

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



COURSE OUTLINE

COURSE TITLE: Anatomy and Physiology II

CODE NO. : PNG1210

SEMESTER: 2

PROGRAM: Practical Nursing

AUTHOR: Consortium/Gwen DiAngelo

DATE: Jan/03

PREVIOUS OUTLINE DATED: N/A

APPROVED:

DEAN

DATE

TOTAL CREDITS: 3

PREREQUISITE(S): PNG1110

HOURS/WEEK: 3

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For additional information, please contact, Dean
School of Health and Human Services
(705) 759-2554, Ext. 603/689

I. COURSE DESCRIPTION:

This course is a continuation of Anatomy and Physiology I and will further examine the relationship of body structures and their functions. Understanding of the remaining individual body systems will provide the learner with knowledge on how these systems work together to carry on complex functions of the human body.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Upon successful completion of this course, the student will demonstrate the ability to:

1. Use the appropriate terminology related to organization, structure and function of the human body.

Potential Elements of the Performance:

- review the selected key terms (vocabulary) for each specific area of study/systems

2. Describe the location, development, structure and function of cells, tissues and organs of stated body systems.

Potential Elements of the Performance:

Nervous System

- Name the anatomical divisions of the nervous system, their components and functions
- Name the functional divisions of the nervous system, their components and functions
- Identify the 2 types of cells that make-up nerve tissue
- Describe the formation and conduction of a nerve impulse
- Describe how impulses are transmitted across a synapse
- Explain how the central nervous system is protected from injury

The Special Senses:

- Describe the basic function of sensory receptors, neurons, nerves and the cerebral cortex
- Describe the location of receptors for heat, cold, touch, pressure and pain
- Describe the location, structure and function of olfactory and taste receptors, receptors involved in hearing, receptors involved in equilibrium and sight

Endocrine System:

- Distinguish between endocrine and exocrine glands and their functions
- Distinguish between hormones and prostaglandins and their functions
- Describe the basic control and actions of the hypothalamus, pituitary, thyroid and parathyroid, adrenal, pancreatic and male and female gonadal hormones

Digestive System

- Compare mechanical and chemical digestion
- Describe the role of digestive enzymes
- Identify the structures of the digestive system and their function
- Explain how the end products of digestion are absorbed
- Identify the sources and uses of carbohydrates, lipids, proteins, vitamins and major minerals and electrolytes

Urinary System:

- name and describe the structure and function of each of the organs of the urinary system
- Name and describe the specific structures of the kidney and their basic functions
- Describe the structure and function of blood supply of the kidney
- Explain how urine is formed
- Name the normal components of urine
- Explain how the kidneys maintain blood plasma composition

Reproductive System:

- Identify and describe the structure and function of the organs of the male reproductive system
- Describe spermatogenesis
- Identify and describe the structure and function of the organs of the female reproductive system
- Describe oogenesis
- Explain the hormonal control of reproduction in males and females
- Describe the structure and function of mammary glands

Genetics/Inheritance:

- Explain the roles of DNA, genes and chromosomes
- Describe the basic patterns of inheritance

III. TOPICS:

1. Nervous System
2. Special Senses
3. Endocrine System
4. Digestive System
5. Urinary System
6. Reproductive System
7. Genetics/Inheritance

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

Thibodeau, G.A. and Patton, K.T. (2000). *Structure and function of the body*. (11th ed.). Mosby.

V. EVALUATION PROCESS/GRADING SYSTEM:

1. The pass mark for this course is 60%. It is composed of term quizzes, a mid-term exam and a final exam.

2. Evaluation Methods:

Quizzes (8 in total, 6 are counted) 30%

Mid-Term Exam (multiple choice & diagrams) 35%

Final Exam (multiple choice & diagrams) 35%

TOTAL 100%

Mid-term exam will consist of course material from the beginning of the course until the mid-term date.

Final exam will consist of course material from the mid-term exam to the end of the course.

3. Students who receive a mark of below 60% may be eligible to write a supplemental exam. The following criteria applies:
 - received at least 50% in the overall mark
 - attended at least 80% of the classes

The supplemental exam will cover the entire semester. It may include multiple choice questions, short answer and/or matching questions and diagrams.

Only one supplemental exam will be offered.

4. Students missing the quizzes for any reason will **not** be able to write them at any other date.
5. Students missing the mid-term exam or final exam because of illness or other serious reason must phone the professor **before** the exam to inform her/him (759-2554, Ext. 630). Those students who have notified the professor of their absence, according to policy, will be eligible to arrange an opportunity as soon as possible to write the exam at another time. Those students who **do not notify** the professor will receive a zero for that exam.
6. Students receiving borderline marks (59, 69, 79, 89) will have their mark advanced to the next category if they have attended at least 80% of the classes.

7. Course Grading Scheme:

The following semester grades will be assigned to students in postsecondary courses:

<u>Grade</u>	<u>Definition</u>	<u>Grade Point Equivalent</u>
A+	90 - 100%	4.00
A	80 - 89%	3.75
B	70 - 79%	3.00
C	60 - 69%	2.00
R (Repeat)	59% or below	0.00
CR (Credit)	Credit for diploma requirements has been awarded.	
S	Satisfactory achievement in field placement or non-graded subject areas.	
U	Unsatisfactory achievement in field placement or non-graded subject areas.	
X	A temporary grade. This is used in limited situations with extenuating circumstances giving a student additional time to complete the requirements for a course (see <i>Policies & Procedures Manual – Deferred Grades and Make-up</i>).	
NR	Grade not reported to Registrar's office. This is used to facilitate transcript preparation when, for extenuating circumstances, it has not been possible for the faculty member to report grades.	

VI. SPECIAL NOTES:

Special Needs:

If you are a student with special needs (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your instructor and/or the Special Needs office. Visit Room E1204 or call Extension 493, 717, or 491 so that support services can be arranged for you.

Retention of course outlines:

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other postsecondary institutions.

Plagiarism:

Students should refer to the definition of “academic dishonesty” in *Student Rights and Responsibilities*. Students who engage in “academic dishonesty” will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course/program, as may be decided by the professor/dean. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

Course outline amendments:

The Professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

Substitute course information is available in the Registrar's office.

Attendance

Students are expected to attend all classes. Various handouts may be given out during class and students are responsible for keeping up with the material missed. The easiest way to do this, is to attend classes.

VII. PRIOR LEARNING ASSESSMENT:

Students who wish to apply for advanced credit in the course should consult the professor. Credit for prior learning will be given upon successful completion of a challenge exam or portfolio.

VIII. DIRECT CREDIT TRANSFERS:

Students who wish to apply for direct credit transfer (advanced standing) should obtain a direct credit transfer form from the Dean's secretary. Students will be required to provide a transcript and course outline related to the course in question.