

CLAS 126

Medical Word Formation and Etymology

General Description

Course Goals

Like other disciplines in modern technological society, the health sciences have developed their own jargon for describing the human body, its normal functions, and its abnormal conditions. This jargon is a tool for precise description and effective treatment of health problems, but it can also be a barrier—blocking communication between specialists and laypeople. This is especially true since there are often several medical words describing the same condition but constructed from entirely different roots or arrangements of those roots.

The goal of this course is to give you access to the imposing language of the medical profession. It will acquaint you with the elements from which most medical terms are formed—roots taken from Greek and Latin, which were the languages of doctors and philosophers from the time of Hippocrates (a Greek medical scholar of the fifth century BC) until as recently as the nineteenth century. You will learn about 400 Greek and Latin words, their various bases used in English, prefixes, suffixes, and the ways these elements combine to form most of the important medical terms in use today.

Once you have used this method to learn the vocabulary in this course, you will have the tools to learn other medical terms in the same way—by understanding the components rather than just memorization of the whole. Generally, the language of medicine makes precise and predictable use of its roots. With a little effort, your vocabulary will grow quickly, and you will be able to make sense, often at first sight, of thousands of new words.

You may wonder why this course is offered through the classics department rather than the biology department. This course is not primarily biological in nature; that is, no previous biological background is necessary, although it can be helpful.

Comprehension of the linguistic reasoning behind medical words can be achieved whether you are beginning your college career, studying for the MCAT exam, or already working in a medical field.

As taught, this course is really more of a language course than anything else, and you will use some of the same techniques as if you were taking Spanish or German. A little curiosity will also be an advantage, for you will find that the meanings of words often do not correspond exactly to the meanings of their parts. Words, after all, come to us like people, with a history. In the case of some words, the evolution in meaning and usage may extend over hundreds or thousands of years, and through several languages. The history of medical terms is particularly rich in this respect, because theories about the human body have varied greatly through the ages. A term may change radically as it passes from Greek and Roman philosophers to the Renaissance physicians and on to the medical researchers of the nineteenth, twentieth, and twenty-first centuries.

Your textbook will sometimes help with the development of a word's meaning; this study guide will assist with other words that seem particularly unclear. It is this ambiguity of the medical language that creates the need for language specialists to teach this course—people who can relate the Greek and Latin words both to their original uses and to their use in English today, and then help you bridge that gap.

Required Textbooks

The following textbooks are required for the course:

Cheryl Walker-Esbaugh, Laine H. McCarthy, and Rhonda A. Sparks, *Dunmore and Fleischer's Medical Terminology: Exercises in Etymology*, Edition III. Philadelphia: FA Davis Company, 2004.

A medical dictionary (*Taber's Cyclopedic Medical Dictionary*, Philadelphia: F.A. Davis Company, 2001, is recommended.)

You may purchase the textbook and dictionary from the Higher Grounds bookstore at the Friday Center using the book order form in this manual, or you can order them online at <https://s4.its.unc.edu/HigherGrounds>.

The Dunmore and Fleischer textbook contains lists of classical roots; explanations of how these combine; notes on anatomy, etymology, and the history of medicine; and exercises. You will need to consult a medical dictionary to complete the exercises and learn the definitions of terms. Taber's dictionary is recommended primarily because Dunmore and Fleischer used Taber's as one of their main resources for selecting the terms and information to include in their text. However, if you already have a different medical dictionary, please do not feel that you have to purchase Taber's as well. If you do use a reference dictionary other than Taber's, just be aware that not all medical dictionaries include all the same terms.

Course Plan

There are fifteen assignments in the course and one midcourse exam (Assignment 8). Each assignment can be completed in several hours (approximately one to two hours for introduction to the new material and three to four hours for the assignment). In the outline below, the Arabic numerals refer to the assignment number in this manual, and the numbers in parentheses refer to the page numbers of the reading assignments in your Dunmore and Fleischer text.

Part I. The Greek Language and Medical Terminology

1. Introduction; Nouns and Adjectives (xiii–xv; 3–16)
2. Greek Nouns and Adjectives with Multiple Combining Forms (17–28)
3. More Greek Nouns and Adjectives (29–38)
4. Greek Verbs (39–50)
5. Greek Vocabulary (51–61)
6. More Greek Vocabulary (63–73)
7. Still More Greek Vocabulary (75–84)
8. Midcourse Examination

Part II. The Latin Language and Medical Terminology

9. Introduction; Nouns and Adjectives (87–105)
10. Latin Verbs (107–119)

Part III. Systems of the Human Body

11. The Cardiovascular System (123–136)
12. The Respiratory System (137–148)
13. The Digestive System (149–162)
14. Ophthalmology (163–174)
15. Gynecology (175–186)
16. Urology (187–200)

This course will not make use of Units 4 and 5 in your textbook. If you are taking this course while working as, or expecting to work as, a professional in a medical field, these units are certainly worthy of your time outside of this course. But because their format does not correspond to the format of exercises established in the previous fifteen lessons of your text, they are omitted from this course.

**Study
Suggestions**

If you have already looked through the text, you may be intimidated by the long lists of seemingly unpronounceable terms, as well as the Greek and Latin roots, which bear little resemblance to English words already in your vocabulary. You will soon find that the medical terms formed from these roots fall into patterns; learning one new term will give you immediate access to a dozen others. Look, for example, at Appendix F on pages 285–297 of your text; a glance down any column will show that most roots appear in a variety of related terms.

To build your vocabulary, however, you must be prepared to memorize the roots and some of the more important terms. Learning medical terminology is like learning a foreign language; there is no substitute for memorization. Each lesson in Dunmore and Fleischer contains a section marked **Vocabulary** (pages 7–9 in Lesson 1). There are four columns: Greek (or Latin) Word, Combining Form(s), Meaning, and Example. **For each Greek or Latin word in the list, you must learn all combining forms and possible meanings.** Meanings in brackets are the only exception; the brackets indicate the original meaning of the word and not the meaning used commonly today. You will not be *required* to learn the Greek and Latin words in the list, but be advised that they do sometimes appear in medical terminology in their original forms, with original endings, rather than in the English

combining form that you have learned. See, for example, Lesson 1, Exercise 1, #16, **diencephalon**, a word in which the ending is **not** a suffix but rather derives from the spelling of the original Greek (listed in the vocabulary as *enkephalon*). Spend some time looking at the Greek and Latin words to familiarize yourself with their patterns of spelling and endings; that way, you will avoid confusion on the rare occasions when you see them used in their original forms.

Study the list for each lesson until you can produce the combining forms given the meaning or vice versa. A good method is to make flash cards for each lesson, with combining forms on one side and meaning(s) on the other. This may seem elementary and time-consuming, but if done as you are learning the new vocabulary for each lesson, it will aid memorization and retention (it will also simplify your study for the midterm and final exams). Get a friend to quiz you, if possible. Use all the techniques that you would use in learning the vocabulary of a foreign language.

When possible, each assignment in this study guide provides a list of common nonmedical English words that contain a combining form you are to learn in that lesson. Association of these medical bases with a word you already recognize should help your memorization and comprehension of your new vocabulary. In addition, each assignment in this manual will include a list of important or difficult medical terms from the textbook lesson. You should incorporate these terms into your active vocabulary.

Vocabulary is only one part of each lesson in the textbook. The lessons also include information on the Greek and Latin language, the mechanics of building terms from roots, and human anatomy. Each lesson also contains etymological notes (often fascinating digressions into the history of words). Unfortunately, this course is not the place for extended discussions of how words are formed. For now, you will have to be satisfied with the brief but interesting explanations in your textbook. If you discover that you are just as interested in word formation as you are in medicine, consider taking a regular etymology course (offered at most colleges and

universities, and also through Self-paced Courses as CLAS 125).

You should read each textbook lesson and its corresponding pages in this study guide thoroughly **before** beginning the exercises. Many exercises will be assigned. All are aimed at acquainting you with terms that use the roots, prefixes, and suffixes you are learning. Exercises that are not assigned may be completed optionally. Medical terminology is like any other language or skill—the more practice, the better. Our joint goal for the course is medical fluency for you, the student—that is, no need for a medical dictionary. Exams will contain words both assigned and unassigned, but all terms will be taken from your textbook. So it is greatly to your advantage to do as many extra exercises as time will allow.

Written Work

All exercises will be found in the Dunmore and Fleischer text, and most will call for a definition. Do not just look up the word in your medical dictionary and write down the given meaning. This is not a course in dictionary use; you learned how to do that long ago. A better method is to attempt to define the word on your own first, based on your personal analysis of the bases, prefixes, suffixes, and part of speech. Then check the dictionary for any difference in the actual meaning. This is the best way to learn quickly how medical roots most commonly combine and to spot roots that do not work as you might expect. Also make sure that you can spell the words correctly; you will see later that many combining forms have similar spellings. Finally, please do not hesitate to ask questions when you submit your written work.

Exams and Grades

A midcourse exam is included (Assignment 8) in order to show you what is expected in the final exam. The midcourse exam is to be taken at home, but you ought to take it as though it were supervised, since it is your only practice for the final exam. Study for it by reviewing carefully Lessons 1–7; see the introduction to Assignment 8 (the midcourse exam) for more specific details. The midcourse exam will be worth 10 percent of your total course grade.

The final exam will be cumulative (Assignments 1–16), but in all other respects it will be like the midcourse exam. Please see "How to Schedule a Self-paced Courses Exam" at the end of this manual when you are ready to schedule your final exam. Final exams are scheduled through the Self-paced Courses office. Your instructor does **not** have any control over scheduling, mailing, or supervising the examination.

Remember: You must pass the final in order to receive credit for the course. A failing grade on the final exam is an automatic failing grade for the course; otherwise, the final examination will count as 25 percent of the total course grade.