

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Outline: ANATOMY & PHARMACOLOGY II

Code No.: SPR 230-4

Program: MEDICAL SECRETARIAL

Semester: FOUR

Date: JANUARY, 1986

Author:

New :

Revision: X

APPROVED:



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Chairperson

Date

SAULT COLLEGE

ANATOMY, PHYSIOLOGY AND PHARMACOLOGY for MEDICAL SECRETARIES

Course Description

The course includes normal anatomy, physiology and microbiology as applied to the human body. It also includes names of common drugs and illnesses associated with the human body.

It is designed to enable the medical secretary to become competent in the terminology with which he will be using in employment.

General Objectives

1. To gain a basic understanding of the way in which the normal human body is designed to function.
2. To gain a basic understanding of the role of microorganisms in health and disease.
3. To gain some information of the pharmacology associated with preventive, diagnostic and therapeutic uses of drugs in treating common illnesses affecting the human body.
4. To gain an adequate level of competency in spelling, pronouncing and applying terminology associated with the human body in health and disease.

MARKS

- A - consists of 80-100%, no failures and all assignments completed.
- B - consists of 70-79%, and all assignments completed.
- C - consists of 60-69%, and all assignments completed.
- I - any mark below a C.

TEXTS

1. The Human Body in Health and Disease - Memmler and Roda (Lippincott)
2. Taber's Medical Dictionary

MARKS CONSIST OF;

1. A short test or assignment at the end of each unit.
2. A final test at the end of each semester.
3. 60% of the term work + 40% of the final test - total mark.

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

MEDICAL SECRETARY COURSE OUTLINE FOR ANATOMY, PHYSIOLOGY AND PHARMACOLOGY

UNIT #1 Plan of the Human Body

1. To spell, pronounce and state the meaning of anatomical terms relating to the body »
2. To use the anatomical terms correctly and appropriately in written and verbal communication
3. To know the cavities of the body
4. To know the organization of the viscera in the human body

UNIT #2 Cells

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 1. To know the structure of a typical cell
 2. To know the meaning of mitosis
 3. To know how osmosis, diffusion and filtration affect the cells and therefore the body
 4. To know the meaning of electrolytes
 5. To know the 4 main groups of tissue classification
 6. To know the 2 categories of membranes
 7. To know 2 types of abnormal growth
 8. To know the common terms associated with benign and malignant tumours

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UNIT #3 Introduction to Pharmacology

1. To be aware of the history of drugs
2. To know the legal controls of drugs
3. To know the sources of drugs
4. To know the functions of drugs
5. To know the basic actions of drugs
- * 6. To know the major routes of administration of drugs
7. To know the action of drugs in the body
8. To be aware of the factors affecting drug administration
9. To know the meaning of Trade name and Generic name
10. To know how to use the Formulary and the CPS
11. To know the meaning of prescription
12. •☉ know the common symbols used in writing prescriptions
13. To know the common drugs associated with drug addiction and drug abuse
14. To know the common terminology associated with drug addiction and drug abuse
15. To know the common side effects of drugs
16. To know the meaning of common terminology associated with pharmacology
17. To be aware of the problems and prevention of accidental poisoning
18. To know the role of the medical secretary when she receives an emergency phone call that involves poisoning
19. To know some common drugs which are used to prevent illness
20. To know some common drugs which are used as diagnostic aids

UNIT #4 Skeletal System

1. To know the composition of bone
2. To know the main functions of bones
3. To be able to identify the positions of bones
4. To be able to label on a diagram the bones specified
5. To know the main functions of joints
6. To know the structure of joints
7. To know the classifications of joints *
8. To describe briefly the common disorders of bones and joints

UNIT #5 The Muscular System

1. To review the classification of muscle cells
2. To know how muscles work ,
3. To know the meaning of muscle tone
4. To be able to locate the more important muscles of the body
5. To know the 3 main attachments for muscles
6. To know the different types of movement
7. To describe briefly the common disorders of muscles
8. To know some common drugs which affect the musculoskeletal system

UNIT #6 The Nervous System

1. To know the main functions of the nervous system
2. To know the anatomy and physiology of a typical neuron
3. To know the anatomic classification of the nervous system
4. To know the structure of the brain |
5. To know the functions of the brain «
6. To know the structure of the spinal cord
7. To know the functions of the spinal cord
8. To know the structure and function of the meninges
9. To know the function of cerebrospinal fluid
10. To describe briefly the common disorders of the brain and spinal co
11. To know the names of the cranial nerves
12. To know the names of the spinal nerves
13. To know the main functions of the autonomic nervous system
14. To describe briefly the common disorders of nerves
15. To know some common drugs which affect the nervous system

UNIT #7 The Sensory System

1. To be aware of the various senses and sensory mechanisms
2. To know the structure of the eye
3. To know the function of the eye
4. To know the basic physiology of sight
5. To briefly describe the common disorders of the eye
6. To know the structure of the ear
7. To know the functions of the ear
8. To briefly describe the common disorders of the ear
9. To know the basic physiology of the senses of taste, smell, thirst, hunger, pressure, temperature, touch, pain and position
10. To know some common drugs which affect the sensory system

UNIT #8 The Integument

1. To know the structure of the Integument
2. To know the functions of the integument
3. To briefly describe the common disorders of the integument
4. To know some common drugs which affect the integument

UNIT #9 The Circulatory System

A. The Blood

1. To know the functions of blood
2. To know the constituents of blood
3. To know the 4 blood types and the Rh factor
4. To know the mechanism of clotting
5. To briefly describe the common disorders of the blood
6. To be aware of the common blood tests utilized for diagnosis
7. To know the meaning of homeostasis
8. To know the mechanisms of heat production and heat loss
9. To know the normal body temperature
10. To briefly describe abnormal body temperature
11. To know the effects of heat and cold on the body

B. The Heart

12. To know the structure of the heart
13. To be able to label a diagram of the heart
14. To know how blood circulates through the heart
15. To know the conduction system of the heart
16. To briefly describe the common disorders of the heart

C. The Blood Vessels

17. To know the structure of arteries, veins and capillaries
18. To know the function of arteries, veins and capillaries
19. To know the components and physiology of the pulmonary circulation
20. To know the components and physiology of the systemic circulation
21. To know the components and physiology of the portal system
22. To briefly describe the common disorders of the blood vessels
23. To know how to take a blood pressure and record the same
24. To know how to take a T.P.R. and record the same

D. The Lymphatic System

25. To know the function of the lymphatic system
26. To know the composition of the lymphatic system
27. To briefly describe the common disorders of the lymphatic system

E. Drugs

28. To know some common drugs which affect the circulatory system

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UNIT #10 The Digestive System

1. To know the structures and locations of the various parts of the digestive system
2. To know the functions of each part of the digestive system
3. To be able to label a diagram of the digestive system
4. To know the physiology of digestion
5. To know the functions of the common vitamins and minerals within the body
6. To know the importance of carbohydrates, fats, protein and water within the body
7. To briefly describe the common disorders of the digestive system
8. To know the meaning of the common surgical procedures of the digestive system
9. To know some common drugs which affect the digestive system

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UNIT #11 The Respiratory System

1. To know the structures of the respiratory system
2. To know the functions of the respiratory system
3. To be able to label a diagram of the respiratory system
4. To know the meaning of respiration
5. To know the physiology of respiration
6. To know the terms for abnormal respiration
7. To briefly describe the common disorders of the respiratory system
8. To know the meaning of the common surgical procedures of the respiratory system
9. To know some common drugs which affect the respiratory system

UNIT #12 The Urinary System fl

1. To know the function of the urinary system
2. To know the structures of the urinary system
3. To be able to label a diagram of the urinary system
4. To know the physiology of the urinary system
5. To know the constituents of normal and abnormal urine
6. To briefly describe the common disorders of the urinary system
7. To know some common drugs which affect the urinary system

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UNIT #13 The Endocrine System

1. To know the difference between exocrine and endocrine glands
2. To know the names of the endocrine glands
3. To know the definition of hormone
4. To know the specific hormone for each endocrine gland
5. To know the functions of the hormones
6. To briefly describe the common disorders of the endocrine system
7. To know some of the treatments for these disorders
8. To know some common drugs which affect the endocrine system

UNIT #10 The Digestive System

1. To know the structures and locations of the various parts of the digestive system
2. To know the functions of each part of the digestive system
3. To be able to label a diagram of the digestive system
4. To know the physiology of digestion
5. To know the functions of the common vitamins and minerals within the body
6. To know the importance of carbohydrates, fats, protein and water within the body
7. To briefly describe the common disorders of the digestive system
8. To know the meaning of the-common surgical procedures of the digestive system
9. To know some common drugs which affect the digestive system

UNIT #11 The Respiratory System

1. To know the structures of the respiratory system
2. To know the functions of the respiratory system
3. To be able to label a diagram of the respiratory system
4. To know the meaning of respiration
5. To know the physiology of respiration
6. To know the terms for abnormal respiration
7. To briefly describe the common disorders of the respiratory system
8. To know the meaning of the common surgical procedures of the respiratory system
9. To know some common drugs which affect the respiratory system

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UNIT #12 The Urinary System

1. To know the function of the urinary system
2. To know the structures of the urinary system
3. To be able to label a diagram of the urinary system
4. To know the physiology of the urinary system
5. To know the constituents of normal and abnormal urine
6. To briefly describe the common disorders of the urinary system
7. To know some common drugs which affect the urinary system⁻¹

UNIT #13 The Endocrine System

1. To know the difference between exocrine and endocrine glands
2. To know the names of the endocrine glands
3. To know the definition of hormone
4. To know the specific hormone for each endocrine gland
5. To know the functions of the hormones
6. To briefly describe the common disorders of the endocrine system
7. To know some of the treatments for these disorders
8. To know some common drugs which affect the endocrine system

UNIT #14 The Reproductive System

1. To know the structures of the male and female reproductive system and the location for each
2. To know the functions of the structures of the reproductive system
3. To understand the menstrual cycle
4. To know the various methods of birth control
5. To briefly describe the common disorders of the reproductive system
6. To understand conception, development of the embryo and fetus and parturition
7. To briefly describe the common disorders of pregnancy
8. To understand the menopause
9. To know some common drugs which affect the reproductive system

UNIT #15 Disease and Organisms

1. To know the terms commonly associated with disease
2. To know the meaning of infection
3. To know the common terms describing microorganisms
4. To know the basic concepts of microbial control
5. To know some common antiseptics, disinfectants and anti-infective drugs