

ALHS 1011 Structure and Function of the Human Body COURSE SYLLABUS Spring Semester 2016

Semester: Spring 2016

Course Title: Structure & Function of the

Human Body

Course Number: ALHS 1011 Credit Hours/ Minutes: 5/3750

Class Location: Gillis BLDG. Room# 618 Class Meets: Tues. & Thurs. 10:15-12:30

CRN: 40176

REQUIRED TEXT:

1) Elsevier's Structure & Function of the Body 14th By Thibodeau & Patton

RECOMMENDED:

 Elsevier's Workbook/Study Guide for <u>Structure & Function of the Body</u> (*It is* <u>recommended to buy a new workbook</u>.)

 By Thibodeau & Patton

REQUIRED SUPPLIES & SOFTWARE: pen, pencil, paper, notebook, and highlighter, recorder strongly recommended

Power points are available on the M. drive.

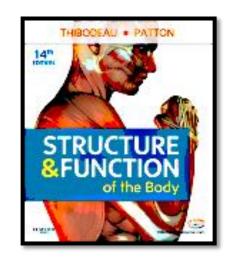
Instructor: Angie Headley, RN

Email Address: aheadley@southeasterntech.edu
Office Hours: M-R: 7:30-8:30 am then, 3:30- 5:00 pm

Office Location: Gillis Building Office 715

Phone: 478-289-2249 Fax Number: 912-538-3106

Tutoring Hours: Please schedule an appointment



COURSE DESCRIPTION: Focuses on basic normal structure and function of the human body. Topics include general plan and function of the human body, integumentary system, skeletal system, muscular system, nervous and sensory systems, endocrine system, cardiovascular system, lymphatic system, respiratory system, digestive system, urinary system, and reproductive system.

MAJOR COURSE COMPETENCIES:

- 1. General Plan and Function of the Human Body
- 2. Integumentary System
- 3. Skeletal System
- 4. Muscular System
- 5. Nervous and Sensory Systems
- 6. Endocrine System
- 7. Cardiovascular System
- 8. Lymphatic System
- 9. Respiratory System
- 10. Digestive System
- 11. Urinary System
- 12. Reproductive Systems

PREREQUISITE(S): Program Admission

COURSE OUTLINE:

General Plan and Function of the Human Body

Order	Description	Learning Domain	Level of Learning
1	Define anatomy and physiology.	Cognitive	Knowledge
2	Describe the major components of the cardiovascular system.	Cognitive	Knowledge
3	Define and use the principle directional terms in human anatomy.	Cognitive	Knowledge
4	Identify the sagittal, transverse, and frontal sections of the body	Cognitive	Knowledge
5	Define and locate the principal regions and cavities of the body	Cognitive	Knowledge
6	Identify the structure of a cell, tissue, organ, and system, and explain the relationship among these structures as they constitute an organism.	Cognitive	Knowledge
7	Define the terms homeostasis, metabolism, and cellular respiration.	Cognitive	Knowledge
8	Differentiate between organic and inorganic compounds and give examples of each.	Cognitive	Analysis
9	Describe the properties of water that make it essential for body functions.	Cognitive	Knowledge
10	Contrast acids and bases and use pH scale in describing acidity and alkalinity of a solution	Cognitive	Analysis
11	Identify the biologically significant chemical elements from a given list by their chemical symbols	Cognitive	Knowledge
12	Describe the structure of a typical cell	Cognitive	Knowledge
13	List organelles and discuss functions of each	Cognitive	Knowledge
14	Describe active and passive transport mechanisms	Cognitive	Knowledge
15	Define mitosis and meiosis	Cognitive	Knowledge
16	Define the term tissue and list the four major types	Cognitive	Knowledge
17	List and describe major types of epithelial, muscle, and connective tissue.	Cognitive	Knowledge
18	Locate and describe different categories of membranes in the body.	Cognitive	Comprehension

Integumentary System

Order	Description	Learning Domain	Level of Learning
1	Identify the main and accessory structures of the integumentary system and their functions	Cognitive	Knowledge
2	Discuss function of the skin in homeostasis of body temperature.	Cognitive	Comprehension

Skeletal System

Order	Description	Learning Domain	Level of Learning
1	Describe functions of the skeletal system	Cognitive	Knowledge
2	Identify major bones of the axial and appendicular skeletons.	Cognitive	Knowledge
3	Explain relationships of the endocrine system to the skeletal system	Cognitive	Comprehension
4	Describe development of the skeletal system.	Cognitive	Knowledge
5	Define articulation and identify types of joints	Cognitive	Knowledge

Muscular System

Order	Description	Learning Domain	Level of Learning
1	Explain functions of skeletal muscle	Cognitive	Comprehension
2	Identify major skeletal muscles and functions	Cognitive	Knowledge
3	Explain physiology of a muscle contraction.	Cognitive	Comprehension
4	Describe actions of muscles.	Cognitive	Knowledge

Nervous and Sensory System

Order	Description	Learning Domain	Level of Learning
1	Identify the general functions of the nervous system.	Cognitive	Knowledge
2	Explain the anatomical and functional classification of the nervous system.	Cognitive	Comprehension
3	Identify types of neurons and describe their functions.	Cognitive	Knowledge
4	Identify parts of a neuron.	Cognitive	Knowledge
5	Describe the physiology of nerve impulse transmission	Cognitive	Knowledge
6	Describe spinal cord and spinal reflexes.	Cognitive	Knowledge
7	Describe and give functions of the layers of the meninges and cerebrospinal fluid.	Cognitive	Knowledge
8	Identify spinal nerves and define plexus.	Cognitive	Knowledge
9	Identify cranial nerves and give functions of each.	Cognitive	Knowledge
10	Compare and contrast the sympathetic with the parasympathetic nervous system.	Cognitive	Evaluation
11	Name the principal areas and functions associated with the lobes of the cerebrum.	Cognitive	Knowledge
12	Identify and describe the function of the major regions of the brain.	Cognitive	Knowledge
13	Describe the structure and functions of the three major parts of the ear.	Cognitive	Knowledge
14	Describe the structure and functions of the eye.	Cognitive	Knowledge
15	Describe the physiology of vision.	Cognitive	Knowledge
16	Trace sound waves through the ear	Cognitive	Comprehension
17	Differentiate special and general senses.	Cognitive	Analysis
18	Describe tactile sensation and proprioreception.	Cognitive	Knowledge

Endocrine System

Order	Description	Learning Domain	Level of Learning
1	Define endocrine gland and hormones; describe how the endocrine system works to maintain homeostasis.	Cognitive	Knowledge
2	Locate the principle endocrine glands, and identify the principle hormones, functions, and target tissues.	Cognitive	Comprehension
3	Describe the mechanism by which the hypothalamus links the endocrine and nervous systems.	Cognitive	Knowledge
4	Describe feedback mechanisms.	Cognitive	Knowledge

Cardiovascular System

Order	Description	Learning Domain	Level of Learning
1	Describe the functions of the cardiovascular system.	Cognitive	Knowledge
2	Describe the major components of the cardiovascular system.	Cognitive	Knowledge
3	Describe the components of plasma and give functions of each.	Cognitive	Knowledge
4	Describe and give the function of each type of formed element.	Cognitive	Knowledge
5	Explain ABO and Rh blood grouping systems.	Cognitive	Comprehension
6	Describe the location of the heart in relation to other organs of the thoracic cavity and the associated serous membranes.	Cognitive	Knowledge
7	Identify the chambers, valves, and associated vessels of the heart.	Cognitive	Knowledge
8	Trace the flow of blood through the heart, and distinguish between pulmonary and systemic circulation.	Cognitive	Comprehension
9	Describe the location of the parts of the conduction system of the heart, and trace the pathway of impulses initiation and conduction.	Cognitive	Knowledge
10	Identify major blood vessels.	Cognitive	Evaluation

11	Describe the structure and function of the different kinds of blood vessels.	Cognitive	Knowledge
12	Define blood pressure and contrast the clinical significance of systolic, diastolic, and pulse pressure.	Cognitive	Knowledge

Lymphatic System

Order	Description	Learning Domain	Level of Learning
1	Describe the structures of the lymphatic system and their functions.	Cognitive	Knowledge
2	Explain adaptive and innate resistance to disease.	Cognitive	Comprehension

Respiratory System

Order	Description	Learning Domain	Level of Learning
1	Describe parts of the upper and lower respiratory tracts.	Cognitive	Knowledge
2	Trace the pathway of air into and out of the respiratory tract.	Cognitive	Comprehension
3	Explain the physiology of breathing.	Cognitive	Comprehension
4	Differentiate external and internal respirations.	Cognitive	Analysis
5	Explain how oxygen and carbon dioxide are carried in the blood.	Cognitive	Comprehension

Digestive System

Order	Description	Learning Domain	Level of Learning
1	Differentiate chemical and mechanical digestion	Cognitive	Analysis
2	Identify the parts of the digestive system, their locations, and the functions of each.	Cognitive	Knowledge
3	Trace the pathway of food through the gastrointestinal system.	Cognitive	Comprehension
4	Identify the major digestive secretions and their functions.	Cognitive	Knowledge
5	Describe the process of absorption.	Cognitive	Knowledge

Urinary System

Order	Description	Learning Domain	Level of Learning
1	Identify the parts of the urinary system.	Cognitive	Knowledge
2	Explain general functions of the urinary system.	Cognitive	Comprehension
3	Explain the relationships of the urinary system to the endocrine and circulatory systems.	Cognitive	Comprehension
4	Describe the structure and function of the nephron	Cognitive	Knowledge
5	Compare the urinary system of the female with that of the male.	Cognitive	Synthesis
6	Identify the constituents of urine.	Cognitive	Knowledge
7	Differentiate the processes of secretion, filtration, and reabsorption and where they occur in the nephron.	Cognitive	Analysis

Reproductive System

Order	Description	Learning Domain	Level of Learning
1	Describe the anatomy and physiology of the female reproductive system.	Cognitive	Knowledge
2	Explain the relationship of the endocrine system to the menstrual cycle and the functioning of the	Cognitive	Comprehension
3	Describe the physiology of the male and female gonads, and the production of gametes.	Cognitive	Knowledge
4	Describe the anatomy and physiology of the male reproductive system.	Cognitive	Knowledge
5	Relate the urinary system to the reproductive system of the male.	Cognitive	Analysis
6	Explain the relationship of the endocrine system to the function of the male reproductive system.	Cognitive	Comprehension

COMPETENCIES: STC has identified the following general education core competencies that graduates will attain:

- 1. The ability to utilize standard written English.
- 2. The ability to solve practical mathematical problems.
- 3. The ability to read, analyze, and interpret information.
- 4. The ability to utilize basic computer skills.

All students pursuing a degree, a diploma, or a Technical Certificate of Credit with a General Education component will be required to pass the General Education Competency Exams prior to graduation.

STUDENT REQUIREMENTS:

Students are responsible for policies and procedures in the STC E-Catalog and Student Handbook. STC policy states that eating, drinking, and cell phone usage are prohibited in class. Any violation of this policy will result in dismissal from the class.

Prior to the discussion of each chapter in class, the student is expected to complete the following:

- 1. Read the assigned chapter.
- 2. Know the answers to the review questions and chapter test at the end of the chapter.
- 3. Know the definitions of the key terms listed at the end of the chapter.
- 4. Complete the workbook activities for the assigned chapter.

A final chapter/unit test average of 70 or above is required to sit for the final exam. Grades of 69.9 will not be rounded up. If the student has below a 70 average, the student will be not be allowed to take the final exam and the student will receive a zero as the grade for the final exam.

NO EXTRA CREDIT OR BONUS POINTS WILL BE GIVEN. NO EXAM GRADES ARE DROPPED.

MAKEUP GUIDELINES FOR TESTS: In the event of an <u>excused absence</u> on an exam day, the student will be allowed to make-up <u>one</u> exam (excluding the final exam) which will be given at the discretion of the instructor. A grade of "0" will be given to all subsequent exams missed. The make-up exam may or may not be the same as the original exam. It may also be a different test format. Failure to show up for a make-up exam results in a grade of zero.

An excused absence is jury duty, military duty, court duty, or required job training. Other excused absences may also include illness, hospitalization or a death in the student's immediate family. Official, written documentation such as a subpoena or a doctor's excuse must be provided by the student prior to taking the make-up exam. The instructor reserves the right to refuse for the student to take the make-up exam based on the merit of the documentation.

STC ATTENDANCE POLICY: It is essential that educational programs maintain requirements and standards necessary for successful employment of its graduates in business and industry. In view of the intensive nature of the educational programs, it is necessary for every student to be present and on time every day for all classes.

Attendance is counted from the first scheduled class meeting of each semester. To receive credit for a course a student must attend at least 90% of the scheduled instructional time. All work missed due to tardiness or absences must be made up at the convenience of the instructor. Any student attending less than the required scheduled instructional time as noted on each syllabus will receive a "W" for the course if removed from the course on or before the 65% date of the semester. After the 65% date, any student who has maintained a passing grade within a course will receive a 'WP' for the course when attending less than the required scheduled instructional time as stated on each course syllabus. If, however, the student has not maintained a passing grade, he or she will receive a 'WF' for the course. Tardy means arriving after the scheduled time for instruction to begin. Early departure means leaving before the end of the scheduled time. Three (3) tardies or early departures equal one (1) absence for the course involved.

TRADITIONAL ATTENDANCE ADDENDUM: This class will meet for a total of 2 days per week for 15 weeks; therefore, a student may **miss no more than 4 days** during the semester.

SPECIFIC ABSENCES: Provisions for Instructional Time missed because of documented absences due to jury duty, military duty, court duty, or required job training will be made at the discretion of the instructor.

SPECIAL NEEDS ADDENDUM: Students with disabilities who believe that they may need accommodations in this class based on the impact of a disability are encouraged to contact Jan Brantley, Building One office 1208 Swainsboro

Campus, 478-289-2274, or Helen Thomas, Room 108 Vidalia Campus, 912-538-3126, to coordinate reasonable accommodations.

PREGNANCY

Southeastern Technical College does not discriminate on the basis of pregnancy. However, we can offer accommodations to students who are pregnant that need special consideration to successfully complete the course. If you think you will need accommodations due to pregnancy, please advise me and make appropriate arrangements with the Special Needs Office. Swainsboro Campus: Jan Brantley (478) 289-2274 -- Vidalia Campus: Helen Thomas Room 108 (912) 538-3126.

WITHDRAWAL PROCEDURE: Students wishing to officially withdraw from a course(s) or all courses after the drop/add period and prior to the 65% portion of the semester (date will be posted on the school calendar) must speak with a Career Counselor in Student Affairs and complete a Student Withdrawal Form. A grade of "W" is assigned when the student completes the withdrawal form from the course.

Students who are dropped from courses due to attendance (see your course syllabus for attendance policy) after drop/add until the 65% point of the semester will receive a "W" for the course. Abandoning a course(s) instead of following official withdrawal procedures may result in a grade of 'F' being assigned.

After the 65% portion of the semester, the student will receive a grade for the course. (Please note: A zero will be given for all missed assignments.)

There is no refund for partial reduction of hours. Withdrawals may affect students' eligibility for financial aid for the current semester and in the future, so a student must also speak with a representative of the Financial Aid Office to determine any financial penalties that may be accessed due to the withdrawal. All grades, including grades of 'W', will count in attempted hour calculations for the purpose of Financial Aid.

Remember - Informing your instructor that you will not return to his/her course does not satisfy the approved withdrawal procedure outlined above.

Procedure for Academic Misconduct

The procedure for dealing with academic misconduct and dishonesty is as follows:

--First Offense--

Student will be assigned a grade of "0" for the test or assignment. Instructor keeps a record in course/program files and notes as first offense. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus. The Registrar will input the incident into Banner for tracking purposes.

--Second Offense--

Student is given a grade of "WF" for the course in which offense occurs. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of second offense. The Registrar will input the incident into Banner for tracking purposes.

-- Third Offense--

Student is given a grade of "WF" for the course in which the offense occurs. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of second offense. The Vice President for Student Affairs, or designee, will notify the student of suspension from college for a specified period of time. The Registrar will input the incident into Banner for tracking purposes.

STATEMENT OF NON-DISCRIMINATION: Southeastern Technical College does not discriminate on the basis of race, color, creed, national or ethnic origin, gender, religion, disability, age, disabled veteran, veteran of Vietnam Era or citizenship status, (except in those special circumstances permitted or mandated by law). This school is in compliance with Title VI of the Civil Rights Act of 1964, which prohibits discrimination on the basis of race, color, or national origin; with the provisions of Title IX of the Educational Amendments of 1972, which prohibits discrimination on the basis of gender; with the provisions of Section 504 of the Rehabilitation Act of 1973, which prohibits discrimination on the basis of handicap; and with the American with Disabilities Act (ADA).

GRIEVANCE PROCEDURES: Grievance procedures can be found in the Catalog and Handbook located on STC's website.

ACCESS TO TECHNOLOGY: Students can now access Angel, Remote Lab Access, Student Email, Library Databases (Galileo), and BannerWeb via the mySTC portal or by clicking the Current Students link on the STC website at www.southeasterntech.edu.

TCSG GUARANTEE/WARRANTY STATEMENT: The Technical College System of Georgia guarantees employers that graduates of State Technical Colleges shall possess skills and knowledge as prescribed by State Curriculum Standards. Should any graduate employee within two years of graduation be deemed lacking in said skills, that student shall be retrained in any State Technical College at no charge for instructional costs to either the student or the employer.

GRADING SCALE:

A: 90-100 B: 80-89 C: 70-79 D: 60-69 F: 0-59

EVALUATION PROCEDURES

Students will be given multiple written examinations throughout the semester and 1 comprehensive final examination at the end of the semester.

Grading Components	
Unit Exams	75%
Final Examination	25%

Total 100%

Each student's final course grade will be determined as follows:

Average of Unit Exams X 0.75 = +_____ Final Exam X 0.25 = +_____

Numerical Course Grade =

ALHS 1011 STRUCTURE & FUNCTION OF THE HUMAN BODY T & R 10:15 - 12:30 **SPRING SEMESTER 2016 LESSON PLAN** Chap / Comp Area **Date** Content **Assignments & Tests Due** Less Week 1 Tuesday Introduction to the course; get books, go over STC polices 1/12/16 Chapter 1 Introduction to the Structure and Function of the Human Body Read/study chapter(s) in Thursday preparation for test *1 1/14/16 Chapter 2 The Chemistry of Life Complete workbook/study-guide **a-d for additional preparation for test Week 2 Read/study chapter(s) in Tuesday Test 1 (1 & 2) preparation for test *1 1/19/16 Chapter 3 Cells and Tissues Complete workbook/study-quide **a-d for additional preparation for test Read/study chapter(s) in *1 Thursday Chapter 3 Cells and Tissues preparation for test **a-d

1/21/15			Complete workbook/study-guide	
		Week 3	for additional preparation for test	
Tuesday	ı	WOOK 0	Dood/study shouts (s) in	
Tuesday 1/26/16	Chapter 5	Test 2 (3)	Read/study chapter(s) in preparation for test	
	,	The Integumentary System and Body Membranes	Complete workbook/study-guide for additionally preparation for	
Thursday			test Read/study chapter(s) in	
1/28/16	Chapter 5	The Integumentary System and Body Membranes	preparation for test Complete workbook/study-guide for additionally preparation for test	*1 & 2 **a-d
		Week 4		
Tuesday			Read/study chapter(s) in	
2/2/16	Chapter 6	The Skeletal System	preparation for test Complete workbook/study-guide for additionally preparation for test	*3 **a-d
Thursday			Read/study chapter(s) in	
2/4/16	Ch 5 & 6	Review 5 & 6	preparation for test Complete workbook/study-guide for additionally preparation for test	*2 & 3 **a-d
		Week 5	1001	
Tuesday			Read/study chapter(s) in	
2/9/16	Chapter 7	Test 3 (5 & 6) The Muscular System	preparation for test Complete workbook/study-guide for additionally preparation for test	*2, 3 & 4 **a-d
Thursday	Chapter 7		Read/study chapter(s) in	
2/11/16	·	The Muscular System	preparation for test Complete workbook/study-guide for additionally preparation for test	*4 **a-d
		Week 6		
Tuesday			Read/study chapter(s) in	
2/16/16	Chapter 8	Test 4 (7) The Nervous System	preparation for test Complete workbook/study-guide for additionally preparation for test	*4 & 5 **a-d
Thursday 2/18/16	Chapter 8	The Nervous System	Read/study chapter(s) in preparation for test Complete workbook/study-guide for additionally preparation for test	*5 **a-d
		Week 7		
Tuesday 2/23/16		Test 5 (8)	Read/study chapter(s) in preparation for test	
2/23/10	Chapter 9	The Senses	Complete workbook/study-guide for additionally preparation for test	* 5 **a-d
Thursday 2/25/16	Chapter 9	The Senses	Read/study chapter(s) in preparation for test Complete workbook/study-guide	*5 **a-d
			for additionally preparation for test	au
Week 8				
Tuesday	Chapter 10	Test 6 (9)	Read/study chapter(s) in	*5 & 6

3/1/16		The Endocrine System	preparation for test Complete workbook/study-guide for additionally preparation for test	**a-d
Thursday 3/3/16	Chapter 13	The Lymphatic System and Immunity	Read/study chapter(s) in preparation for test Complete workbook/study-guide for additionally preparation for test	*8 **a-d
		Week 9		
Tuesday 3/8/16	Chapter 11	Test 7 (10 & 13) The Blood	Read/study chapter(s) in preparation for test Complete workbook/study-guide for additionally preparation for test	*6. 7, & 8 **a-d
Thursday 3/10/16	Chapter 12	The Cardiovascular System	Read/study chapter(s) in preparation for test Complete workbook/study-guide for additionally preparation for test	*7 **a-d
		Week 10		
Tuesday 3/15/16	Chapter 14	Test 8 (11 & 12) The Respiratory System	Read/study chapter(s) in preparation for test Complete workbook/study-guide for additionally preparation for test	*7 & 9 **a-d
Thursday 3/17/16	Chapter 14	The Respiratory System	Read/study chapter(s) in preparation for test Complete workbook/study-guide for additionally preparation for test	*9 **a-d
		Week 11		
Tuesday 3/22/16	Chapter 15	Test 9 (14) The Digestive System	Read/study chapter(s) in preparation for test Complete workbook/study-guide for additionally preparation for test	*9 & 10 **a-d
Thursd6y 3/24/16	Chapter 15	The Digestive System	Read/study chapter(s) in preparation for test Complete workbook/study-guide for additionally preparation for test	*10 **a-d
		Week 12		
Tuesday 3/29/16		Spring Break	Read/study chapter(s) in preparation for test Complete workbook/study-guide for additionally preparation for test	*10 & 11 **a-d
Thursday 3/31/16		Spring Break	Read/study chapter(s) in preparation for test Complete workbook/study-guide for additionally preparation for test	*11 **a-d
		Week 13		
Tuesday 4/5/16	Chapter 17	Test 10 (15) The Urinary System	Read/study chapter(s) in preparation for test Complete workbook/study-guide for additionally preparation for test	*11 & 12 **a-d

Thursday 4/7/16	Chapter 17	The Urinary System	Read/study chapter(s) in preparation for test Complete workbook/study-guide for additionally preparation for test	* 12 **a-d	
		Week 14			
Tuesday 4/12/16	Chapter 20	Test 11 (17) The Reproductive System	Read/study chapter(s) in preparation for test Complete workbook/study-guide for additionally preparation for test	*12 **a-d	
Thursday 4/14/16	Chapter 20	The Reproductive System	Read/study chapter(s) in preparation for test Complete workbook/study-guide for additionally preparation for test	*1-12 **a-d	
		Week 15			
Tuesday 4/19/16		Test 12 (20)	Review all previous chapters including the workbook at home	*1-12 **a-d	
Thursday 4/21/16		Test Make-up Day if applicable (if you do not have a make-up test, you are excused from class ☺)			
Week 16 (Final Exam Week)					
Tuesday 4/26/16	All Chapters	Review for final	Review all previous chapters including the workbook at home	*1-12 **a-d	
Thursday 4/28/16	All Chapters	Comprehensive Final Exam			

* Competency Areas:

- 1. General Plan and Function of the Human Body
- 2. Integumentary System
- 3. Skeletal System
- 4. Muscular System
- 5. Nervous and Sensory Systems
- 6. Endocrine System
- 7. Cardiovascular System
- 8. Lymphatic System9. Respiratory System
- 10. Digestive System
- 11. Urinary System
- 12. Reproductive System

**General Core Educational Competencies

- a) The ability to utilize standard written English.
- b) The ability to solve practical mathematical problems.
- c) The ability to read, analyze, and interpret information.
- d) The ability to utilize basic computer skills.