Medical Terminology Resource

Proposed Textbook Adoption

Board of Education Curriculum Subcommittee
New Fairfield Public Schools
May 26, 2026

Medical Terminology

Medical Terminology ECE Grade 11-12
1 Semester | 0.5 credit STEM | Science
Prerequisite: Human Anatomy and Physiology Wt 5
Physics may be taken concurrently. A 10th-Grade student may take this elective with a required science teacher recommendation.

Medical Terminology through Human Pathology ECE introduces the basic concepts, medical terminology and etiology of diseases and conditions that affect humans. Students will be able to earn ECE credit through the University of Connecticut upon successful completion of this course. Students will engage in an overview and history of human pathology immune response, pathology of major organ systems and common ailments There are no formal laboratory reports, rather students will conduct mini presentations throughout the course in preparation for the final exam and research project presentation at the end of the course where students will demonstrate mastery of the appropriate medical terminology used to describe various pathological issues.

Science - Medical Terminology

Medical Terminology (AH 2001) is a two-credit UConn Early College Experience course that teaches students to decode and construct medical terms by recognizing patterns in Greek and Latin word parts, developing analytical skills that unlock thousands of terms without memorization. Each unit is organized around an essential question and a career lens that illustrates how terminology is used in practice, providing context rather than job training. Medical terminology is the shared language of healthcare, and mastering it prepares students for any pathway they choose to pursue.

Unit 1: Cracking the Code of Medical Language

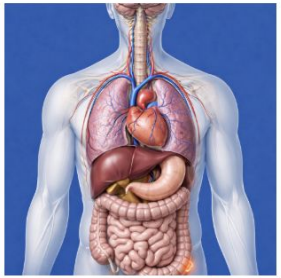
Medical terminology is built from a structured system of word parts that carries meaning across healthcare settings. Students analyze Greek and Latin origins, examine prefixes, roots, and suffixes, and explore alternative naming systems, such as eponyms and acronyms. By identifying recurring patterns, students begin to see how medical language encodes meaning and supports clear, global communication.

VIEW

Unit 2: Mapping the Human Body

Accurate healthcare communication depends on consistently and precisely describing the body. Using anatomical position as a reference point, students learn to describe body locations, directions, planes, and movements. Clinical contexts such as examinations, imaging, and therapy notes provide opportunities to practice using anatomical terminology without ambiguity.

VIEW



Unit 3: Naming What Goes Wrong

As symptoms emerge, they must be translated into standardized medical descriptions. Students work with disease-related terminology to describe pathological processes, conditions, and diagnoses. By examining how different medical specialties classify and communicate disease, students deepen their ability to interpret diagnostic language and understand its role in clinical decision-making.

VIEW

Unit 4: Reading the Medical Record

Healthcare information gains meaning through documentation. Students analyze the structure and terminology of medical records, including histories, examinations, progress notes, diagnostic reports, and laboratory results. Emphasis is placed on how standardized documentation enables accurate information transfer between providers and healthcare settings.

VIEW

Unit 5: Pharmacology and Treatment

Clinical care relies on precise language to describe interventions. Students examine how procedural and surgical terms are formed and how pharmacological vocabulary communicates drug classifications, administration routes, and treatment plans. The focus highlights how treatment terminology connects diagnosis to action and supports patient safety.

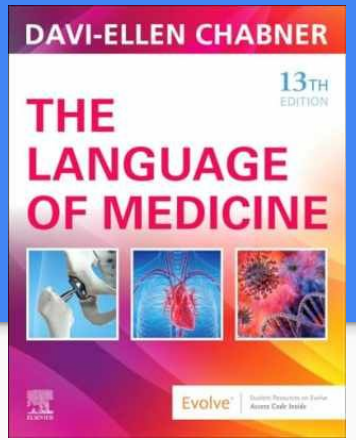
VIEW

Unit 6: Body Systems Deep Dive

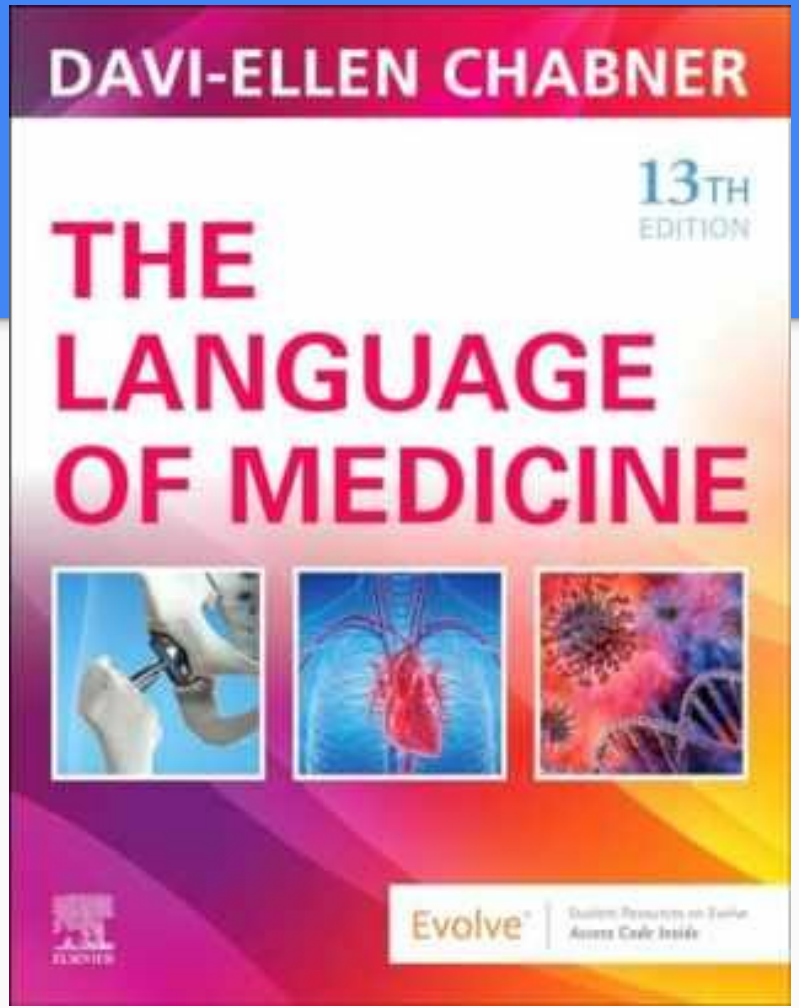
All prior learning comes together through focused study of individual body systems. Students apply terminology related to anatomy, pathology, diagnostics, documentation, and treatment to analyze how each system is described in healthcare. Through a culminating Body System Research Project, students demonstrate how medical terminology creates a complete and coherent understanding of human health and disease.

VIEW

Recommended Resource



- 2025 edition
- Recommended by UCONN Allied Health Department for ECE courses; standard text for this course at the college level
- Systematic, word-part-based approach (parts of speech and related body systems)
- Morphology (roots, prefixes, suffixes), vocabulary, medical terminology, practical applications and clinical cases, practice exercises, pronunciation guide



Notice that the combining vowel is retained between **gastr** and **enter,** even though the second root, **enter,** begins with a vowel. When a term contains two or more roots related to parts of the body, anatomic position often determines which root goes before the other. For example, the stomach receives food first, before the small intestine—so the word is formed as **gastroenterology,** not "enterogastrology."

In summary, remember **three general rules:**

1. **READ** the meaning of medical terms from the suffix back to the beginning of the term and across.
2. **DROP** the combining vowel (usually o) before a suffix beginning with a vowel: **gastritis,** *not* "gastroitis."
3. **KEEP** the combining vowel between two roots: **gastroenterology,** *not* "gastrenterology."

In addition to the root, suffix, and combining vowel, two other word parts are commonly found in medical terms. These are the **combining form** and the **prefix.** The combining form is simply the root plus the combining vowel. For example, you already are familiar with the following combining forms and their meanings:

HEMAT/O means **blood**

COMBINING FORM = root + combining vowel

GASTR/O means **stomach**

COMBINING FORM = root + combining vowel

CARDI/O means **heart**

COMBINING FORM = root + combining vowel

Combining forms are used with many different suffixes. Remembering the meaning of a combining form will help you understand unfamiliar medical terms.

The **prefix** is a small part attached to the *beginning* of a term. Not all medical terms contain prefixes, but the prefix can have an important influence on the meaning. Consider the following examples:

HYPO/GASTR/IC means **pertaining to below the stomach**

prefix	**root**	**suffix**
(below)	(stomach)	(pertaining to)

EPI/GASTR/IC means **pertaining to above the stomach**

prefix	**root**	**suffix**
(above)	(stomach)	(pertaining to)

PREFIXES

PREFIX	MEANING	TERMINOLOGY	MEANING
a-, an-	no, not, without	anemia	*Anemia is a decreased number of erythrocytes or an abnormality of the hemoglobin (a chemical) within the red blood cells. This results in decreased delivery of oxygen to cells of the body. Anemic patients look so pale that early physicians thought they were literally "without blood."*
aut-, auto-	self, own	autopsy	*This term literally means "process of viewing by oneself." Hence, an autopsy is the examination of a dead body with one's own eyes to determine the cause of death and nature of disease.*
dia-	complete, through	diagnosis	*The plural of diagnosis is diagnoses.*
endo-	within	endocrinologist	
epi-	above, upon	epigastric	
		epidermis	*This outermost layer of skin lies above the middle layer of skin, known as the dermis.*
ex-, exo-	out, outside of, outward	excision	
		exocrine glands	
hyper-	excessive, above, more than normal	hyperthyroidism	*The suffix -ism means process or condition.*
hypo-	deficient, below, under, less than normal	hypogastric	*When hypo- is used with a part of the body, it means below.*
		hypoglycemia	*In this term, hypo- means deficient.*
in-	into, in	incision	
peri-	surrounding, around	pericardium	*The suffix -um means a structure. The pericardium is the membrane that surrounds the heart.*

Plurals

Terms ending in **-is** (diagnosis, prognosis) form their plural by dropping the **-is** and adding **-es.** See Appendix I, page 989, for other rules on formation of plurals.

Understanding Hyperthyroidism

In **hyperthyroidism,** a **hyperactive thyroid gland** (an endocrine gland in the neck) secretes a greater than normal amount of **thyroxine** (thyroid hormone, or **T4**). Because thyroxine causes cells to burn fuel and release energy, signs and symptoms of hyperthyroidism are **increased energy level** and **nervousness, tachycardia** (increased heart rate), **weight loss,** and **exophthalmos** (bulging eyeballs).

PRONUNCIATION OF TERMS

The terms you have learned in this chapter are presented here with their pronunciations. The CAPITAL letters indicate the accented syllable.

The meanings for all the terms are in the **Mini-Dictionary** beginning on page 967. You can also hear each term pronounced on the Evolve website (http://evolve.elsevier.com/Chabner/language/).

TERM	PRONUNCIATION	TERM	PRONUNCIATION
abdomen	AB-do-men	epinephrine	ep-ih-NEF-rin
abdominal cavity	ab-DOM-ih-nal KAV-ih-te	epithelial cells	ep-ih-THE-le-al sels
adipose	AH-dih-pohs	frontal plane	FRUN-tal playn
anabolism	ah-NAB-o-liz-im	genes	jeenz
anterior	an-TE-re-or	histology	his-TOL-o-je
cartilage	KAR-tih-lij	hypochondriac regions	hi-po-KON-dre-ak RE-jens
catabolism	kah-TAB-o-liz-im	hypogastric region	hi-po-GAS-trik RE-jen
cell membrane	sel MEM-brayn	iliac	IL-e-ak
cephalic	seh-FAL-ik	inferior	in-FE-re-or
cervical	SER-vih-kul	inguinal regions	IN-gwih-nal RE-jens
chondroma	kon-DRO-mah	intervertebral	in-ter-ver-TE-bral
chondrosarcoma	kon-dro-sar-KO-mah	intravenous	in-trah-VE-nus
chromosome	KRO-mo-sohm	karyotype	KAIR-e-o-type
coccygeal	kok-sih-JE-al	laryngitis	lah-rin-JI-tis
coccyx	KOK-siks	larynx	LAH-rinks
cranial cavity	KRA-ne-al KAV-ih-te	lateral	LAT-er-al
craniotomy	kra-ne-OT-o-me	lumbar regions	LUM-bar RE-jens
cytoplasm	SI-to-plaz-im	lumbar spine	LUM-bar spine
deep	deep	lumbosacral	lum-bo-SA-kral
diaphragm	DI-ah-fram	medial	ME-de-al
disc	disk	mediastinum	me-de-ah-STI-num
distal	DIS-tal	metabolism	meh-TAB-o-lism
dorsal	DOR-sal	mitochondria	mi-to-KON-dre-ah
endoplasmic reticulum	en-do-PLAZ-mik reh-TIK-u-lum	nucleic	nu-CLA-ik
		nucleus	NU-cle-us
epigastric region	ep-ih-GAS-trik RE-jen	pelvic cavity	PEL-vik KAV-ih-te

PRACTICAL APPLICATIONS

Be sure to check your answers with the Answers to Practical Applications on page 64.

X-RAY VIEWS

Circle the correct answers in the following sentences related to each x-ray view of the chest.

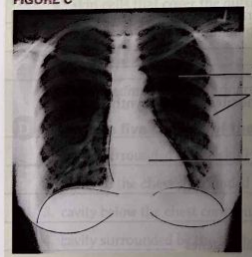
FIGURE A

1. This is a/an **(coronal, sagittal, axial)** view. The heart lies **(anterior, posterior, dorsal)** to the vertebrae.

FIGURE B

2. This is a/an **(coronal, sagittal, axial)** view. It is a/an **(CT, traditional x-ray)** image.

FIGURE C



3. This is a/an **(coronal, sagittal, axial)** view. It is a/an **(lateral, transverse, anterior/posterior)** image.

(A, from Weir J et al: *An Imaging Atlas of Human Anatomy*, ed 4, Philadelphia, 2011, Elsevier/Mosby. C, from Black J, Hawks J: *Medical-Surgical Nursing*, ed 8, Philadelphia, 2009, Elsevier/Saunders.)

IN PERSON: KIDNEY TRANSPLANT

This first-person narrative was written by a kidney donor.

When my 64-year-old father-in-law announced to my wife and me that his kidney function was failing, it didn't really enter our minds that one of us might ultimately have a part to play in his survival. Five years later, dialysis was taking its toll on his organ systems, and there had been no success in obtaining a cadaveric kidney. Things had reached the point where he needed a kidney in short order, before his health deteriorated to the point where he would no longer be a candidate for transplantation.

My wife's blood type ruled out the possibility of her being a direct donor, so I volunteered to be tested. Turns out that her father and I were a match on 5 of the 7 key traits—a really good fit! The next round of testing—blood work and my kidney function—was able to be done locally. I remember carrying around a specimen container (on ice), having to provide a full liter of urine in 24 hours!

The results of those tests were favorable, and two weeks later I made the 3½-hour drive to the transplant center at the University of Virginia in Charlottesville. While a transplant is really a team of two—donor and recipient—the entire process at UVA was very much individualized. A transplant coordinator (an experienced RN) was assigned specifically to our case, and I had a team of doctors and support staff dedicated exclusively to me, the donor. Similarly, there was a team that dealt only with my father-in-law as the recipient.

My visit involved some more in-depth blood tests and cardiac studies largely to determine that I was healthy enough for major surgery. My transplant team and I spent an entire afternoon discussing the implications of being a donor—the inherent risk in any surgery, potential implications for me and my family, the likely recovery time, and the possibility that, despite all of the up-front testing, the transplant might not be successful. The discussions that afternoon only reaffirmed that I was making the right decision. I had an opportunity to have a positive impact on someone else's life, with relatively little risk to my own health.

The events around the surgery itself were pretty straightforward. The surgery is a more involved procedure for the donor than for the recipient, so I was taken back first. A nurse started an IV and injected a mild sedative. From that point, my only memory is of one last hug for my wife and children, and then being shifted from the stretcher onto the operating table.

When I woke up in recovery, the news was all good. My surgery had gone well—four laparoscopic incisions through which the surgeons did most all of their work, and a lateral incision in my lower abdomen through which the kidney was removed. Equally important, my father-in-law had come through his surgery well and the kidney had immediately begun to function! I was discharged from the hospital on Sunday, and cleared to return home the next Friday, 8 days post-op.

As is typical following a major surgery, it took about 6 weeks for me to feel "normal" again. During those 6 weeks, I had weekly blood tests to chart the progress of my kidney function. I went back to UVA for a routine follow-up visit at the 6-week mark. I was recovering as expected, and my remaining kidney was actually growing in size and capacity. Blood tests continued on a monthly basis until I was officially "discharged" from the transplant center's care 6 months after the surgery.

John Melson is pictured with his father-in-law, Rod Beckwith.

Next Steps:

- BOE Curriculum Subcommittee questions and discussion
- Request for approval to move to full BOE, June 4, 2026
- Sample copy available at NFHS for review