

Health Sciences 1110

Biomedical Terminology

Student Course Materials

Flexible Learning in the Learning Commons

College of DuPage

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Notes:

Section 1: Syllabus

Catalog Description Including Prerequisites

Course prefix and number: Health Science 1110

Course title: Biomedical Terminology

4 credit hours:

Course Description: Introduction of medical terms for each body systems and specialty medical fields. Includes word roots, prefixes and suffixes commonly encountered in the healthcare field. Previous medical background unnecessary. Repeatable for credit: No. Prerequisites: None

Course Goals & Expected Student Outcomes

Upon completing the course objectives, you need to realize that this course is a “beginning.” The information contained in this course will provide a framework for future courses and practice. The emphasis of this course is language, not anatomy and physiology. Practice and adaptation to your own situation will be required once you are on the job and pursuing additional course work.

Course Objectives

Upon successful completion of the course the student should be able to do the following:

- Develop the ability to read, understand, spell, and pronounce the language of medicine by body systems and specialty medical fields
- Recognize the components of medical words (roots, prefixes, and suffixes) in body systems and specialty medical fields
- Compare and contrast the relationship between medical terms and their synonyms in common language
- Analyze the meaning of unfamiliar medical words by breakdown into word components
- Translate medical and surgical abbreviations into their meanings
- Demonstrate a basic knowledge of anatomic terms related to the different anatomical systems and specialty medical fields

Course Materials

Textbook

The Language of Medicine, Davi-Ellen Chabner, 9th Edition, W.B. Saunders, Philadelphia, PA, 2011.

Orientation

An optional orientation is offered at the beginning of each term at specified times. Check the dates and times listed in Orientation and Deadline Dates sheet. This information is posted on Blackboard. You may also arrange for a more individualized orientation by contacting the instructor during their scheduled hours; these hours are listed in the Contact Information and Availability sheet. This information is also posted on Blackboard. It is helpful if you read through your packet first and then call or email with specific questions.

The student works independently with instructors available to assist the student. Students can initiate contact with their instructor via email, telephone, or in person.

Additional information regarding orientation can be found in the “Orientation” tab of Blackboard.

Exams and Evaluations

Examinations

This course is developed based on units (three chapters/unit). You should take the first exam when you are ready and have completed the other assignments for Unit 1. Do not proceed ahead nor complete any other activities required for other units. Each chapter in the book helps you for the next one so you should complete all activities and test in each unit before beginning another.

Each Unit, 1 through 7, requires completion of a written examination (multiple choice and build the medical term: 60 questions). All tests are taken electronically in Blackboard. Tests are not scheduled by the instructor, nor are there due dates. When you are prepared for the Unit 1 exam, go to the Testing Center and take the Unit 1 test. Students may take their tests in the Testing Center in Glen Ellyn (BIC 2405) or one of the Off-Campus Learning Commons in Bloomingdale, Naperville, and Westmont. A photo I.D. is required.

For fall/spring students, if you take Unit 1 exam within the first three weeks after the first day of school (21 days) you will receive 5 extra credit points.

For summer students, if you take Unit 1 exam within the first two weeks after the first day of school (14 days) you will receive 5 extra credit points.

Pronunciation Sessions

In order to demonstrate your ability to correctly articulate medical terms, you are required to articulate identified terms from 5 of the 7 units. The pronunciation terms ARE NOT the first terms in the chapter. Read the course map/syllabus carefully to ensure you are pronouncing the correct terms for the identified units.

To complete this activity call 630-942-3392. At the start of each phone call, say and spell your name, identify the Learning Commons where you are registered, and unit number. Each unit of

15 items should be called in separately. Pronounce the identified terms without saying “#1 is...”.

Case Translations

Translate the assigned cases as documented in your Course Map. Type the document in Microsoft Word and submit electronically through “Assignments” in Blackboard. There are 4 case translations to be completed.

Type the medical case reports exactly as they appear on the page. After every medical term, put the definition of each term in parenthesis. Make sure to use “layman’s english” – how you would describe the term to your neighbor. We check sources like Wikipedia and are familiar with most medical references.

Example: The patient experienced RLQ (right lower quadrant) pain and a diagnosis (state of complete knowledge) of appendicitis (inflammation of the appendix) was given. An appendectomy (removal of the appendix) was recommended.

Grading Policy

Your final grade will be based on the following required activities which total 575 points. All grades and instructor comments are posted in Blackboard.

		<u>TOTAL</u>
Examinations 1-7	60 points each	420
5 Pronunciation Sessions	15 points each	75
4 Case Translations	20 points each	80

Calculation of grades is as follows:

Grade	Percentage	Points
A	92% - 100%	529 – 575
B	83% - 91%	477.25 – 528.9
C	74% - 82%	425.5 – 477.24
D	66% - 73%	379.5 -425.4
F	65% and below	379.4 and below

Testing Locations

Tests for this course may be taken at the Testing Center in Glen Ellyn (BIC 2405) or one of the Off-Campus Learning Commons in Bloomingdale, Naperville and Westmont. Students are required to comply with the Deadline Dates, posted on Blackboard in the Deadline Dates link and comply with specific testing instructions provided by the instructor. Appointments are not required for testing.

When you are ready to take an exam, sign in at the front desk. You will be expected to write in the date, course name and number, the instructor’s name, test number, and time the exam is

taken. You must present a photo ID as well. You may not use notes or books during the exam. No food, drink, pagers or cell phones are allowed in the testing room.

All tests must be completed in one sitting. All tests will be collected 10 minutes prior to closing. It is important for you to plan sufficient time to complete your test within the Center's hours. No additional time will be given to complete a test. No tests are distributed 30 minutes prior to closing.

Scores of exams are available in Blackboard. The student may view the test results with their instructor in the Learning Commons. Scores of essay exams (if any) are available from the instructor. A progress report may be mailed to the student. You must show a picture ID.

Important Test Taking Instructions

Blackboard test are designed to be completed in one session.

If you try to click over to another Blackboard section while active in a test, you will lose access to the test. Do not open new browser windows and/or tabs while active in a test. You may not login to another session (i.e., open a new browser or tab and log into Blackboard) while active in a test. Your original session will be terminated and you will lose access to the test.

A logout may occur due to user error or may be caused unexpectedly by a server or session timeout, or a loss of internet connection. Should that occur during testing, please ask the Testing Center assistant for a paper test. The testing center cannot recover the test for you.

Paper Tests

You must complete the entire paper test as the online test questions are randomizing. There is no way of knowing which questions you did or did not complete online. Both the paper test and the online test will be reviewed by your instructor.

Test Navigation

Use only the on-screen navigational tools in Blackboard. Do not use your keyboard arrow keys, ESC key, backspace key, etc. This will abort the test.

Clicking on the arrow to move to the next question will save your answer. Please be patient while the page refreshes; it may take a second to load/refresh.

To see what questions you have and have not answered, and to navigate directly to them, click on the blue "Test/Survey Status" that appears above the questions. Each question number has a box; gray boxes you have already answered, white boxes you have not. Click on the boxes to navigate among questions. This is an easy way to skip a question and come back to it. Clicking on the last question number will take you to the end of the exam and the "submit" button. To quickly get to the first or last question, use the double arrow keys in the lower right corner. You can only "submit" your test for grading from the last question.

Test Submission

Make sure to click “save and submit” when you have finished all questions. Allow time for the test to submit.

If you get the following message: “The following questions may be incomplete: ##, ##, Continue?”. Click “Cancel” and return to those question numbers for verification. If you click “OK”, your test will be submitted with those questions not answered. When done, click “save and submit” again.

After clicking submit you will see your test score. Print this page for the testing center. You are not able to view test questions or answers. Contact your instructor if you would like to review your test. Your score will be available in the MyGrades section of Blackboard.

Satisfactory/Fail (S/F) Grade Option

The instructor retains the prerogative to determine whether the “Satisfactory/Fail” option is applicable to the course. It is the responsibility of the instructor to set deadlines for a student’s grade option decision and communicate these deadlines to the student during the student’s first week of instruction. All students desiring the “Satisfactory/Fail” option must sign an agreement with the instructor confirming the use of the “Satisfactory/Fail” grading option. Grade option forms will be submitted to the Registration Office by the instructor 1 week prior to the end of the course. Grade options will not be changed after they have been sent to the Records office. The satisfactory or “S” grade will not be computed in the GPA; the fail or “F” grade will be computed. Students seeking an associate’s degree may apply only a limited number of satisfactory or “S” credit toward these degrees.

Incomplete Policy

Upon the request of a student, the instructor may give an incomplete or “I” grade when a student has been unable to complete the course within the prescribed time for some unavoidable reason. A substantial portion of the course must be completed (Units 1 through 4 with a letter grade of C or better) to qualify for an “I” grade. The student is responsible for contacting the instructor regarding course completion. The “I” grade may be changed within the time limits established by the instructor. The student must sign a “Contract for Incomplete Grade” form with the instructor before an incomplete grade can be issued. Further information concerning the “I” grade may be found in the College catalog.

Withdrawal Policy

Course Withdrawals

Students are encouraged to consult directly with the instructor when considering a course withdrawal. The student may withdraw from a course by contacting the Registration office up to the mid-term date of the class. Thereafter, a grade will be assigned which reflects the student's actual performance in the class. Exceptions require an agreement with the instructor and the student. Written permission to withdraw signed by the instructor must be presented to the Registration office by the student prior to the end of the term.

Medical Withdrawals

Medical Withdrawals: Requests for medical withdrawals should be made to the Dean of Enrollment Services. Send medical forms to Student Registration Services, SSC 2221, (630) 942-2687. Requests should be made in writing and accompanied by documentation from a physician or medical institution to verify the medical condition, date of onset and estimated length of treatment. [Request forms for medical withdrawals](#) are reviewed individually. Refunds are issued when appropriate within the guidelines of the College of DuPage refund policy. You will receive written notification of the decision within three (3) weeks from the office of the Student Registration Services.

Administrative Withdrawals

Students not actively pursuing the completion of course objectives may be withdrawn from the class by the instructor any time up to two weeks prior to the end of the term and given a grade of "W" without an official withdrawal through the Registration office.

Plagiarism/Academic Dishonesty Policy

All work submitted for credit must be completed by the student who is registered for the course. Disciplinary action will be pursued in all instances in which it is determined that academic dishonesty has occurred. Academic dishonesty can include the dishonest use of course materials such as student papers and exams.

Library Information

The College of DuPage Library has a wealth of information in both print and online formats. The Library homepage is found at <http://www.cod.edu/library>. To access the online sources, click on Article Databases. You may access these databases from within the Library or from the Off-Campus Learning Commons with a College of DuPage library card. You will need to come to the Library or at the Off-Campus Learning Commons to get a card.

The Library is located in the Student Resource Center (SRC) building at the Glen Ellyn campus.

For more information about the Library, visit www.cod.edu/library. Visit <http://www.cod.edu/academics/resources/flexlearning/index.aspx> for hours and other information about Flexible Learning.

Computer Use

The Library computers may be used for more than accessing the Library Catalog and online sources. You can also use Microsoft Word, Excel, PowerPoint, and Access.

Learning Commons computers are intended for all Flexible Learning students; therefore, use must be restricted to tasks that take less than 30 minutes. You may use tutorials and review course materials with your instructor. Access is granted on a first-come, first serve basis.

Academic Computing Center (ACC) is located in the Student Resource Center (SRC) room 3600. The Academic Computing Center is open for use by individuals registered at College of DuPage, as well as, community residents.

Off-Campus Learning Commons welcome Flexible Learning students to use the computers. Access is granted on a first-come, first serve basis. To use computers at the Off-Campus Learning Commons, the person must be currently enrolled at the College of DuPage and have a photo ID.

At all College of DuPage computer labs, you are expected to work independently and bring your own storage media for your work. No peripheral equipment (e.g. calculators, laptop computers, or mice) may be attached to any computer. Students may NOT install software or programs on any computer in the computer labs.

Section 2: Course Map

Unit #	Required Text	Video Tapes & Other Materials	Chapter Study Guide	Assignment/Activity	Exam #
1	<u>The Language of Medicine:</u> Chapters 1, 2, 3	Language of Medicine CD	<i>Chapter 1:</i> Exercises B,D,F,G,H,I,J,L <i>Chapter 2:</i> Exercises C,E,G,J,K,L <i>Chapter 3:</i> Exercises B,D,E,F,G,H,I,J,K,L,M	Complete study guide Exercises identified in the textbook or complete all CD Rom exercises. You do not need to turn these in. <u>Call</u> 630-942-3392 and <u>pronounce</u> the first 15 terms on page 26, from Chapter 1.	1
2	<u>The Language of Medicine:</u> Chapters 4, 5, 7	Language of Medicine CD	<i>Chapter 4:</i> Exercises A,C,D,E,F, H,I, J,K <i>Chapter 5:</i> Exercises C,D,E,F,G,H,K, L <i>Chapter 7:</i> Exercises C, D, E, F, K, L	Complete study guide Exercises identified in the textbook or complete all CD Rom exercises. You do not need to turn these in. <u>Call</u> 630-942-3392 and <u>pronounce</u> the last 15 terms on page 181 from Chapter 5.	2

3	<u>The Language of Medicine:</u> Chapters 8, 9, 10	Language of Medicine CD	<i>Chapter 8:</i> Exercises F,H,I,K <i>Chapter 9:</i> Exercises B,G,H,I <i>Chapter 10:</i> Exercises D,F,G,I,J,L,M	Complete study guide Exercises identified in the textbook or complete all CD Rom exercises. You do not need to turn these in. Translate the case report on page 374-375 into layman's English. <u>Call</u> 630-942-3392 and pronounce the first 15 terms on page 390 from Chapter 10.	3
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Unit #	Required Text	Other Materials	Chapter Study Guide	Assignment/Activity	Exam #
4	<u>The Language of Medicine:</u> Chapters 11, 12, 13	Language of Medicine CD	<i>Chapter 11:</i> Exercises D,E,J,K, M,O,P <i>Chapter 12:</i> Exercises B,C,D,E,H,I,J,K <i>Chapter 13:</i> Exercises A,B,F,G,H,K,M	Complete study guide Exercises identified in the textbook or complete all CD Rom exercises. You do not need to turn these in. Translate the case report on page 483 into layman's English. <u>Call 630-942-3392 and pronounce the last 15 terms on page 496 from Chapter 12.</u>	4
5	<u>The Language of Medicine:</u> Chapters 14, 15, 16	Language of Medicine CD	<i>Chapter 14:</i> Exercises F,G,H,I <i>Chapter 15:</i> Exercises G,H,I,L,N,O,S <i>Chapter 16:</i> Exercises D,H,K,L	Complete study guide Exercises identified in the textbook or complete all CD Rom exercises. You do not need to turn these in. Translate the medical report on page 621 into layman's English.	5
6	<u>The Language of Medicine:</u> Chapters 17, 18, 19	Language of Medicine CD	<i>Chapter 17:</i> Exercises D,E,G,I,K,O,P,Q <i>Chapter 18:</i> Exercises A,B,C,D,F, I, J <i>Chapter 19:</i> Exercises B,C,E, H,I,J	Complete study guide Exercises identified in the textbook or complete all CD Rom exercises. You do not need to turn these in. Translate the operative report on page 724 into layman's English. <u>Call 630-942-3392 and pronounce the last 15 terms on page 786 of Chapter 18.</u>	6

7	<u>The Language of Medicine:</u> Chapters 20, 21, 22	Language of Medicine CD	<i>Chapter 20:</i> Exercises A,B,D,E,F,G, <i>Chapter 21:</i> Exercises A,C,D,E,F,G,I,K <i>Chapter 22:</i> Exercises A,B,C,D,E,F,J	Complete study guide Exercises identified in the textbook or complete all CD Rom exercises. You do not need to turn these in.	7
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Notes:

Section 3: Course Handbook

Foreword

How to Use the Handbook Section

This course handbook should serve as the guide to direct you to the readings and assignments that are required for this course.

If you are starting the course late, your instructor can assist you in setting up a time schedule that would allow you to complete the course on time. Check the Instructor Info in Blackboard for instructor information.

Health Science 1110, The Language of Medicine fulfills all the course objectives through an independent learning format. Some students will be able to complete this course with minimal instructor contact; others will require more contact. Instructors will make every attempt to help you successfully complete this course.

It is critical for you to determine a workable schedule or timeline for yourself. Your self-imposed timeline will contribute to the successful completion of this course. This course is composed of **seven units**, each comprised of three chapters. Fall/Spring students should schedule one unit per two-week period. Summer students should schedule one unit per one-week period.

The **seven units** in this course are structured in the same way. The Unit Overview introduces each of the seven units. The Unit Overview is followed by:

1. A Brief Chapter Overview
2. Chapter Objectives
3. Key Terms
4. Learning Activities
5. Enrichment Activities
6. Unit Assignments
7. Review Questions and Answers
8. Self -Test and Answers
9. Unit Test

Finally, familiarize yourself with the Flexible Learning policies and procedures! Now you're ready to devote your full attention to this course and the successful completion of HEALTH SCIENCE 1110.

Notes:

Unit 1

Overview of the Unit

Unit 1 covers Chapters 1, 2, and 3. Unit 1 is the introduction to biomedical terminology. This includes an overview of analyzing medical terms into individual component parts. The unit will focus on how to separate complicated terms into simpler sub-parts.

Chapter 1

Overview of the Chapter

This chapter covers the general rules for building and analyzing medical terms.

Objectives

At the completion of this chapter, you should be able to:

- **Define** three general rules of medical terms.
- **Be aware** of common spelling and pronunciation problems.
- **Relate** the medical terms to the structure and/or function of the human body.
- **Analyze** terms into component parts through word analysis.
- **Define** the important elements of medical terms.

Learning Activities

Read

The Language of Medicine: Basic Word Structure, Chapter 1, pp. 1-29.

Focus on pages 6-14 and study guide sections contained in your Course Map.

Other Resources

Practice using *Language of Medicine* software and/or The Language of Medicine textbook exercises.

Create 3x5 cards for each chapter. Write the word part on one side and the definition on the opposite side.

Key Terms

Chapter 1

combining form
combining vowel
prefix
root
suffix

Assignments

Pronouncement

Call 630-942-3392. State and spell your name. State the center where you are registered and Unit 1. Pronounce the first fifteen (15) terms from The Language of Medicine textbook, Chapter 1, p. 26 (electroencephalogram to gastric). This is not the first page of terms.

Review Questions

Answer the following review questions, which assist you in preparing for your examination.

1. The combining vowel between two root words should be?
 - a. Dropped
 - b. Kept
2. The combining vowel should be kept before a suffix beginning with a vowel.
 - a. True
 - b. False
3. What is a combining form?
4. Differentiate the terms “prefix” and “suffix”.
5. The foundation of a word is referred to as?
6. List two terms that refer to cancerous or malignant tumors.
7. Differentiate between incision and excision. List the correct suffix each term respectively.
8. Which of the following term below is considered an adverse effect of treatment?
 - a. Prognosis
 - b. Carcinogenic
 - c. Iatrogenic
 - d. Exocrine

Self-Test

Build the medical term

1. Record of electricity in the brain.
2. Removal of a gland.
3. Pain in a joint.

4. Pertaining to through the liver.
5. One who performs autopsies and reads biopsies.

Write the definition:

6. Osteitis
7. Diagnosis
8. Neuralgia
9. Nephrectomy
10. Gastrotomy

Review Question Answers

1. Kept
2. False
3. Combination of root and the combining vowel
4. Prefix – word beginning
Suffix – word ending
5. Root
6. Carcinoma and sarcoma
7. Incision – process of cutting, (-tomy) Excision – removal, (-ectomy)
8. Iatrogenic

Self-Test Answers

1. Electroencephalogram
2. Adenectomy
3. Arthralgia
4. Transhepatic
5. Pathologist
6. Inflammation of a bone
7. Is made on the basis of complete knowledge about a patient's condition.
8. Pain of nerves
9. Resection of a kidney
10. Incision of the stomach

CHAPTER 2

Overview of the Chapter

This chapter presents the basic structural organization of the human body. The healthcare professional must identify and define the basic organization, function, positional, and directional terms to facilitate diagnosis and treatment.

Objectives

At the completion of this chapter, you should be able to:

- **Define** terms that apply to the structural organization of the body.
- **Identify** the body cavities and the purpose of each cavity.
- **Locate** and identify the anatomical and clinical divisions of the abdomen (regions and quadrants).
- **Locate** and name the anatomical divisions of the back.
- **Describe** terms associated with procedural and/or surgical positions, directions and planes of the body.

Learning Activities

Read

The Language of Medicine: Terms Pertaining to the Body as a Whole, Chapter 2, pp. 30-69.
Focus on pages 50-54 and study guide sections contained in your Course Map.

Other Resources

Practice using *Language of Medicine* software and/or The Language of Medicine textbook exercises.

Read professional journal articles. Identify and analyze unfamiliar terms.

Key Terms

Chapter 2

Sagittal	Supine/Prone	Pleural	RUQ
Epithelial	Connective Tissue	Mediastinum	RLQ
Adipose	Abdominal	Peritoneum	LUQ
Cranial/Skull	Spinal	Hypochondriac	LLQ
Thoracic	Pelvic	Sarcoma	Proximal
Disks	Ventral/dorsal	Larynx	Distal
Cavity	Dorsal	Pleura	Lateral
Joint	Internal Organs	Pharynx	Medial

Review Questions

Answers the following review questions, which assist you in preparing for your examination.

1. Analyze the word order of chondrosarcoma. Why is chondr/o listed first?
2. List the combining form for cell.
3. Differentiate the combining form for voice box and the throat.
4. Identify the location of the urethra and ureters.
5. Identify two terms that mean pertaining to the back.
6. Identify two terms that mean pertaining to the front.
7. Which horizontal plane is considered cross-sectional?
8. The total of the chemical processes in a cell.
9. Space between the pleural membranes.
10. Lying on the back

Self-Test

Build the medical term

1. Malignant tumor of flesh tissue.
2. Incision of the skull
3. Flexible connective tissue at joints.
4. A piece of cartilage between backbones.
5. Pertaining to the chest.

Write the definition:

6. Epithelial
7. coccyx
8. supine
9. hypochondriac regions
10. pleura

Review Question Answers

1. The malignant tumor (sarcoma) arises from cartilage (chondr/o).
2. Cyt/o
3. Laryng/o (Larynx), Pharyng/o (pharynx)
4. Urinary system
5. Posterior/dorsal
6. Anterior/ventral
7. Transverse
8. Metabolism
9. Pleural cavity
10. Supine

Self-Test Answers

1. Sarcoma
2. Craniotomy
3. Cartilage
4. Disk
5. Thoracic
6. Pertaining to the skin cells
7. Tailbone
8. Lying on the back
9. Upper lateral regions of the abdomen
10. Double folded membrane surrounding the lungs

Chapter 3

Overview of the Chapter

This chapter presents additional suffixes and reviews previously reviewed suffixes.

Objectives

At the completion of this chapter, you should be able to:

- **Define** new suffixes and review those presented in previous chapters.
- **Gain** practice in word analysis by using these suffixes with various combining forms.
- **Name** the different blood cells and identify blood cell abbreviations such as RBC and WBC.
- **Identify** and recognize common surgical or procedural suffixes.
- **Identify** and recognize common medical condition suffixes.
- **Identify** and recognize the common adjective suffixes for "pertaining to."

Learning Activities

Read

The Language of Medicine: Suffixes, Chapter 3, pp. 70-107.

Focus on pages 72-79 and study guide sections contained in your Course Map.

Other Resources

Practice using *Language of Medicine* software or The Language of Medicine textbook exercises.

Key Terms

Chapter 3

SURGICAL/PROCEDURAL SUFFIXES		DISEASE RELATED TERMS		INSTRUMENTS
-ectomy	-tomy	-cele	-coccus	-scope
-stomy	-centesis	-emia	-genesis	-graph
-plasty	-opsy	-genic	-itis	
-graphy	-gram	-lysis	-megaly	PAIN TERMS
-therapy		-malacia	-sclerosis	-algia
		-osis	-pathy	-dynia
		-trophy	-plasia	
		-oma	-ptosis	STUDY OF/ONE WHO STUDIES
		-stasis	-penia	-logy -logist -ist
		-phobia	-ic	
		-cyte	-therapy	

Review Questions

Answer the following review questions, which assist you in preparing for your examination.

NOTE: You do not need to turn them in.

1. Identify two suffixes that refer to pain.
2. Differentiate the combining form for lungs versus the pleura.
3. How does metastasis differ from a primary cancer?
4. What are the alternate terms for a necropsy?
5. Enlargement of extremities due to pituitary gland problem?
6. Small artery?
7. Removal of the voicebox?
8. Blood cell that produces antibodies?
9. Hernia of the urinary bladder?
10. Resection of the breast?

Self-Test

Analyze the medical term

1. Phlebotomy
2. Angiogram
3. Laparotomy
4. Osteosarcoma
5. Hydronephrosis

Build the medical term

6. Surgical repair of a blood vessel
7. Pain in the lining of the lungs
8. Hardening of the arteries
9. Incision of the skull
10. Excessive development

Review Question Answers

1. Dynia, algia
2. Pneumon/o, pulmon/o and pleur/o
3. Spread versus initial site
4. Autopsy
5. Acromegaly
6. Arteriole
7. Laryngectomy
8. Lymphocyte
9. Cystocele
10. Mastectomy

Self-Test Answers

Analyze the medical term

1. Incision into a view or drawing blood from a vein
2. Record of blood vessels
3. Incision of the abdomen
4. Malignant (flesh) tumor of the bone
5. Abnormal condition of fluid (water) in the kidney

Build the medical term

6. Angioplasty
7. Pleuralgia or pleurodynia
8. Arteriosclerosis
9. Craniotomy
10. Hypertrophy

Unit 2

Overview of the Unit

Unit 2 covers Chapters 4, 5 and 7.

Chapter 4

Overview of the Chapter

This chapter presents additional suffixes and reviews previously reviewed suffixes.

Objectives

At the completion of this chapter, you should be able to:

- **Define** and identify prefixes used in the medical language.
- **Analyze** medical terms that combine prefixes and other word elements.
- **Identify** and recognize antigen-antibody reaction including Rh incompatibility.
- **Identify** various congenital anomalies.

Learning Activities

Read

The Language of Medicine: Prefixes Chapter 4, pp. 110-139.

Focus on pages 111-117 and study guide sections contained in your Course Map.

Other Resources

Practice using *Language of Medicine* software or The Language of Medicine textbook exercises.

Key Terms

Chapter 4

a-	an-	epi-	de-
ab-	ad-	exo-	endo-
ante-	anti-	hyper-	hypo-
auto-	meta-	in-	infra-
uni-	bi-	inter-	intra-
ana-	cata-	macro-	micro-
con-	contra-	mal-	neo-
brady-	tachy-	pan-	para-
trans-	dia-	per-	peri-
eu-	dys-	poly-	pseudo-
		re-	retro-

Review Questions

Answer the following review questions, which assist you in preparing for your examination.

NOTE: You do not need to turn them in.

1. What is an alternate term for suprarenal glands? Are they considered endocrine or exocrine glands?
2. What is the most common location of an ectopic pregnancy? Where else could it be?
3. List the term of an instrument that views within the body.
4. Distinguish the terms hyperplasia versus hypertrophy.
5. List the correct sequence (starting with 1 for the first step and 4 for the final step) of the following terms in terms of process.
 Mild dysplasia
 Malignant neoplasm
 Precancerous hyperplasia
 Metastases
6. Differentiate between “intra” versus “infra.”
7. What is an irregularity in a structure or organ at birth called?
8. List the correct sequence (starting with 1 for the first step and 4 for the final step) of the following terms in terms of process.
 Antibiotics
 Antigen
 Remission
 Antibody

Review Question Answers:

1. Adrenal glands; endocrine
2. Fallopian tubes; ovaries or peritoneal
3. Endoscope
4. Increase in cell numbers; increase development or cells increase in size
5. 1, 3, 2, 4
6. Within; beneath or below
7. Congenital anomaly
8. 3, 1, 4, 2

Self-Test

Build the medical term

1. Spread of cancer beyond the original site and give an example
2. You shouldn't take a certain drug because you are pregnant, what is this called, generically?
3. State of living together. Give one good and one bad example.
4. Symptoms which precede the onset of illness
5. Process of recording sound waves in the abdomen (two terms)
6. Drug treatment administered to relieve one from a poison. Give the layman's term as well.
7. Pertaining to one side and pertaining to two sides.

Self-Test Answers

1. Metastasis
2. Contraindication
3. Symbiosis
4. Prodrome
5. Abdominal ultrasonography
6. Antitoxin; antidote
7. Unilateral, bilateral

Chapter 5

Overview of the Chapter

This chapter presents the organs, functions, disease processes and common procedures of the digestive system.

Objectives

At the completion of this chapter, you should be able to:

- **Name** and identify the organs of the digestive system.
- **Identify** the organs of the digestive system in anatomically correct position.
- **Identify** enzymes and accessory organs which play a vital role in the digestive process.
- **List** the physician **specialists** who treat digestive system disorders.
- **Differentiate** between upper and lower gastric intestinal disorders and procedures.
- **Recognize** the functions and steps in the digestive process.

Learning Activities

Read

The Language of Medicine: Digestive System, Chapter 5, pp. 142-185.

Focus on pages 155-160 and study guide sections contained in your Course Map.

Other Resources:

Practice using *Language of Medicine* software.

Key Terms

Chapter 5

Alimentary	Cholecystectomy
Gastrointestinal	Postprandial
Endodontist	Sialolith
Orthodontist	Enterocolostomy
Periodontist	Hepatomegaly
Oral Surgeon	Choledochojejunostomy
Dentist	Sublingual
Gastroenterologist	Dentalgia
Proctologist	Absorption
Parenteral	Gastroesophageal reflux
Proctosigmoidoscopy	Amylase
Cholelithiasis	Esophagogastroduodenoscopy (EGD)
Sphincterotomy	Symphysis
Pancreatitis	Celiac
Buccal	Colonoscopy
ileostomy	Appendectomy

Assignments

Call 630-942-3392. State and spell your name. Pronounce the last fifteen terms from The Language of Medicine textbook, Chapter 5, page 181.

Review Questions

Answer the following review questions, which assist you in preparing for your examination.

NOTE: You do not need to turn them in.

Ch. 5

1. When does “ostomy” mean stoma, & give a medical term example & when does “ostomy” mean surgical connection and give an example.
2. What is “ase” and give two med term examples.
3. What is removal of the gallbladder, and what takes over for the function of the gallbladder when it is removed?
4. Give an example of a med term in this chapter that is an “anastomosis”.
5. What are the two terms that mean “under the tongue”?
6. List 2 terms that have to do with stones. 1 is in the gallbladder and 1 is near the gallbladder.
7. What is the difference between a proctologist and a gastroenterologist?

Build a term:

8. Bright red blood in feces. Give an example of what could cause it.
9. Discharge of fat in feces. Give an example of what could cause it.
10. No gastric acid in the stomach.
11. This professional does root canals.
12. Listerine helps to eliminate this.

13. How are most appendectomies completed (what type of generic surgery)?
14. Give two examples of how a person contracts hepatitis.
15. If someone is receiving their “food” intravenously, which term describes this?

Review Question/build a term answers:

1. When it's with 1 word root; when it's with 2 word roots
2. Enzyme
3. Cholecystectomy; liver
4. There are several
5. Sublingual; hypoglossal
6. Cholelithiasis; choledocholithiasis
7. Specialist in study of anus & rectum; specialist in the study of stomach & intestines
8. Hematochezia; hemorrhoids
9. Steatorrhea
10. Achlorhydria
11. Endodontist
12. Gingivitis
13. Laparoscopy
14. Contaminated water or needles or blood transfusions
15. Parenteral

Chapter 7

Overview of the Chapter

This chapter presents the organs, functions, disease processes, and common procedures of the urinary system.

Objectives

At the completion of this chapter, you should be able to:

- **Name** and identify the organs of the urinary system.
- **Identify** the organs of the urinary system in anatomically correct position.
- **Identify** the functions of the urinary system.
- **Identify** disease processes which can occur from obstructions in the urinary tract.
- **Recognize** the uses of a urinalysis as a diagnostic tool.
- **Differentiate** between acute renal failure and chronic renal failure.
- **Differentiate** between hemodialysis and peritoneal dialysis.

Learning Activities

Read

The Language of Medicine: Urinary System, Chapter 7, pp. 218-255

Focus on pages 225-229 and study guide section contained in your Course Map.

Other Resources

Practice using *Language of Medicine* software or The Language of Medicine textbook exercises.

Enrichment Activities

Complete practical application on page 240-241 in The Language of Medicine textbook.

Key Terms

Chapter 7

Cystourethrogram	Pyuria
Nephropathy	Diuretic
Voiding cystourethrogram	Glycosuria
Meatotomy	Urinary retention
Hematuria	Urinary incontinence
Pyelolithotomy	ARF
Uremia	CRF
Renal calculus	BUN
Renal ischemia	CAPD
Renal transplantation	ESRD
Renal dialysis	ESWL

Paranephric	IVP
Ureteroileostomy	UA
Perivesical	UTI
Vesicoureteral Reflux	PKU
Polydipsia	

Review Questions

Answer the following review questions, which assist you in preparing for your examination.

NOTE: You do not need to turn them in.

1. What are the 2 different types of dialysis a person can have?
2. What means, “to crush stones” .
3. List 3 medical terms that describe possible abnormal findings in a urinalysis.
4. What is the difference between uremia and hematuria?
5. Give me a “uria” term that is NOT something found in the urine.
6. If a patient has a cystectomy, what surgery can be completed to make a “fake” organ that was removed?
7. Explain “reflux” and give a medical term example.
8. What is diabetes insipidus?
9. What is the difference between urinary incontinence and urinary retention?
10. List 2 terms that mean incising into the body to remove a stone from a certain area.

Review question answers:

1. Hemodialysis or peritoneal dialysis
2. Lithotripsy; water
3. There are several
4. Urea in blood; blood in urine
5. Nocturia, oliguria
6. Ureteroileostomy
7. Back flow; vesicoureteral reflux
8. ADH is not secreted adequately
9. Cannot hold urine in bladder; cannot release urine from bladder
10. Nephrolithotomy; pyelolithotomy

Unit 3

Overview of the Unit

Unit 3 covers chapters 8, 9 and 10.

Chapter 8

Overview of the Chapter

This chapter presents the functions and organs of the female reproductive system. Common gynecological abnormalities, diseases, diagnostic and therapeutic procedures are reviewed. Major obstetrical conditions, pregnancy and puerperium complications are reviewed.

Objectives

At the completion of this chapter, you should be able to:

- **Name** the major organs of the female reproductive system.
- **Explain** how major organs and their hormones function in the process of menstruation and pregnancy.
- **Identify** abnormalities of the female reproductive system.
- **Differentiate** among sexually transmitted diseases.
- **Recognize** and explain laboratory tests, clinical procedures and abbreviations related to obstetrics and gynecology.

Learning Activities

Read

The Language of Medicine: Female Reproduction System, Chapter 8, pp. 256-309.

Focus on pages 268-273 and study guide sections contained in your Course Map.

Other Resources

Practice using *Language of Medicine* software or exercises in The Language of Medicine textbook.

Key Terms

Chapter 8

Abortion	Carcinoma	Neonatologist
Amenorrhea	Gravida	Hysterosalpingography
Amniocentesis	Cesarean Section	I ntra <u>u</u> terine P regnancy (IUP)
Abruptio placentae	Choriocarcinoma	Mammography
Anovulatory	Colposcopy	Multiparity
Antenatal	Endocervical	Mastectomy
Apgar score	Dilation and curettage (D& C)	Ovarian cysts
Aspiration	Gynecologist	Nulligravida/Nullipara
Bilateral salpingo- oophorectomy	Ectopic	Toxemia
Cauterization	Obstetric	Oxytocia
	Endometriosis	

Review Questions

Answer the following review questions, which assist you in preparing for your examination.

NOTE: You do not need to turn them in.

1. Endometrial cancer may be detected by.
2. Explain the difference between menorrhea, metrorrhagia, menorrhagia, and menometrorrhagia.
3. Removal of internal and reproductive organs?
4. Abnormal development of breasts in men?
5. Painful labor and delivery?
6. Leukorrhea and _____ are associated conditions?

Self-Test

Build the medical term

1. Incision into the perineum
2. Cancer of the pregnant uterus (outer layer of the placenta)
3. Poor (abnormal) cell development of the neck of the uterus

4. A woman who has been pregnant many times
5. Process of recording the uterus and fallopian tubes

Write the definition:

6. Patient is a 25-year-old G4 P3
7. Colposcopy
8. Abruptio placentae
9. Obstetrics
10. Mastectomy

Review Question Answers

1. D&C
2. Menorrhoea – menstrual discharge
metrorrhagia – bleeding between menses
menorrhagia – abnormally heavy or long menstrual periods
menometrorrhagia – excessive bleeding during and between menses
3. Pelvic exenteration
4. Gynecomastia
5. Dystocia
6. cervicitis

Self-Test Answers

1. Episiotomy
2. Choriocarcinoma
3. Cervical dysplasia
4. Multigravida
5. Hysterosalpingography
6. Patient has been pregnant four times and delivered three times
7. Visual examination of the vagina
8. Premature separation of the implanted placenta
9. Practice of caring for women during pregnancy and delivering neonates
10. Removal of a breast

Chapter 9

Overview of the Chapter

This chapter presents the functions and organs of the male reproductive system. Common male reproductive abnormalities, congenital anomalies, diseases, diagnostic and therapeutic procedures are reviewed.

Objectives

At the completion of this chapter, you should be able to:

- **Name** the major organs of the male reproductive system.
- **Describe** the specific functions of the organs of the male reproductive system.
- **Define** abnormalities and pathological conditions that affect the male reproductive system.
- **Differentiate** among sexually transmitted diseases.
- **Define** and apply combining forms used to describe the structure in the male reproductive system.
- **Recognize** and explain laboratory tests, clinical procedures and abbreviations related to the male reproductive system.

Learning Activities

Read

The Language of Medicine: Male Reproductive System, Chapter 9, pp. 310-339.
Focus on pages 317-319 and study guide sections contained in your Course Map.

Other Resources

Practice using *Language of Medicine* software or exercises in *The Language of Medicine* textbook.

Key Terms

Chapter 9

Anorchism	Epididymitis	Prostatectomy
Benign prostatic hyperplasia (BPH)	Hydrocele	Spermatogenesis
Balanitis	Hypospadias	Spermolytic
Circumcision	Orchiectomy	Teratoma
Cryogenic	Orchiopexy	Vasectomy
Cryptorchidism	Phimosis	Vasovasostomy
Embryonal	Purulent	Varicocelectomy

Review Questions

Answer the following review questions, which assist you in preparing for your examination.

NOTE: You do not need to turn them in.

1. What is the sterilization procedure?
2. What diagnostic tests are used to detect prostatic carcinoma?
3. How is BPH distinguished from prostatic carcinoma?
4. Explain cryogenic surgery.
5. List two reasons a physician may order a semen analysis.
6. Explain the abbreviation DRE.
7. Explain the abbreviation TURP.
8. Explain what is varicocele.

Self-Test

Build the medical term

1. Cancer of the testes
2. Congenital anomaly of no testes
3. Removal of a part of the vas deferens for sterilization
4. Excision of a sac of fluid in the scrotum
5. Removal of prepuce

Write the definition:

6. Spermolytic
7. Cryptorchidopexy
8. Acute balanitis
9. Oligospermia
10. Hydrocele

Review Question Answers

1. Vasectomy
2. PSA, DRE
3. BPH is benign growth of cells
4. Treating tissue with cold temperatures
5. Fertility and sterility
6. Digital rectal exam
7. Transurethral resection of the prostate
8. Swollen, twisted veins near the testes

Self-Test Answers

1. Seminoma
2. Anorchism
3. Vasectomy
4. Hydrocelectomy
5. Circumcision
6. Pertaining to the destruction of sperm
7. Surgical fixation of undescended testes
8. Sudden inflammation of the glans penis
9. Scanty production of sperm
10. Hernia of fluid in the scrotal sac

Chapter 10

Overview of the Chapter

This chapter presents the functions and organs of the nervous system. Common neurologic abnormalities, congenital anomalies, diseases, diagnostic, and therapeutic procedures are reviewed.

Objectives

At the completion of this chapter, you should be able to:

- **Recognize** and apply nervous system combining forms.
- **Describe** the functions of the major organs of the nervous system.
- **Define** abnormalities and pathological conditions that affect the nervous system.
- **Recognize** and explain laboratory tests, clinical procedures and abbreviations related to the nervous system.

Learning Activities

Read

The Language of Medicine, Nervous System, Chapter 10, pp. 340-395.

Focus on pages 356-361 and study guide sections contained in your Course Map.

Other Resources

Practice using *Language of Medicine* software or exercises in The Language of Medicine textbook.

Key Terms

Chapter 10

Analgnesia	Intrathecal
Anencephaly	L umbar P uncture (LP)
Anesthesia	Meningioma
Aphasia	Myelomeningocele
Aneurysm	Myelogram
Apraxia	Neuroanastomosis
Ataxia	Neurologist
Bradykinesia	Neurosurgeon
Causalgia	Paraplegia
Dyslexia	Poliomyelitis
C erebro v ascular A ccident (CVA)	Radiculopathy/Radiculitis
Echoencephalography	Quadriplegia
Electroencephalogram	Subdural hematoma
Embolism	Syncopal/Syncope
Epidural hematoma	Thalamic
Epilepsy	Thrombosis
Hemiparesis	T ransient I schemic A ttacks (TIA)
Hemiplegia	Vagotomy
Hemorrhage	

Assignments

Pronouncement

Call 630-942-3392. State and spell your name. State the center where you are registered and Unit 3. Pronounce the first fifteen (15) terms from The Language of Medicine textbook, Chapter 10, p. 390 (meninges to neuropathy). This is not the first page of terms.

Case Translation

Translate the Case Report on page 374-375 into every day english. Type the medical case report exactly as it appears on the page 374-375, after every medical term put the definition of each term in parentheses.

Example: The patient experienced RLQ (right lower quadrant) pain and a diagnosis (state of complete knowledge) of appendicitis (inflammation of the appendix) was given. An appendectomy (removal of the appendix) was recommended.

Submit the typed report electronically through Blackboard – Assignments.

Review Questions

Answer the following review questions, which assist you in preparing for your examination.

NOTE: You do not need to turn them in.

1. What does the abbreviation CSF mean?
2. List three types of cerebrovascular accidents.
3. What is the difference between a subdural hematoma and epidural hematoma?
4. Explain the difference causes of meningitis.
5. List the medical term commonly known as spina bifida.
6. Explain the types of anesthesia?
7. What are the differences between the residuals of CVA known as hemiparesis and hemiplegia?
8. List two types of epileptic seizures.
9. Collection of spinal nerves below the end of the spinal cord?
10. Abnormal sensation of tingling or prickling?

Self-Test

Build the medical term

1. Softening of the brain
2. Disease of spinal nerve roots
3. Inflammation of many nerves
4. Tumor of the meninges
5. Nervous exhaustion

Write the definition

6. Palliative
7. Cerebral hemorrhage
8. Aneurysmectomy
9. Myoneural
10. Glioblastoma

Review Question Answers

1. Cerebral spinal fluid
2. Thrombotic, embolic, hemorrhagic
3. Subdural – tearing of veins between dura and arachnoid membranes
Epidural – between the skull and the dura as a result of a ruptured meningeal artery
4. Bacteria or viral
5. Meningocele
6. Anesthesia –lack of normal sensation, general or local
7. Hemiparesis – slight paralysis in either the right or left half of the body
Hemiplegia – paralysis in half of the body
8. Tonic-clinic seizures, absence seizures, temporal lobe, complex partial
9. Cauda equine
10. Paresthesia

Self-Test Answers

Build the medical term

1. Encephalomalacia
2. Radiculopathy
3. Polyneuritis
4. Meningioma.
5. Neurasthenia
6. Relieving, but not curing
7. A specific type of CVA-bursting forth of blood from the cerebrum
8. Surgical excision of a widening of a blood vessel (artery)
9. Pertaining to muscles and nerves
10. Malignant brain tumor

Notes:

Unit 4

Overview of the Unit

Unit 4 covers Chapters 11, 12 and 13.

Chapter 11

Overview of the Chapter

This chapter presents the functions and organs of the cardiovascular system. Common cardiovascular abnormalities, congenital anomalies, diseases, diagnostic, and therapeutic procedures are reviewed.

Objectives

At the completion of this chapter, you should be able to:

- **Name** the major organs of the cardiovascular system.
- **Explain** the specific functions of the organs of the cardiovascular system.
- **Trace** the pathway of blood through the heart.
- **Define** and apply combining forms used to describe the cardiovascular system.
- **Recognize** and explain laboratory tests, clinical procedures and abbreviations related to the cardiovascular system.
- **Define** abnormalities, and pathological conditions that affect the cardiovascular system.

Learning Activities

Read

The Language of Medicine: Cardiovascular system, Chapter 11, pp. 398-455.

Focus on pages 409-412 and study guide sections contained in your Course Map.

Other Resources:

Practice using *Language of Medicine* software or exercises in The Language of Medicine textbook.

Enrichment Activities

Complete practical application on pages 433-434 in The Language of Medicine textbook.

Key Terms

Chapter 11

Aneurysm	Atheroma
Angina pectoris	Atrioventricular
Angioplasty	Auscultation
Aortic stenosis	Bradycardia
Arrhythmia	B lood p ressure (BP)
Arteriosclerosis	Cardiac catheterization
Cardiac arrest with cardioversion	Cyanosis
C ongestive h eart f ailure (CHF)	Endocarditis
Endarterectomy	Fibrillation
Hemoptysis	Hypoxia
Hypercholesterolemia	M ycocardial i nfarction (MI)
Ischemia	Phlebotomy
Petechiae	Stethoscope
Pericardiocentesis	Tetralogy of Fallot
Sphygmomanometer	Thrombolytic therapy
Systole	Vasoconstriction
Valvuloplasty	Patent
Vasodilation	

Review Questions

Answer the following review questions, which assist you in preparing for your examination.

NOTE: You do not need to turn them in.

1. Which side of the heart receives oxygenated blood and which side receives the de-oxygenated blood?
2. What is a blood pressure cuff?
3. What are the purposes of heart valves? What are the names of all the heart valves?
4. Angioplasty's didn't used to work so well. Often followed by a CABG. What made the angioplasty's start working better (hint: the surgeons left something behind)? Also explain CABG, and explain more than just the initials.
5. How is "thrombolysis" achieved? (AKA thrombolytic therapy).

6. Fast heart rate? Slow heart rate? What are the terms for both? Also, what rate is considered average?
7. What is an “endarterectomy”? Where is this performed to make sure the brain gets a good blood flow if it’s compromised?
8. You have valves in your heart; where else do you have valves?
9. What does a pacemaker do?
10. Describe CHF, initials and exactly what it is.

Answers to review questions:

1. Left side; right side
2. Sphygmomanometer
3. Keep blood flowing in one direction; tricuspid, pulmonary, mitral, aortic
4. Stent; coronary artery bypass graft is open heart surgery
5. Drugs dissolve clots and can keep clots from forming
6. Tachycardia; bradycardia ; 60-80
7. Removal of plaque within an artery; carotoid artery
8. Veins
9. Keeps the heart beating at a proper rate
10. Congestive heart failure; the heart is unable to pump the appropriate amount of blood.

Self-Test

Build the medical term

1. Area of dead heart muscle tissue which is located on the front wall of the heart muscle
2. Severe chest pain relieved by sublingual nitroglycerin
3. Rapid, fast heart beats
4. Abnormal condition of blueness due to lack of oxygen

Analyze the medical term

5. Hypercholesterolemia
6. CABG
7. Pericardiocentesis
8. Cardiomegaly

Self-Test Answers

1. Anterior myocardial infarction
2. Angina pectoris
3. Tachycardia
4. Cyanosis

Analyze the medical term

5. Excessive amount of cholesterol in the bloodstream.
6. Coronary artery bypass graft.
7. Surgical puncture to remove fluid from the pericardium.
8. Enlargement of the heart.

Chapter 12

Overview of the Chapter

This chapter presents the functions and organs of the respiratory system. Common respiratory abnormalities, diseases, diagnostic and therapeutic procedures are reviewed.

Objectives

At the completion of this chapter, you should be able to:

- **Name** the major organs of the respiratory system.
- **Recognize** and apply respiratory system combining forms.
- **Describe** the functions of major organs of the respiratory system.
- **Define** abnormalities and pathological conditions that affect the respiratory system.
- **Recognize** and explain laboratory tests, clinical procedures and abbreviations related to the nervous system.

Learning Activities

Read

The Language of Medicine: Respiratory System, Chapter 12, pp. 458-501.

Focus on pages 464-469 and study guide sections contained in your Course Map.

Other Resources

Practice using *Language of Medicine* software or exercises in The Language of Medicine textbook.

Enrichment Activities

Complete practical application on page 483-484 in The Language of Medicine textbook. Translate the case report into layman's English and submit to the instructor.

Key Terms

Chapter 12

Adenoid hypertrophy	Empyema	Orthopnea
Anosmia	Hemoptysis	Percussion
Apical	Hilar	Phrenohepatic
Apnea	Hypercapnia	Pleural effusion
Asthma	Laryngospasm	Pleurodynia
Atelectasis	Lobectomy	Pneumonia
Bronchiectasis	Mediastinoscopy	Rhinorrhea
Bronchiolitis	Nasogastric intubation	Thoracotomy
COPD	Nasopharyngitis	Tracheostomy
Dysphonia	diaphragm	expectoration

Assignments

Call 630-942-3392. State and spell your name. Pronounce the larst fifteen (15) terms, Chapter 12, page 496 from The Language of Medicine textbook.

Review Questions

Answer the following review questions, which assist you in preparing for your examination.

NOTE: You do not need to turn them in.

1. What is the difference between a bronchodilator and bronchiectasis?
2. Explain the difference between a tracheostomy and a tracheotomy.
3. Name the two structures that envelop the lungs and protect them.
4. What is the difference in the action of the epiglottis when speaking and eating?
5. Expiration has two meanings, what are they?
6. What is the waste product produced by the respiratory system?
7. Define orthopnea and explain why some people have it and what they have to do to breathe better.
8. Break down the word “atelectasis” and explain how it means collapsed lung, “figuratively”.
9. Explain the two general categories of lung cancers.
10. Back in the 1950’s, why did all patients have to have a chest x-ray? Do you know the area hospitals (there are a few) that began as a hospital catering to this disease?

Review Questions Answers:

1. A bronchodilator is a drug to widen the bronchus to improve ventilation to the lungs; bronchiectasis is a medical condition caused by weakening of the bronchus from an infection.
2. Surgical opening to the outside of the body from the trachea; incision into the trachea to open it below a blockage.
3. Parietal pleura and visceral pleura
4. Open when speaking; closed when eating
5. Death or breathing out
6. Carbon dioxide
7. Breathing easier upright; often due to CHF; people with this often use several pillows to sleep more comfortably
8. A-without, tel-complete, ectasis-expansion of the lung or collapsed lung
9. Non-small cell lung cancer – 90% of lung cancers; small-cell lung cancer – 10% of lung cancers and are more deadly.
10. TB, Edward, CDH, Hindsdale

Self-Test

Build the medical term

1. Fluid in the chest cavity
2. Instrument to measure breathing
3. Removal of the upper region of one lung (three terms)
4. Deficiency of oxygen
5. Surgical repair of the nose

Analyze the medical term

6. Chronic epistaxis
7. Pneumonectomy
8. Bronchoscope

Self-Test Answers

1. Hydrothorax
2. Spirometer
3. Unilateral apical lobectomy
4. Hypoxia
5. Rhinoplasty

Analyze the medical term

6. Nosebleed that is recurring over time
7. Surgical excision of a lung
8. Instrument to visually examine the bronchial tubes

Chapter 13

Overview of the Chapter

This chapter presents the composition and formation of blood (which is an integral part of the cardiovascular system). Pathological diseases of red blood cells, blood clotting, white blood cells and bone marrow are explored. Common tests, diagnostic and therapeutic procedures are explored.

Objectives

At the completion of this chapter, you should be able to:

- **Identify** forms relating to the composition, formation, and function of blood.
- **Differentiate** among blood type groups.
- **Define** and apply combining forms used to describe the blood system.
- **Describe** abnormalities and pathological conditions that affect the blood.
- **Recognize** and explain laboratory tests, clinical procedures and abbreviations related to the blood.

Learning Activities

Read

The Language of Medicine: Blood system, Chapter 13, pp. 504-543.

Focus on pages 514-516 and study guide sections contained in your Course Map.

Other Resources

Practice using *Language of Medicine* software or exercises in The Language of Medicine textbook.

Enrichment Activities

Complete practical applications, on pp. 526-527 in The Language of Medicine textbook.

Key Terms

Chapter 13

Anisocytosis	Microcytosis
Aplastic anemia	Morphology
Anticoagulant	Myelopoiesis
Autologous transfusion	Neutrophilia
<u>T</u> hromboplastin <u>T</u> ime (TT)	<u>P</u> artial <u>T</u> hromboplastin <u>T</u> ime (PTT)
Bone marrow biopsy	Pancytopenia
Coagulation time	Poikilocytosis
Cytology	<u>P</u> rothrombin <u>T</u> ime (PT)
Electrophoresis	Sideropenia
Erythrocytopoiesis	Hemolysis
Granulocytopenia	Hemostasis
Hemoglobinopathy	Hypochromia
Leukapheresis	Macrophage
Myelodysplasia	

Review Questions

Answer the following review questions, which assist you in preparing for your examination.

NOTE: You do not need to turn them in.

1. Describe the two parts in explaining blood type and give one specific example of blood type.
2. What is the difference between PT and PTT?
3. Explain the process of hemolysis.
4. What is phagocytosis? What WBCs go to the site of antigens and start this process first?
5. What is an example of an anticoagulant produced in the liver (can be made synthetically, too)? Give another example of a synthetically produced anticoagulant.
6. What is “O” the universal donor?
7. Why do some WBCs have “color” names and give an example.
8. What is a WBC differential test?

Review Question Answers

1. A, B, AB and O are based on antigens on the RBCs and antibodies in the serum.
2. Prothrombin time is the test of the ability of blood to clot; partial thromboplastin time measures other clotting factors.
3. Breakdown or destruction of RBCs; it happens based on a disease process or naturally in the body as old RBCs are replaced by new ones.
4. Ingesting (eating) and destroying bacteria or other antigens; neutrophils.
5. Heparin; Coumadin
6. It contains no A and B antigens and very low-producing anti-A and anti-B serum antibodies.
7. It can be based upon the dye it is attracted to, while looking at it under a microscope; eosinophil
8. It shows the percentages of all WBCs in a volume of blood (how many eosinophils, monocytes, etc.)

Self-Test

Build the medical term

1. Symptoms of a disease has returned
2. Formation of blood
3. Immature red blood cell
4. Derived from bone marrow
5. Deficiency of iron

Analyze the medical term

6. Macrocytosis
7. Hemoglobinopathy
8. Hypochromia

Self-Test Answers

1. Relapse
2. Hematopoiesis
3. Erythroblast
4. Myeloid
5. Sideropenia

Analyze the medical term

6. Slight increase in the number of large eating cells
7. Disease of hemoglobin
8. Reduction in hemoglobin

Unit 5

Overview of the Unit

Unit 5 covers Chapters 14, 15 and 16.

Chapter 14

Overview of the Chapter

This chapter presents the functions and organs of the lymphatic and immune systems (which is an integral part of the cardiovascular system). Pathological diseases and disorders of the immune system are explored. Common tests, diagnostic and therapeutic procedures are reviewed.

Objectives

At the completion of this chapter, you should be able to:

- **Name** the structures and organs of the lymphatic system.
- **Describe** the basic elements of the immune system.
- **Define** and apply combining forms used to describe the structure of the lymphatic system.
- **Define** abnormalities and pathological conditions that affect the lymphatic system.
- **Recognize** and explain laboratory tests, clinical procedures and abbreviations related to the lymphatic system.

Learning Activities

Read

The Language of Medicine: Lymphatic and Immune Systems, Chapter 14, pp. 544-575.
Focus on pages 556-557 and study guide sections contained in your Course Map.

Other Resources

Practice using *Language of Medicine* software or exercises in Language of Medicine textbook.

Key Terms

Chapter 14

<u>A</u> cquired <u>I</u> mmunodeficiency <u>S</u> ndrome(AIDS)	Lymph tissue
Anaphylaxis	Lymphoma
Atopy	Splenomegaly
<u>H</u> uman <u>I</u> mmunodeficiency <u>V</u> irus (HIV)	Thymoma
Hypersplenism	Vaccination
Immunologist	Hodgkin disease
Lymphadenitis	Kaposi sarcoma
Lymphangiography	

Review Questions

Answer the following review questions, which assist you in preparing for your examination.

1. Define the abbreviations AIDS and HIV.
2. What is a slight increase in numbers of lymphocytes?
3. What computerized x-ray imaging is used in the transverse plane?
4. Explain an anaphylaxis reaction.
5. What is the behavior of a thymoma?
6. Explain the following infections: Herpes simplex, Pneumocystis jiroveci pneumonia, toxoplasmosis, Cryptococcosis

Self-Test

Build the medical term

1. Record of a lymph vessel
2. Pertaining to poison
3. Formation of lymph
4. Enlargement of the spleen
5. Disease condition of lymph nodes

Analyze and define the medical term

6. Cervical lymphadenitis
7. Allergen
8. Cytotoxic T cells
9. Vaccination

Review Question Answers

1. Acquired Immunodeficiency Syndrome, Human Immunodeficiency Virus
2. Lymphocytosis
3. CT Scan
4. An exaggerated hypersensitivity reaction to foreign proteins
5. Malignant tumor of the thymus gland.
6. Viral infection causing blisters on skin of lips, nose, or genitals,
Major lung infection with fever, cough, chest pain and sputum
Protozoal infection associated with AIDS
Fungal infection associated with AIDS

Self-Test Answers

Build the medical term

1. Lymphangiogram
2. Toxic
3. Lymphopoiesis
4. Splenomegaly
5. Lymphadenopathy

Analyze and define the medical term

6. Inflammation of a lymph gland in the neck region
7. A substance capable of causing a specific hypersensitivity
8. T-cells that directly kill foreign cells
9. Introduction of an altered antigen to produce an immune response and protect against disease (Immunization)

Notes:

Chapter 15

Overview of the Unit

This chapter presents the functions and structures of the musculoskeletal system. Common musculoskeletal abnormalities, congenital anomalies, diseases, diagnosis and therapeutic procedures are reviewed.

Objectives

At the completion of this chapter, you should be able to:

- **Define** terms relating to the structure and functions of bones, joints, and muscles.
- **Describe** the process of bone formation and growth.
- **Analyze** and apply combining forms prefixes and suffixes used to describe bones, joints, and muscles.
- **Define** and explain musculoskeletal disease conditions and terms related to bone fractures.
- **Recognize** and explain laboratory tests, clinical procedures, and abbreviations relating to the musculoskeletal system.

Learning Activities

Read

The Language of Medicine: Musculoskeletal System, Chapter 15, textbook pp. 576-647.
Focus on pages 594-598, 614-615, and study guide sections contained in your Course Map.

Other Resources

Practice using *Language of Medicine* software or exercises in The Language of Medicine textbook.

Assignment

Case Translation

Translate the Medical Report on page 621 into every day english. Type the medical case report exactly as it appears on the page 621, after every medical term put the definition of each term in parentheses.

Example: The patient experienced RLQ (right lower quadrant) pain and a diagnosis (state of complete knowledge) of appendicitis (inflammation of the appendix) was given. An appendectomy (removal of the appendix) was recommended.

Submit the typed report electronically through Blackboard – Assignments.

Key Terms

Chapter 15

Arthroplasty	Femur	Polymyositis
Atrophy	Fibular	Pronation
Bursitis	Hemarthrosis	Reduction
Calcaneal	Humeral	Subungual
Colles' fracture	Hypercalcemia	Subpatellar
Chondrocostal	Iliac	Synovitis
Chondromalacia	Kyphosis	Scapula
Craniotomy	Leiomyosarcoma	Tenorrhaphy

Review Questions

Answer the following review questions, which assist you in preparing for your examination.

1. What is the difference between mastoid and xiphoid processes?
2. Explain the difference between an orthopedist and rheumatologist.
3. Define kyphosis and scoliosis.
4. List and explain rheumatoid arthritis, osteoarthritis, gouty arthritis, ankylosing spondylitis.
5. Compare and contrast a pathological fracture versus a comminuted fracture.
6. Explain the term “ankylosis”.
7. List the difference between leiomyosarcoma and leiomyoma.
8. List and explain muscular actions abduction and adduction.

Self-Test

Build the medical term

1. Pertaining to within a muscle
2. Break in a bone due to chronic disease
3. Poor formation of bone
4. Removal of hand bone
5. One side of the bone is fractured, the other side is bent

Analyze and define the medical term

6. Osteomyelitis
7. ORIF
8. Electromyography
9. Spondylolisthesis
10. Laminectomy

Review Question Answers

1. Projection of the temporal bone and knuckle-like process at the end of a bone.
2. Orthopedists treat bone and joint diseases. Rheumatologist specialize in joint problems such as arthritis.
3. Posterior curvature, lateral curvature
4. Rheumatoid arthritis – chronic joint condition with inflammation and pain
osteoarthritis – progressive, degenerative joint disease
gouty arthritis – inflammation of joints caused by excessive uric acid accumulation
ankylosing spondylitis – chronic progressive arthritis with stiffening of joints
5. caused by disease, bone is splintered or crushed into several pieces.
6. Condition of stiffening and immobility of a joint
7. Malignant tumor of smooth muscle, benign tumor of smooth muscle
8. Abduction – movement away from the midline of the body
Adduction - movement toward the midline of the body

Self-Test Answers

Build the medical term

1. Intramuscular
2. Pathological fracture
3. Osteodystrophy
4. Metacarpectomy
5. Greenstick fracture

Analyze and define the medical term

6. Inflammation of bone and bone marrow
7. Open reduction with internal fixation (plates, pins, screws, etc.)
8. The process of recording the strength of muscle contraction using electricity
9. Slipping or subluxation of a vertebra
10. Operation performed to relieve the symptoms of a slipped disk

Notes:

Chapter 16

Overview of the Chapter

This chapter covers the integumentary system of the body — the skin, and its accessory organs (hair, nails, and glands).

Objectives

At the completion of this chapter, you should be able to:

- **Identify** the layers of the skin;
- **Identify** accessory structures associated with the skin;
- **Describe** lesions, symptoms, and pathological conditions related to the Dermatology specialty;
- **Be aware** of common spelling and pronunciation problems;
- **Analyze** terms into component parts through word analysis;
- **Apply** and **analyze** medical terms in their proper context using case studies; and
- **Identify** laboratory tests, clinical procedures, and abbreviations that relate to the skin.

Learning Activities

Read

The Language of Medicine: Skin, Chapter 16, textbook pp. 648-691.

Focus on pages 656-660 and study guide sections contained in your Course Map.

Key Terms

Chapter 16

Adipose	Alopecia	Basal cell carcinoma	Burns (Cicatrix)
Collagen	Cicatrix	Cyst	Dermabrasion
Dermatologist	Dermatoplasty	Diaphoresis	Electrocautery
Epidermis	Epidermolysis	Epithelium	Fissure
Gangrene	Keloid	Lipoma	Macule
Nevus	Tinea	Pilonidal cyst	Purulent
Pustule	Rubeola	Scleroderma	Subcutaneous
Urticaria	Varicella	Vitiligo	Xanthoma

Review Questions

Answer the following review questions, which assist you in preparing for your examination.

1. List and define the three layers of the skin.
2. Differentiate between the lunula and the cuticle.
3. Differentiate between decubitus ulcer and gangrene.
4. What disease process is Kaposi's Sarcoma generally associated with?
5. List the three classifications of burns and identify the characteristics of each.

Self-Test

Build the medical term:

1. Absence of pigment in skin:
2. Inflammation of the soft tissue around a nail:
3. Itching:
4. Fungal infection:
5. Inflammation of disease of the joints and collagen of the skin:

Write the definition

6. Dysplastic nevi
7. Psoriasis
8. Mohs surgery
9. leukoplakia
10. Scleroderma

Review Question Answers:

1. Epidermis – thin cellular membrane layer
Dermis – dense fibrous connective tissue
subcutaneous layer – thick fat containing tissue
2. Base of the nail plate, band of epidermis at the base and sides of the nail plate
3. Bedsores, death of tissue due to loss of blood supply
4. AIDS
5. First degree – superficial epidermal lesions
Second degree – epidermal and dermal lesions
Third degree – epidermis and dermis are destroyed

Self-Test Answers

1. Albinism
2. Paronychia
3. Pruritus
4. Trichomycosis
5. Systemic lupus erythematosus
6. Moles that can develop into malignant melanoma
7. Recurrent dermatosis with itchy, scaly, and/or red plaques covered by silvery gray scales:
8. Layers of growth are removed and examined microscopically
9. White patches on a mucous membrane of tongue or cheek
10. Connective tissue in the skin hardens

Notes:

Unit 6

Overview of the Unit

Unit 6 covers Chapters 17, 18 and 19.

Chapter 17

Overview of the Chapter

Chapter 17 is an introduction to the sense organs — the eyes and the ears. This unit includes an overview of the ophthalmology and otology, therapeutic procedures, lab tests, and basic sense organ pathology.

Objectives

At the completion of this chapter, you should be able to:

- **Identify** the locations and functions of the major parts of the eye and ear;
- **Describe** ophthalmologic and otological symptoms and pathological conditions;
- **Translate** medical terms using combining forms that relate to ophthalmologic and otological conditions or procedures;
- **Analyze** terms into component parts through word analysis;
- **Apply** and **analyze** medical terms in their proper context using case studies; and
- **Identify** laboratory tests, clinical procedures, and abbreviations that relate to the ophthalmology and otology.

Learning Activities

Read

The Language of Medicine: Sense Organs: The Eye and The Ear, Chapter 17, pp. 694-743.
Focus on pages 700-704, 718-719 and study guide sections contained in your Course Map.

Enrichment Activity

Complete practical application on page 724 in The Language of Medicine textbook.
Translate the operative report into layman's English and submit to the instructor.

Key Terms

Chapter 17

Accommodation	Amblyopia	Aqueous humor	Blepharoptosis	Corneal Ulcer
Conjunctivitis	Cycloplegic	Diabetic	Diplopia	Fluorescein
Glaucoma	Hyperopia	Cataract with	Iridectomy	angiography
Miosis	Mydriasis	extraction	Phaco-	Keratoplasty
Ophthalmologist	Optometrist	Hemianopsia	emulsification	Photophobia
Auditory meatus	Audiogram	Papilledema	Macular	Retinal
Ossiculoplasty	Otitis Media	Optician	degeneration	detachment
Stapedectomy	Tinnitus	Cochlear	Mastoiditis	Myringotomy
Otolaryngologist		implant	Pneumatic	Salpingo-
Otomycoosis		Otosclerosis	Otoscopy	pharyngeal
otophyorrhea		Tympanoplasty	Vertigo	Vestibulo-
				cochlear

Review Questions

Answer the following review questions, which assist you in preparing for your examination.

NOTE: You do not need to turn them in.

- Which fluid maintains the shape of the anterior portion of the eye as well as nourishes the structures within that region?
 - fovea centralis
 - vitreous humor
 - aqueous humor
 - lacrimination
- What is the difference between slit lamp microscopy and laser photocoagulation?
- Differentiate accommodation from refraction. List at least three errors in refraction.
- Describe four specific eye disorders caused by diabetes mellitus which describes diabetic retinopathy.
- List the most common treatment for cataracts.

6. Define the purpose of a mydriasis drug.
7. What term is used to describe sensitivity to light?
8. What is the difference between an audiogram and audiometer?
9. Describe the types of disorders that an ophthalmologist would treat versus an optometrist.
10. How does a myringotomy differ from tympanoplasty?
11. List two tests that uses a tuning fork. Identify the difference.
12. What does EENT mean?
13. Differentiate serous otitis media from acute bilateral otitis media

Review Question answers

1. c. aqueous humor
2. Examination of anterior ocular structures under microscopic magnification; precisely focused argon laser creates an inflammatory reaction that seals retinal leaks and tears

3. Adjustment of eyes to focus on objects from far to near; bending of light rays to bring them into focus on the retina.
4. Microaneurysms, hemorrhages, retinal vein dilation and neovascularization
5. Phacoemulsification
6. To enlarge the pupils to look into the eye
7. Photophobia
8. Record of hearing; instrument to record hearing
9. Ophthalmologists (MDs) treat all types of eye disorders and do surgery; optometrists are not physicians and examine eyes, prescribe lenses and determine vision problems
10. surgical incision into the ear drum, (often for ventilating tubes); surgical repair of the ear drum, often including the middle ear bones.
11. Rinne test and Weber test
12. eyes, ears, nose and throat
13. Serous O.M. involves an accumulation of serous fluid that often cannot drain; infection in both ears of short duration

Self-Test

Build the medical term

1. Double vision:
2. Inflammation of the lacrimal gland:
3. Excision of the iris:
4. Inflamed cornea:

5. LASIK:
6. Resection or removal of the complete eyeball:
7. IOP:
8. PERRLA:

Self-Test Answers

1. Diplopia
2. Dacryoadenitis
3. Iridectomy
4. Keratitis
5. Laser In Situ Keratomileusis
6. Enucleation
7. Intraocular Pressure
8. Pupils equal, round, reactive to light and accommodation

Chapter 18

Overview of the Chapter

This chapter covers an overview of the endocrine glands, their hormones and associated abnormal conditions.

Objectives

At the completion of this chapter, you should be able to:

- **Identify** the endocrine glands and their hormones;
- **Identify** the functions of each hormone secreted within the body;
- **Describe** endocrine system symptoms, and pathological conditions;
- **Be aware** of common spelling and pronunciation problems;
- **Relate** the medical terms using combining forms that relate to endocrinology;
- **Analyze** terms into component parts through word analysis;
- **Apply** and **analyze** medical terms in their proper context using case studies; and
- **Identify** laboratory tests, clinical procedures, and abbreviations that relate to the endocrinology.

Learning Activities

Read

The Language of Medicine: Endocrine System, Chapter 18, pp. 746-791.

Focus on pages 760-763 and study guide sections contained in your Course Map.

Key Terms

Chapter 18

Adenectomy	Adrenal Cortex	Adrenal Medulla	Adrenaline	Androgen
Calcitonin	Endocrinology	Electrolyte	Epinephrine	Graves Disease
Homeostasis	Hypercalcemia	Hyperglycemia	Hypoinsulinism	Myxedema
ACTH	ADH	FBS	FSH	IDDM
K	PSA	Na	NIDDM	TSH
Pancreatectomy	Dysplastic	Adrenopathy	Goiter	

Assignments:

Call 630-942-3392 and pronounce the last 15 terms on page 786.

Review Questions

Answer the following review questions, which assist you in preparing for your examination.

NOTE: You do not need to turn them in.

1. Differentiate endocrine versus exocrine glands. List examples of each.
2. The adrenal medulla secretes two types of hormones:
 - a. cortisol and aldosterone
 - b. androgen and estrogen
 - c. adrenaline and noradrenaline
 - d. aldosterone and epinephrine
3. List the hormones released by the posterior pituitary gland.
4. Differentiate between gonadotropins, FSH and LH.
5. What is the purpose of a fasting blood sugar.
6. What is the difference between diabetes mellitus and diabetes insipidus?
7. Compare and contrast Type 1 versus Type 2 diabetes mellitus.
8. Myxedema is associated with which endocrine disorder?

Review Question answers

1. Endocrine glands secrete within the body and exocrine glands secrete to the outside of the body
2. c. adrenaline and noradrenaline
3. Oxytocin and ADH
4. in females FSH & LH stimulate the growth of eggs and production of hormones and ovulation; in males FSH stimulates the production of sperm and LH stimulates production of testosterone
5. To determine blood glucose levels after not eating all night
6. DM is about insulin malfunction; DI is about insufficient secretion of ADH
7. See page 769
8. Hypothyroidism

Self-Test

1. List the gland that secretes melatonin and is linked to seasonal affective disorder
2. Specialist that treats diseases and disorders of the internal secretion glands
3. A group of signs and symptoms caused by excessive cortisol from the adrenal cortex (two terms)
4. Congenital hyposecretion of growth hormone
5. Excision or resection of a gland
6. Low sodium in the blood stream
7. Maintaining a constant internal environment
8. Enlargement of the extremities

Self-Test Answers

1. Pineal
2. Endocrinologist
3. Cushing Syndrome
4. Dwarfism
5. Adenectomy
6. Hyponatremia
7. Homeostasis
8. Acromegaly

Chapter 19

Overview of the Chapter

Chapter 19 is an introduction to oncology or cancer medicine. This unit includes an overview of the growth and spread of cancer, staging of cancer, treatment modalities, and common iatrogenic conditions associated with cancer treatment.

Objectives

At the completion of this chapter, you should be able to:

- **Identify** the process in which cancer develops and spread throughout the body;
- **Recognize** how tumors are classified and described by pathologists;
- **Describe** oncological lesions, carcinomas, symptoms, and pathological conditions;
- **Be aware** of common spelling and pronunciation problems;
- **Relate** the medical terms using combining forms that relate to oncology;
- **Analyze** terms into component parts through word analysis;
- **Apply** and **analyze** medical terms in their proper context using case studies; and
- **Identify** laboratory tests, clinical procedures, and abbreviations that relate to the cancer.

Learning Activities

Read

The Language of Medicine: Cancer Medicine, Chapter 19, pp. 794-839.

Focus on pages 818-820 and study guide sections contained in your Course Map.

Key Terms

Chapter 19

Benign	Malignant	Metastasis	Adenoma	Gastric
Leukemia	Osteosarcoma	(Metastases)	Inflammatory	adenocarcinoma
Necrotic	Polypoid	Fungating	Verrucous	Medullary
Diffuse	Dysplasia	Ulcerating	Nodular	Carcinoma <i>in situ</i>
Undifferentiated	Cryosurgery	Epidermoid	Excisional	Pleomorphic
Fulguration	Incisional	Electrocautery	Biopsy	Exenteration
Proton Therapy	Biopsy	Brachytherapy	Electron	Fractionation
Palliative	Radiocurable	Radioresistant	Beams	Remission
Gallium Scan	Chemotherapy	Pap Smear	Relapse	TNM
Staging-	Interferon	Osteogenic-	PSA	CA
Laparotomy		Sarcoma	Cachexia	

Review Questions

Answer the following review questions, which assist you in preparing for your examination.

NOTE: You do not need to turn them in.

1. Compare and contrast benign versus malignant tumors.
2. Define apoptosis. Is it good or bad?
3. Explain TNM staging.
4. List three types of environmental agents that cause cancer.
5. What is the difference between the tumors described as radiocurable versus radioresistant versus radiosensitive?
6. List 5 modalities used to treat cancerous tumors.
7. Describe 5 microscopic descriptions used to identify the appearance of tumors.
8. A diagnostic test used to determine cervical cancer.

Review Question answers.

1. See page 795
2. Programmed cell death; good.
3. See pages 804 and 805.
4. Chemicals, radiation and viruses.
5. Radiocurable tumors respond to radiation treatment (RT); radioresistant tumors require large doses of RT to kill the tumor; radiosensitive tumors respond to RT without serious damage to surrounding tissue.
6. Surgery, RT, chemotherapy, biological therapy and differentiating agents.
7. Pages 803 and 804
8. Pap smear

Self-Test

1. Specialization of cells
2. Process of a stalk which is characteristic of some polypoid tumors
3. Units of absorbed radiation dose
4. Relieving, but not curative
5. A detailed and explicit treatment plan
6. Return of symptoms
7. Process of recording the breast tissue
8. Pertaining to the death of tissue

Self-Test Answers

1. Differentiation
2. Pedunculated
3. Rad
4. Palliative
5. Protocol
6. Relapse or Recurrence
7. Mammography
8. Necrotic

Unit 7

Overview of the Unit

Unit 7 covers Chapters 20, 21, and 22. Chapter 20 is an introduction to diagnostic imaging procedures, which includes radiology, nuclear medicine, radiation therapy, and intervention radiological procedures. This unit includes an overview of the physical properties of x-rays, directional terms, and the role of radioactivity in the diagnosis and treatment of diseases.

Chapter 20

Overview of the Chapter

This chapter covers a variety of diagnostic imaging procedures.

Objectives

At the completion of this chapter, you should be able to:

- **Identify** the physical properties of x-rays;
- **Differentiate** the roles of the radiologist, radiotherapist, and radiological technologist;
- **Identify** various x-ray views and the patient position used in the x-ray examination;
- **Identify** the role of radioactivity in the diagnosis and treatment of diseases;
- **Be aware** of common spelling and pronunciation problems;
- **Relate** the medical terms using combining forms that relate to radiology;
- **Analyze** terms into component parts through word analysis;
- **Apply** and **analyze** medical terms in their proper context using case studies; and
- **Identify** clinical procedures, and abbreviations that relate to the radiology.

Learning Activities

Read

The Language of Medicine: Radiology and Nuclear Medicine, Chapter 20, pp. 842-873.
Focus on pages 860-861 and study guide sections contained in your Course Map.

Key Terms

Chapter 20

Radiology Angiography Contrast medium Echography Oblique Decubitus MUGA Scan Radiographer RP	Nuclear Medicine Cholangiography Barium Sulfate Sonogram Abduction Prone PET Scan Perfusion studies	Radiation Oncologist Computed Tomography Barium Enema AP view Adduction Recumbent UGI	Radiologic Technologist Hysterosalpingography Fluoroscopy PA view Extension Supine U/S Radioisotope	Radiologist Myelography Interventional Radiology Lateral Flexion Thallium Scan VQ Scan Liver/spleen scans
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Review Questions

Answer the following review questions, which assist you in preparing for your examination.

1. Distinguish interventional radiology from diagnostic radiology.
2. Differentiate between in vitro from in vivo processes.
3. What is the difference between radiolucent and radiopaque?
4. What is the routine view for a chest x-ray?
 - a. AP
 - b. PA
 - c. oblique
 - d. prone
5. Which technique produces frontal, cross-sectional as well as sagittal images?
6. Define contrast studies
7. What is the difference between an upper GI series and lower GI series?
8. Explain CT Scan.

Self-Test

1. An alternate term for radiology or study of x-rays
2. Lying down on the side with horizontally positioned x-ray beams
3. General term for images of a part or organ
4. Process of recording the uterus and fallopian tubes
5. IVP
6. An alternate term for sonogram
7. A physician that specializes in the practice of administering radioactive and radionuclides tests
8. PET
9. Myelogram
10. Arthrogram

Review Question Answers

1. Interventional – invasive, diagnostic – diagnosis
2. In vitro – outside a living organism, in vivo within a living organism
3. Radiolucent – permitting passage of xrays, radiopaque – obstructing passage of xrays
4. AP – anteroposterior, PA – posteroanterior, oblique – slanting direction, prone – laying down. Routine check xray is done in the PA view.
5. MRI
6. Requires injecting contrast medium into the structure to be visualized
7. UGI – small intestine, LGI – lower intestine
8. Uses ionizing x-rays and a computer to produce a transverse image of the body organs

Self-Test Answers

1. Roentgenology
2. Lateral Decubitus
3. Scan
4. Hysterosalpingography (HSG)
5. Intravenous Pyelogram
6. Ultrasound
7. Nuclear Medicine Physician or Nuclear Physician
8. Positron Emission Tomography
9. Xray of the spinal cord
10. Xray of a joint

Notes:

Chapter 21

Overview of the Chapter

Chapter 21 is an introduction to the pharmacology. This unit includes an overview of the basic pharmacology, routes of drug administration, drug classification, and iatrogenic conditions related to pharmacology.

Objectives

At the completion of this chapter, you should be able to:

- **Identify** the various routes of drug administration;
- **Identify** various drug classifications and determine the disease each drug is designed to treat;
- **Describe** the difference between chemical name, generic name, and brand name for various drug classes;
- **Be aware** of common spelling and pronunciation problems;
- **Relate** the medical terms using combining forms that relate to pharmacology;
- **Identify** the process for drug approval and reference sources for relating to pharmacology;
- **Apply** and **analyze** medical terms in their proper context using case studies; and
- **Identify** abbreviations that relate to the pharmacology.

Learning Activities

Read

The Language of Medicine: Pharmacology, Chapter 21, pp. 874-913.

Focus on pages 894-896 and study guide sections contained in your Course Map.

Key Terms

Chapter 21

Pharmacist	Chemical Name	Generic Name	Brand Name	FDA
Toxicology	PDR	Oral	Sublingual	Rectal
U.S.P.	SC	Intradermal	IM	IV
Parenteral	Intracavitary	Inhalation	Topical	Transdermal
Intrathecal	Idiosyncrasy	Synergism	Tolerance	Patch
Additive	ACE Inhibitor	Analgesic	Anesthetic	Iatrogenic
Contraindication	Anticonvulsant	Antidepressant	Antidiabetic	Antibiotic
Anticoagulant	bid/b.i.d.	gtt	MAOI	Antihistamine
ac/a.c.	PCA	po	prn/p.r.n.	NPO
pc/p.c.	qid/q.i.d.	subq	tab	qd/q.d.
qh/q.h.	anaphylaxis			tid/t.i.d.

Review Questions

Answer the following review questions, which assist you in preparing for your examination.

1. What is the difference between a generic versus brand name?
2. Identify and define each subspecialty of pharmacology.
3. List the various routes of drug administration.
4. Identify the various types of topical administrations
5. Differentiate contraindications from idiosyncratic reactions.
6. Identify the major drug classes.
7. When is a general anesthetic used?
8. How does tolerance differ from additive action?

Self-Test

1. Pertaining to produced by treatment
2. The combination of two similar drugs that is equal to the sum of the effects of each
3. FDA
4. Drugs administered by placement under the tongue
5. Harmful effects of a drug
6. A drug class that opens the bronchial tubes
7. A drug class that promotes activity or excitability
8. A habit forming analgesic

Review Question Answers

1. Generic – legally identifies the drug, brand - trademark
2. Medicinal chemistry – drug synthesis
Pharmacodynamics – effect on the body
Pharmacokinetics – disposition in the body over time
Molecular pharmacology – interaction of drugs
Chemotherapy – drugs that destroy microorganisms
Toxicology – harmful effects of drugs
3. Oral
Sublingual
Rectal
Parenteral
Inhalation
Topical
4. Lotions
Creams
Ointments
Transdermal patches
5. Contradictions – patient's condition make the use of a drug dangerous
Idiosyncratic reactions – unpredictable type of drug toxicity
6. Analgesics and anesthetics
Antibiotics and antivirals
Anticoagulants, anticonvulsants, antidepressants and antidiabetics
Antihistamines and antiosteoporosis drugs
Cardiovascular drugs
Endocrine drugs
Respiratory drugs
Sedative-hypnotics
Stimulants and tranquilizers
7. When the effect is desired in all tissues of the body
8. Tolerance – effects of a given dose diminishes
Additive action – combination of two similar drugs is equal to the sum of the effects of each.

Self-Test Answers

1. Iatrogenic
2. Additive action
3. Food and Drug Administration
4. Sublingual
5. Toxicity
6. Bronchodilator(s)
7. Stimulant
8. Narcotic

Notes:

Chapter 22

Overview of the Chapter

Chapter 22 is an introduction to psychiatry. This unit includes an overview of the psychiatric diseases and disorders as well as various therapies used to treat specific psychiatric conditions.

Objectives

At the completion of this chapter, you should be able to:

- **Differentiate** between a psychiatrist, psychologist, and other mental health specialist;
- **Identify** tests used by clinical psychologist to evaluate a patient's mental health status;
- **Define** terms that describe various psychiatric disorders;
- **Identify** the significance of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV);
- **Relate** the medical terms using combining forms that relate to psychiatry;
- **Analyze** terms into component parts through word analysis;
- **Apply** and **analyze** medical terms in their proper context using case studies; and
- **Identify** laboratory tests, clinical procedures, and abbreviations that relate to the psychiatry.

Learning Activities

Read

The Language of Medicine: Psychiatry, Chapter 22, pp. 914-953.

Focus on pages 934-937 and study guide sections contained in your Course Map.

Key Terms

Chapter 22

DSM – IV	MMPI	WAIS	Amnesia	Anxiety
Compulsion	Conversion	Delusion	Dissociation	Euphoria
Hallucination	Labile	Mania	Obsession	Paranoia
Delirium	Dementia	Bipolar	Dysthymia	Antisocial
Borderline	Histrionic	Narcissism	Schizoid	Parahpilia
Sexual	Dependence	Tolerance	Amphetamines	Hallucinogens
Dysfunction	Sedatives	Psychotherapy	Electroconvulsive	Drug Therapy
Opioids	Repression	Agoraphobia	Therapy	Compulsion
Catatonic				Autism

Review Questions

Answer the following review questions, which assist you in preparing for your examination.

1. Compare and contrast psychiatry versus psychology.
2. Define clinical psychologist. List examples of testing used in clinical psychology.
3. List and define various personality disorders.
4. Lists the differences between delusion and hallucinations.
5. List and explain various mood disorders.
6. List the basic elements of dementia and identify common underlying causes.
7. Identify various therapeutic modalities.

Self-Test

1. Absence of emotions
2. Anxiety that becomes bodily symptoms that have no organic basis
3. ECT
4. An alternative term for a neuroleptic drug
5. Process of undergoing rapid emotional change or unstable
6. Uncontrollable urges to perform a task repeatedly
7. Significant impairment of reality testing with symptoms of hallucinations or delusions
8. Depressive mood that are not classified as major depression

Review Question Answers

1. Psychiatry – diagnosis, treatment and prevention of mental illness
Psychology – psychotherapy and analysis
2. Clinical psychologist – uses tests to evaluate patients mental health
IQ tests, Wechsler Adult Intelligence Scale, Stanford-Benet Intelligence Scale
3. Antisocial
Borderline
Histrionic
Narcissistic
Paranoid
Schizoid
4. Delusions – “people are out to get me”, hallucinations – hearing voices
5. Bipolar disorders
Cyclothymic disorder
Depressive disorders
6. Dementia – loss of intellectual abilities, Alzheimer disease, stroke, CNS infections, trauma, tumors
7. Psychotherapy
Electroconvulsive therapy
Drug therapy

Self-Test Answers

1. Apathy
2. Conversion
3. Electroconvulsive Therapy
4. Antipsychotic
5. Labile
6. Compulsion
7. Psychosis
8. Dysthymia

Congratulations! You have reached the end of the course.