

AN INDEPENDENT STUDY COURSE BY CORRESPONDENCE
Paralleling the Course of the Same Name and Number
Offered in Residence by
Texas State University-San Marcos
San Marcos, Texas

HIM 2360
Medical Terminology

2004 Edition
(Three Semester Credit Hours)

Prepared by

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Important Information

Before beginning work in your course, you will find it helpful to familiarize yourself with the policies and procedures of the Texas State Office of Correspondence Studies contained in your student handbook and on our website. In addition to this, the following pages contain information important to know when taking a course from our office. Please take the time to read through this section carefully.

Textbooks and Course Materials

Be sure to purchase all materials required for your course within thirty days of your enrollment date. After thirty days, course materials may become unavailable. If you need to order additional textbooks or course materials, you will find an order form in the back of the current course catalog and on our website.

Making a Schedule

You have nine months to complete your course. To meet graduation or other personal deadlines, you may need to complete your course earlier. If, at the end of the enrollment period, you need more time to complete your course, one three-month enrollment period extension is allowed for an additional fee. No course may be completed in less than forty-five days.

Using the Personal Study Schedule in the front of this study guide, set a reasonable schedule for submitting each assignment and taking any required exams. When making your schedule, keep in mind that unless otherwise stated in the Introduction of this study guide, you may submit no more than two assignments per week. Consider the mail time involved with a correspondence course. You should plan around dates when the university is closed for extended periods of time and faculty will not be on campus or grading correspondence assignments. Also be aware that it will take longer to get your assignments graded during exceptionally busy times for faculty, such as when final exams are being administered in on-campus classes. **Allow four weeks for final grades to be reported to the Texas State registrar. Allow additional time for receipt of transcripts.** It is your responsibility to know your personal deadlines. Take these into consideration when making your schedule, particularly if you need to complete this course to graduate. Once you have constructed a study schedule, stick to it. Refer to it often to ensure that you are staying on track. If you should fall behind, amend your schedule so that it is still a useful tool for helping you complete the course in a reasonable amount of time.

Doing and Submitting Assignments

Follow assignment directions carefully. If possible, type your assignments. If you are unable to type your assignments, print legibly in ink unless otherwise directed by the instructor. For mathematical work, show all calculations and circle your final answer.

Identify your work. Number all pages of your assignment and include on each page the course prefix and number, the assignment number, and your name. (This is especially important for assignments submitted via e-mail.) Attach one of the assignment cover sheets from the back of this study guide to your assignment. Fill out all information completely and clearly. If you have questions, ask them on the cover sheet. Your instructor or our office will respond in the space provided. **Make a copy of your work.** This will save you from having to redo your assignment if it is lost.

When the Office of Correspondence Studies receives your assignment, its submission is noted and it is forwarded unopened to your instructor. Your instructor may take up to ten working days to grade and return your assignment to our office, where the grade is then recorded and the graded assignment is returned to you.

Submitting Assignments by Mail

Place your assignment in one of the pre-addressed envelopes provided. If you find the envelope is too small for your entire assignment, obtain a larger envelope and record on it your return address, course name, and assignment number. Do not split an assignment and mail it in two separate envelopes. Send in the Instructor's Grade Card with Assignment One. Never give or send your assignment directly to your instructor.

Be sure your assignment has sufficient postage to avoid any last minute delays. You must pay any outstanding postage fees incurred during your enrollment period to avoid a hold being placed on your records. Mail exam request forms separately from your assignments; do not mail an exam request form in the same envelope with an assignment.

Submitting Assignments by Fax

In some courses, you may fax your assignments to our office for an additional fee. Check the Introduction of this study guide to see if your instructor will accept faxed assignments. When faxing an assignment to our office, fill out the assignment cover sheet and use this as the cover sheet for your fax. Always call to verify receipt of the assignment and the total amount of the fax charge. Remember, if you choose to fax Assignment One, you will also need to mail in the Instructor's Grade Card.

Submitting Assignments by E-Mail

Some instructors allow students to submit assignments as e-mail attachments to corrlessons@bluesky.mediasrv.txstate.edu. Check the Introduction of this study guide to see if e-mail submission of assignments is an option for this course. All e-mail submitted assignments

should be saved as MS Word documents. If you submit your assignment in a format that the instructor is unable to access, you will be asked to resubmit the assignment as an MS Word document. **When submitting your assignment, please be sure to note the course number, the assignment number, and your name in both the subject area and the body of the e-mail message.** For instance, the second assignment for ENG 2340 would read as follows:

ENG 2340-Assignment Two-Jane Smith

Also, be sure the file you attach to this e-mail is clearly identified with your name and assignment number as follows:

JaneSmith2

Following these instructions carefully will expedite the return of your graded assignment. Remember, do not submit e-mail assignments directly to the instructor. The Office of Correspondence Studies will forward these assignments to the instructor, who will then post grades back to our office via e-mail. You will then receive your grade and instructor comments from our office via e-mail. If you choose to e-mail Assignment One, be sure to mail in the Instructor's Grade Card separately.

Exams

Almost all correspondence courses require you to take at least one exam. For these courses, a minimum grade on the exam(s) is required to pass the course independent of the grades you earn on the assignments. An explanation of the exam grade requirement for your course can be found in the Introduction of this study guide.

If you live at a distance from the Texas State campus and need to have your exam proctored, be sure to read the information on exam proctors in the About Your Exam section of this study guide. We will contact all proctors for verification. Review proctor requirements to avoid possible delays in your exam being mailed to your testing location.

Reporting Course Grades and Incompletes

All assignments must be completed and all exams must be taken for you to receive credit for your course. Once you have completed your course and the instructor has determined your final grade, you will receive a final grade report. Letter grades of A, B, C, D, and F are used for final grades. The lowest passing grade is a D. There is no pass/fail grading option for any course except MATH 1311. Final grades are sent to the Texas State registrar only if you complete the course. No grade is reported if you do not complete the course. If your enrollment expires or you elect to discontinue, no transcript entry is made. The Texas State Transcript Office will send one complimentary transcript to you or, with advance notice, to the institution of your choice.

Additional Resources

The Texas State Library

All Texas State students, including correspondence students, receive library support services from the Alkek Library, located on the main campus. The Library website www.library.txstate.edu is your essential portal to resources and services. Distance learning students are also eligible for additional assistance (including document delivery) from the Distance Services Librarian. Some library resources may require a Texas State username and password, which you may obtain by contacting the Texas State Office of Correspondence Studies. Please contact the Alkek Library for more information on specific library services:

Library homepage—www.library.txstate.edu

Reference Desk—512.245.2686

Email reference—linked onto library homepage & directly at

<http://server3.lrc.txstate.edu/cgi-bin/qform.cgi>

Distance Librarian—866.255.3511 or LK02@txstate.edu

Distance webpage—also linked onto library homepage & directly at

<http://www.library.txstate.edu/ref/dist-learn/>

Online Tutoring

The Texas State Office of Correspondence Studies provides students with online tutoring for correspondence courses offered through our office. The subject areas in which students can receive help include math, writing, and Spanish. For detailed information about this service, visit our website or contact us by phone.

A Final Word

The Office of Correspondence Studies will work with you to see that you benefit from and enjoy correspondence study. Should you have any questions about our procedures, call 512.245.2322 from 8 a.m. to 5 p.m. Central Time, Monday through Friday. If you have questions concerning course content, use the assignment cover sheets to communicate with your instructor. The Texas State University-San Marcos Office of Correspondence Studies is committed to offering you the highest quality educational experience. We appreciate feedback concerning our services to you, your instructor, and ideas for new courses. For our most recent catalog, call or write:

Texas State University-San Marcos
Office of Correspondence Studies
601 University Drive
San Marcos, TX 78666-4615

Telephone: Local 512.245.2322

Toll-free 800.511.8656

Fax: 512.245.8934

Website: <http://www.txstate.edu/correspondence>

E-mail: corrstudy@txstate.edu

Personal Study Schedule

Here's a planning schedule to help you successfully complete your course. Follow these steps:

First, enter the course abbreviation and number and today's date at the top of the schedule. This is the date you began the course.

Second, enter your deadline for completing the course at the bottom of the schedule. Be sure to allow for holidays and breaks between semesters.

Third, enter the dates you plan to take each exam.

Fourth, enter the dates you plan to mail each assignment.

Planning Schedule

START I began _____ on _____.

	Planned	Actual	Date	
Assignment	Date	Date Sent	Received	Grade
1	_____	_____	_____	_____
2	_____	_____	_____	_____
3	_____	_____	_____	_____
4	_____	_____	_____	_____
5	_____	_____	_____	_____

MIDCOURSE EXAM I plan to take the midcourse exam on _____.

6	_____	_____	_____	_____
7	_____	_____	_____	_____
8	_____	_____	_____	_____
9	_____	_____	_____	_____
10	_____	_____	_____	_____

FINAL EXAM I plan to take the final exam on _____.

DEADLINE My grade must be received on _____.

CORRESPONDENCE NOTE:

Plan your personal study schedule wisely, so you will get the most out of the course.

About the Author & Instructor

Sue Biedermann is an Associate Professor and Chair of the Health Information Management Program in the Texas State College of Health Professions. She holds professional credentials of R.H.I.A., Registered Health Information Administrator through the American Health Information Management Association. She has taught at Texas State since 1980.

Her prior professional experience includes a tenure as director of a hospital medical record department. She is active in the state and national health information management professional associations and has held several leadership positions with these associations. Her current teaching assignments include healthcare statistics, comparative record systems, and departmental management.

Ms. Biedermann welcomes your questions and comments concerning course material. She can be reached at 512.245.8242 or via e-mail at SB02@txstate.edu.

CORRESPONDENCE NOTE:

If you have any questions for your professor, type them up and submit them along with your assignments.

HIM 2360

Medical Terminology

Scope and Nature of the Course

Welcome to medical terminology. Medical terminology is the language used for communicating about diseases and medical conditions in the healthcare delivery system. It is a universal language with Latin and Greek being the basis for many of the terms.

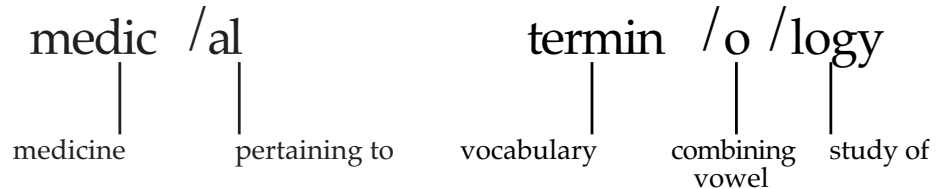
For the most part, medical terms are formed by joining together the building blocks of the language—the prefixes, suffixes, and combining forms or root words. Let's look at a common example such as *cardio-* or *card-*, which is a combining form denoting relationship to the heart, the cardiac orifice, or portion of the stomach (*Dorland's Illustrated Medical Dictionary*). This is an example of a combining form or root form, from which many medical terms can be built by adding prefixes and/or suffixes that will then communicate important medical information in a universal language.

Several of the prefixes and suffixes commonly used with *cardio-*/*card-* are *-itis*, inflammation of; *-tomy*, process of cutting, incision; *-ectomy*, excision, removal; and *peri-*, around. Using these prefixes and suffixes, you can form the following terms:

- carditis—inflammation of the heart
- pericardium—the sac which surrounds the heart
- pericarditis—inflammation of the pericardium
- cardiotomy—surgical incision of the heart
- pericardotomy—surgical incision of the pericardium
- pericardectomy—surgical excision of the pericardium

Literally hundreds of words can be made with the root or combining form *cardio-* / *card-* using different prefixes, suffixes, and other roots. Yes, there are many of these suffixes, roots, and prefixes to learn, but let's review common parts of words we use everyday. You will see that you already have a start on mastering the definitions of the medical terminology building blocks.

Sub- is a prefix signifying "below or under." With this in mind, think about the words *subway* and *submarine*. Do the meanings of the words *exit* and *exile* make sense when it is known that the prefix *ex-* means "out"? Even the meaning of the words *medical terminology* can be determined by breaking these words down into their component parts, determining the meanings of each part, and then putting the meanings together in a logical format. This process is illustrated below.



Thus, *medical terminology* is the study of vocabulary pertaining to medicine.

Course Objectives

When you have successfully completed this course, you will be able to do the following:

- analyze the elements of a medical term and define these elements and the term as a whole;
- construct medical terms from prefixes, roots, and suffixes;
- use the textbook and other resources to locate definitions, correct pronunciation, and find plural forms of terms;
- differentiate lay terminology from appropriate medical terminology;
- recognize and write standard abbreviations for medical terms;
- identify common drug terms, laboratory tests, and radiological terms; and
- interpret meanings of medical terms as used in a given context.

Textbooks and Materials

Chabner, Davi-Ellen.

The Language of Medicine, 6th ed. Philadelphia, PA: W.B. Saunders Company, 2001. ISBN 0-7216-8569-2

You will not hear the terms for proper pronunciation and appropriate use in sentences by taking this course via correspondence study. For this reason, you are encouraged to seek opportunities to hear medical terms being spoken and in proper context. You can do this by listening and talking to healthcare practitioners, by watching and listening to medically related programs on television and radio, or by studying with other students to practice saying the words from the text using the pronunciation guides. Each chapter of the text includes a section on the pronunciation of terms which you can refer to. There is also a set of audio tapes which accompany the text available for purchase from the publisher. These tapes include pronunciation of terms and opportunities to hear the terms being used in complete sentences to illustrate meaning.

Course Procedures

You have chosen to enroll in a course in medical terminology by correspondence study. It can be completed successfully in this format if you accept the responsibility for making these words, parts of words, and phrases a part of your vocabulary.

Each lesson begins with a list of objectives. Read these objectives before you read the assigned chapters in the textbook. By reading the objectives first, you will be able to narrow your focus and understand the scope of the lesson. When you've completed a lesson, it's a great idea to read the objectives again to see if you met the lesson goals.

With each lesson of this study guide, you will be directed through approximately two or three of the textbook chapters. However, you should read one chapter at a time and achieve a good command of the terms in that chapter before proceeding to the next. Periodically, you should return to previous chapters to review and reinforce the information. As you continue through the book, you will soon recognize that there is much repetition and that there is a pattern for building and defining the medical terms.

Required Textbook

Remember to buy the textbook within thirty days of your enrollment.

Lesson Objectives

Reading Assignments

Discussions

The discussion sections of each lesson highlight important aspects of the reading assignments and supplement the textbook with additional information. Often, the discussion offers advice and solutions for some of the more difficult terms and concepts.

Assignments

With each lesson you must submit an assignment. These assignments generally include matching prefixes, suffixes, and roots with their definitions, building terms, defining terms, and answering multiple-choice questions.

You must earn a score of **sixty or higher** on final exam to receive a passing grade for this course.

Grading Policy

Your final grade for this course will be determined as follows:

Assignments	25%
Midcourse Exam	25%
Final Exam	50%

You must earn a **score of sixty or higher** on the comprehensive final exam to receive a passing grade for this course.

The following is the scale I will use to determine your course letter grade:

90–100	A
80–89	B
70–79	C
60–69	D
below 60	F

Academic Honesty

As stated in the *SWT Official Student Handbook and Code of Conduct*, “Learning and teaching take place best in an atmosphere of intellectual fair-minded openness. All members of the academic community are responsible for supporting freedom and openness through rigorous personal standards of honesty and fairness. Plagiarism and other forms of academic dishonesty undermine the very purpose of the university and diminish the value of an education.”

If you are found guilty of academic dishonesty, which includes, but is not limited to, cheating on an examination or other academic work to be submitted, plagiarism, or collusion, you may be subject to disciplinary action.

Academic work means the preparation of an essay, thesis, report, problem assignments, or other projects which are to be submitted for purposes of grade determination.

Cheating means

- copying from another student’s test paper, laboratory report, other report or computer files, data listing, and/or other programs.
- using unauthorized materials during an exam.
- collaborating without authorization with another person during an exam or in preparing academic work.
- knowingly and without authorization, using, buying, selling, stealing, transporting, soliciting, copying, or possessing, in part or whole, the content of an unadministered exam.
- substituting for another student—or permitting another person to substitute for you—when taking an exam or preparing course work.
- bribing another person to obtain an unadministered exam or information about an unadministered exam.

Plagiarism means the appropriation of another’s work and the unacknowledged incorporation of that work in one’s own written work.

Collusion means the unauthorized collaboration with another person in preparing written work.

Academic Offenses

CORRESPONDENCE NOTE:

Always attach an assignment cover sheet, found in the back of your study guide, to the assignments you submit.

Word Structure & General Terms

Reading Assignment

The Language of Medicine:

Chapter One, "Basic Word Structure"

Chapter Two, "Terms Pertaining to the Body As a Whole"

Objectives

After completing this lesson, you should be able to do the following:

- list the benefits of studying medical terminology;
- divide medical terms into their component parts;
- determine the meanings of medical words composed of basic combining forms, suffixes, and prefixes;
- build medical terms by using the basic combining forms, suffixes, and prefixes;
- locate and name the anatomical and clinical divisions of the body; and
- express the terms that describe positions, directions, and planes of the body.



Review these objectives again after completing this lesson.

Discussion

Chapter One, “Basic Word Structure,” provides a wonderful introduction and, along with the next few chapters, will provide the foundation on which you will build with all subsequent chapters. As you begin to study medical terminology, you should understand that it is much like learning a foreign language. The key to learning this language is to recognize that the terms can be broken down into parts. The meanings of these component parts can then be determined and put together in a logical format to give the meaning of the term. You should not attempt to memorize all of the terms. Instead, develop a good command of the parts of words. Subsequent chapters in the text continue to use and build on the information that is presented in the introductory chapters.

Although much anatomy and physiology is included in this course and in the textbook, *HIM 2360* is not intended to be an A & P course per se. However, a second objective of learning medical terminology is to relate the terms to the structure and function of the human body. Using the terms in this A & P context will make them easier to remember.

A final objective for the course will be to point out peculiarities, such as words that have similar pronunciations but which are spelled differently.

As presented in the first chapter of the textbook, you must learn to recognize elements of a medical term, which can be illustrated with the following example:

sub / acute gastro / o / enter / itis
| | | | | |
prefix root root combining root suffix
vowel

Chapter One introduces you to a number of the basic combining forms, suffixes, and prefixes that you will use throughout the course. Use the exercises in the textbook to begin to learn the meanings of these building blocks. Try to keep your definitions as simple as possible, as they will be much easier to remember this way. After you have worked through some of the exercises, try to make additional words on your own by using the “parts” of words.

One reason this textbook was selected was because of its workbook format, which allows you the opportunity to practice and use what you are learning. Take advantage of the exercises provided, write the terms and definitions, and try to use the words in context. Remember, you are learning a language—a means of communicating—so it will take practice.

Do not submit the exercises in the Chabner textbook. The assignments you should submit for grading are located at the end of each lesson, after the self-help exercise.

As mentioned earlier, relating medical terms to the structure and function of the body enhances understanding and makes the information seem more “real.” In the first reading assignment, Chapter Two contains terms that relate to the body as a whole. Read all of the material, but pay particular attention to the names of the body systems and organs contained in the systems. The majority of the material for this course is presented in a body system format, and you will be introduced to the associated terms for each respective system as it is covered.

For a comprehensive understanding of the terms, it is important to know the regions and quadrants of the body as well as the positional and directional terms, all of which are presented in Chapter Two. Many times these terms will be used to modify or make other medical terms more specific. The combining forms, prefixes, and suffixes exercises, where you are asked to write the meanings of the term, are the most helpful in providing you with the foundation you will need. Notice how some of the combining forms come from words presented earlier in the chapter. For example, the cervical division refers to the neck region. In the exercises you are shown that combining form is *cervic/o*, which means neck. This combining form can now be used in terms pertaining to either the neck of the body (*cervicodynia*=pain in the neck) or the neck of the uterus (*transcervical*=performed through the cervical, or neck, opening of the uterus), but in either case refers to a neck region.

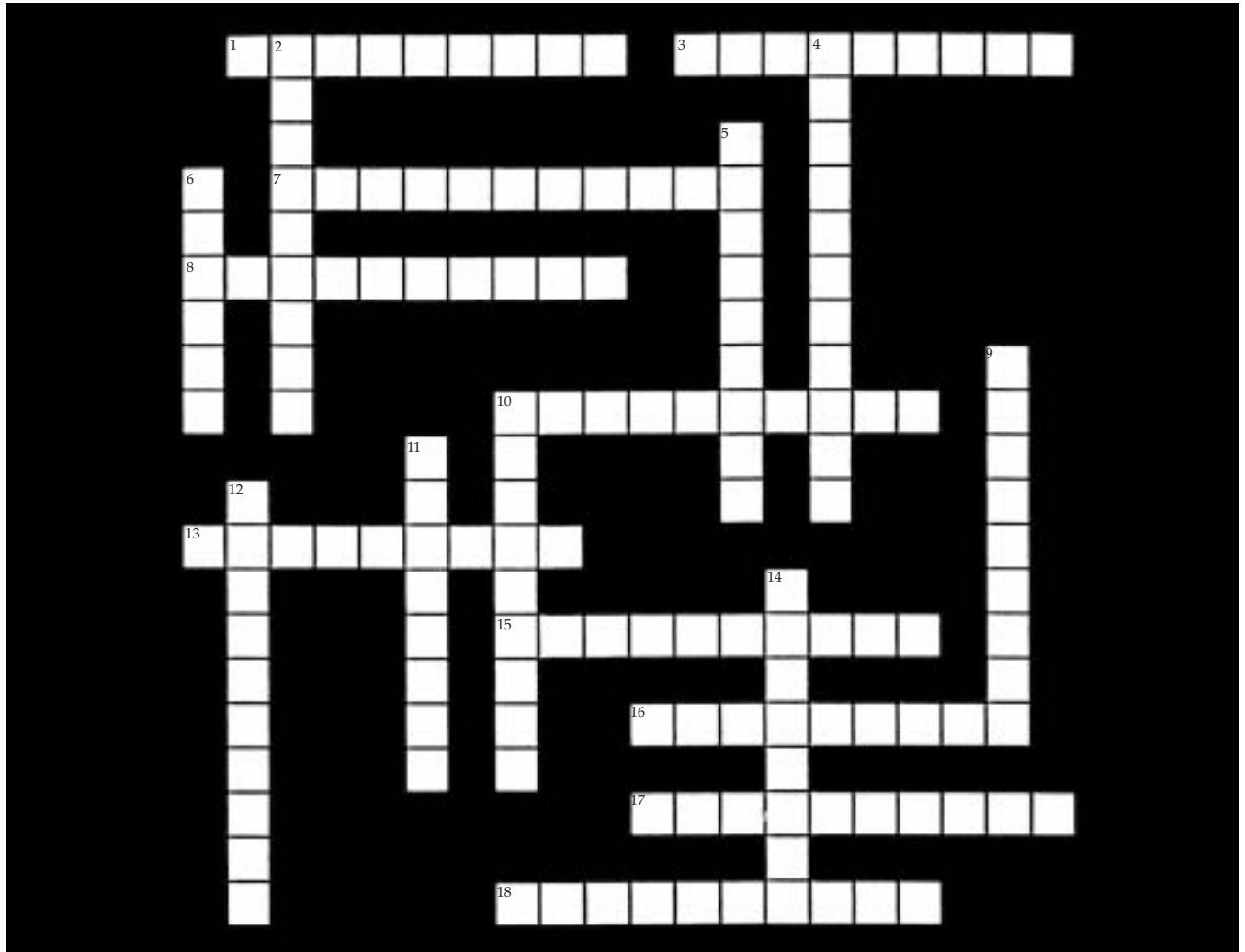
A number of different kinds of exercises are presented in each of the textbook chapters. You should determine your own best way for using these exercises to make the words and word forms part of your vocabulary. You should study the words and try to complete the review sheets in the textbook without referring to the answers to assess your comprehension of the material. Other means of study-

ing that some students find helpful include making flash cards, writing the words and definitions several times, and/or studying with a partner to ask each other questions. You should have a fairly good command of the words presented in the lesson before you complete the assignment for a grade.

Self-Help Exercise One



For more review of the material in this lesson, complete this crossword puzzle. Do not send this exercise in for grading. The answers are provided in the appendix of this study guide.



Across Clues:

- 1) Process of cutting back (removal)
- 3) Complete knowledge
- 7) Red blood cell
- 8) Pertaining to above the stomach
- 10) Study of women's diseases
- 13) White blood cell
- 15) Pertaining to produced by treatment
- 16) Inflammation of the liver
- 17) Pertaining to under the skin
- 18) Pertaining to below the liver

Down clues:

- 2) Inflammation of the small intestine
- 4) Removal of the stomach
- 5) Study of nerves
- 6) Blood condition of low numbers of erythrocytes or deficient hemoglobin in the red cell
- 9) Before knowledge (prediction about the outcome of treatment)
- 10) Inflammation of the stomach
- 11) Process to cut into a part of the body
- 12) Study of the kidney
- 14) Mass of blood under the skin

CORRESPONDENCE NOTE:

Always retain a copy of the assignment in case it is lost in the mail.