrence High School and Lawrence Free State High School.</p>		
<p><b>PREREQUISITE:</b> Pre-Med 1 and 2 (Recommended)  <b>COREQUISITE:</b> Medical Interventions 2</p>		
<b>CREDIT: 0.5</b>	<b>TYPE:</b> Science or Elective	<b>GRADE:</b> 11-12
<b>STATE COURSE CODE:</b> 14105		<b>COURSE FEE:</b> \$0
<b>Medical Interventions 2</b>		<b>HC2221/HC2222</b>
<p>This course investigates a variety of interventions involved in the prevention, diagnosis and treatment of disease, methodology for maintaining overall health, and homeostasis in the body. Students explore how to prevent and fight infection; screen and evaluate the code in human DNA; prevent, diagnose and treat cancer; and prevail when the organs of the body begin to fail. Through these scenarios, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical services and diagnostics.</p>		
<p><b>COURSE NOTE:</b> This course is taught at the Lawrence College &amp; Career Center. Transportation is provided from Lawrence High School and Lawrence Free State High School.</p>		
<p><b>PREREQUISITE:</b> Pre-Med 1 and 2 (Recommended)  <b>COREQUISITE:</b> Medical Interventions 1</p>		
<b>CREDIT: 0.5</b>	<b>TYPE:</b> Science or Elective	<b>GRADE:</b> 11-12
<b>STATE COURSE CODE:</b> 14105		<b>COURSE FEE:</b> \$0
<b>BioEngineering 1</b>		<b>HC3811/HS3812</b>
<p>BioEngineering is a rigorous activity, project, and problem-based course in which students investigate and design solutions to solve real-world challenges related to world food security, renewable energy, and clean drinking water. Students completing BioEngineering will develop an understanding of the scientific and technological foundations for each of the problems. Students apply their knowledge and skills as they use an engineering design process to design and test solutions that help solve these global challenges.</p>		
<p><b>COURSE NOTE:</b> This course is taught at the Lawrence College &amp; Career Center. Transportation is provided from Lawrence High School and Lawrence Free State High School.</p>		
<p><b>PREREQUISITE:</b> Medical Interventions 1 &amp; 2 or Forensic Science 1 &amp; 2  <b>COREQUISITE:</b> BioEngineering 2</p>		
<b>CREDIT: 0.5</b>	<b>TYPE:</b> Science or Elective	<b>GRADE:</b> 11-12
<b>STATE COURSE CODE:</b> 21020		<b>COURSE FEE:</b> \$0
<b>BioEngineering 2</b>		<b>HC3821/HS3822</b>

BioEngineering is a rigorous activity, project, and problem-based course in which students investigate and design solutions to solve real-world challenges related to world food security, renewable energy, and clean drinking water. Students completing BioEngineering will develop an understanding of the scientific and technological foundations for each of the problems. Students apply their knowledge and skills as they use an engineering design process to design and test solutions that help solve these global challenges.

**COURSE NOTE:** This course is taught at the Lawrence College & Career Center. Transportation is provided from Lawrence High School and Lawrence Free State High School.

**PREREQUISITE:** Medical Interventions 1 & 2 or Forensic Science 1 & 2

**COREQUISITE:** BioEngineering 1

**CREDIT:** 0.5

**TYPE:** Science or Elective

**GRADE:** 11-12

**STATE COURSE CODE:** 21020

**COURSE FEE:** \$0

**Certified Nurse Aide (CNA)**

**HC3111/HC3112**

Certified Nurses Aide is a college course provided to USD 497 juniors and seniors by Neosho County Community College (NCCC) at the Lawrence College & Career Center. Students will receive 6 hours of college credit through NCCC. Students who choose to take the course will need to also apply to NCCC and enroll in the course through NCCC. Counselors and college representatives will assist in this process. There is no tuition cost and books are provided.

This course is the first step in a medical career. This course includes a study of the aging process, its related conditions and the nursing skills required in assisting geriatric residents to reach and maintain their highest levels of wellness. Students will complete supervised clinical experiences in a nursing home and project-based lab work.

**COURSE NOTE:** This course is taught at the Lawrence College & Career Center. Transportation is provided from Lawrence High School and Lawrence Free State High School.

**COREQUISITE:** Medical Terminology

**CREDIT:** 0.5

**TYPE:** Science or Elective

**GRADE:** 11-12

**STATE COURSE CODE:** 14997

**DUAL**

**COURSE FEE:** \$0

**Medical Terminology**

**HC3121/HC3122**

Medical Terminology (CNA) is a college course provided to USD 497 juniors and seniors by Neosho County Community College (NCCC) at the Lawrence College & Career Center. Students will receive 3 hours of college credit through NCCC. Students who choose to take the course will need to also apply to NCCC and enroll in the course through NCCC. Counselors and college representatives will assist in this process. There is no tuition cost and books are provided but students will be responsible for any fees by Neosho County Community College. Scholarships and payment plans are available. The scholarship form is available on the Lawrence College & Career Center website ([www.usd497.org/discoverwhatsnext](http://www.usd497.org/discoverwhatsnext)).

This purpose of this course is to provide the student with the basic tools for building a medical vocabulary. It emphasizes the building of a medical vocabulary from prefixes, suffixes, roots, and combining forms. Emphasis is placed on correct pronunciation, spelling, and analysis of medical terms as they pertain to anatomy, physiology, and diseases. The course provides an organized method for unlocking the mysteries of medical terms and building a working vocabulary. The various study methods used will enable the student to analyze medical terms and identify their relationship to specific medical categories.

**COURSE NOTE:** This course is taught at the Lawrence College & Career Center. Transportation is provided from Lawrence High School and Lawrence Free State High School.

**COREQUISITE:** Certified Nurse Aide (CNA) or EMS - First Responder

<b>CREDIT: 0.5</b>	<b>TYPE:</b> Elective	<b>GRADE:</b> 11-12
<b>STATE COURSE CODE:</b> 14154	<b>DUAL</b>	<b>COURSE FEE:</b> \$0
<b>Forensic Science 1</b>		<b>HC3311/HC3312</b>
<p>Forensic Science focuses on the skills and concepts behind crime scene investigation. Students will use concepts from chemistry, physics, cell biology, anatomy, environmental science and computer science to “solve the crime.” Additionally, students will interact with law and science professionals in the field. Topics will include DNA analysis, trace evidence, drugs and toxicology and serology. Whether the student is interested in being a crime scene investigator, a forensic pathologist or a medical scientist, this course will prepare students for future studies and/or careers in applied science.</p>		
<b>COURSE NOTE:</b> This course is taught at the Lawrence College & Career Center. Transportation is provided from Lawrence High School and Lawrence Free State High School.		
<b>COREQUISITES:</b> Forensic Science 2		
<b>CREDIT: 0.5</b>	<b>TYPE:</b> Science or Elective	<b>GRADE:</b> 11-12
<b>STATE COURSE CODE:</b> 44225	<b>NCAA</b>	<b>COURSE FEE:</b> \$0
<b>Forensic Science 2</b>		<b>HC3321/HC3322</b>
<p>Forensic Science focuses on the skills and concepts behind crime scene investigation. Students will use concepts from chemistry, physics, cell biology, anatomy, environmental science and computer science to “solve the crime.” Additionally, students will interact with law and science professionals in the field. Topics will include DNA analysis, trace evidence, drugs and toxicology and serology. Whether the student is interested in being a crime scene investigator, a forensic pathologist or a medical scientist, this course will prepare students for future studies and/or careers in applied science.</p>		
<b>COURSE NOTE:</b> This course is taught at the Lawrence College & Career Center. Transportation is provided from Lawrence High School and Lawrence Free State High School.		
<b>COREQUISITES:</b> Forensic Science 2		
<b>CREDIT: 0.5</b>	<b>TYPE:</b> Science or Elective	<b>GRADE:</b> 11-12
<b>STATE COURSE CODE:</b> 44225	<b>NCAA</b>	<b>COURSE FEE:</b> \$0
<b>EMS - First Responder</b>		<b>HC3411/HC3412</b>
<p>Emergency Medical Science (EMS) - First Responder is a college course available to USD 497 juniors and seniors by Johnson County Community College (JCCC) at the Lawrence College &amp; Career Center. Students will receive 5 hours of college credit through JCCC. Students who choose to take the course will need to also apply to JCCC and enroll in the course through JCCC. Counselors and college representatives will assist in this process. There is no tuition cost and books are provided.</p> <p>The course is designed to provide training in emergency medical care for those who are apt to be the first persons responding to an emergency incident. Fire, police, civil personnel, school bus drivers, day-care providers, utility workers and industrial workers are a few examples of those persons who would benefit from this training. The student will receive both didactic and psychomotor skills training in CPR, patient assessment, fracture management, airway management and trauma management. Successful completion of this course with a minimum grade of “C” will enable the student to sit for the First Responder certification exam administered by the Kansas Board of Emergency Medical Services.</p>		
<b>COURSE NOTE:</b> This course is taught at Lawrence High School and Lawrence College & Career Center. Transportation is provided from Lawrence High School and Lawrence Free State High School.		

<b>COREQUISITES:</b> Medical Terminology		
<b>CREDIT:</b> 0.5	<b>TYPE:</b> Elective	<b>GRADE:</b> 11-12
<b>STATE COURSE CODE:</b> 44050		<b>COURSE FEE:</b> \$0
<b>EMT - Emergency Medical Technician 1 &amp; 2</b>		<b>HC3611/HC3612 HC3621/HC3622</b>
<p>This program is designed for individuals interested in providing medical care to patients in the pre-hospital setting. It will provide the participants with opportunities to gain information, skills and attitudes necessary for certification and practice as an emergency medical technician (EMT) in the state of Kansas. This program has been approved by the Kansas Board of Emergency Medical Services (BEMS). It addresses information and techniques currently considered the responsibility of the EMT according to the United States Department of Transportation, National Standard Curriculum. The program consists of didactic instruction, practical skill training and clinical experience. Students are also required to attend Saturday session(s) as necessary. Saturday dates and times will be announced during the first class session. Classroom instruction includes anatomy, physiology, recognition and care of medical emergencies and trauma-related injuries. CPR, bandaging, splinting, childbirth techniques and airway management are among the skills taught. An extrication session will give students hands-on experience with automobile accident situations. Upon instructor recommendation, students will participate in clinical and field observation. All transportation to and from off-campus sites is the responsibility of the student. Students completing this course with a minimum grade of "C" will be allowed to sit for the Kansas EMT State Certification examination and receive JCCC certificate of completion.</p> <p>This is an evening class at the College &amp; Career Center. Students interested in this class should call (785) 832-5900 for more information.</p>		
<b>COURSE NOTE:</b> This course is taught at Lawrence High School and Lawrence College & Career Center. This is an evening course. Transportation is <u>not</u> provided.		
<b>PREREQUISITES:</b> EMS - First Responder		
<b>COREQUISITES:</b> EMT - Emergency Medical Technician must be taken concurrently		
<b>CREDIT:</b> 0.5	<b>TYPE:</b> Elective	<b>GRADE:</b> 11-12
<b>STATE COURSE CODE:</b> 44060		<b>COURSE FEE:</b> \$0
<b>Certified Medication Aide</b>		<b>HC3211/HC3212</b>
<p>Certified Medication Aide covers information related to many commonly prescribed medications. Students will learn the classification, side effects and techniques of administration, including preparations and accurate distribution of medications. Clinical practice sessions are included. Students must have CNA certification to enroll. Students will receive 5 hours of college credit through Neosho County Community College, the course provider.</p>		
<b>COURSE NOTE:</b> This course is taught at the Lawrence College & Career Center. Transportation is provided from Lawrence High School and Lawrence Free State High School.		
<b>PREREQUISITE:</b> Certified Nurse Aide (CNA) and student must be 18 at the time of the exam		
<b>CREDIT:</b> 0.5	<b>TYPE:</b> Science or Elective	<b>GRADE:</b> 12
<b>STATE COURSE CODE:</b> 44060		<b>COURSE FEE:</b> \$0