

Course Syllabus

COURSE: PTHA 1413 Functional Anatomy (4:3:3)
 SEMESTER: Spring 2020
 CLASS DAYS: M/W
 CLASS TIMES: 1:00-4:00
 FACEBOOK: <https://www.facebook.com/South-Plains-College-PTA-270314052992426/?ref=bookmarks>

Name	Phone Numbers	Email	Office	Office Hours
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“South Plains College improves each student’s life.”

GENERAL COURSE INFORMATION

It is the responsibility of each student to be familiar with the content and requirements listed in the course syllabus.

COURSE DESCRIPTION

This course includes a detailed study of the knowledge and skills necessary to reach competence in introduction of advance practice.

STUDENT LEARNING OUTCOMES

Upon successful completion of the course, following a given plan of care and under the supervision of the PT, the student will be able to:

1. Identify advanced human anatomy of the musculoskeletal system.
 - a. Explain the function of the skeletal system.
 - b. Describe the gross anatomical components and relationships of the skeletal system.
 - c. Identify joint structures and components.
 - d. Define principles of joint motion.
 - e. Describe normal joint end-feel for all major joints.
 - f. Identify the normal curves of the vertebral column.
 - g. Identify the center of gravity in standing.
 - h. Explain the function of the muscular system.
 - i. Describe the gross anatomical components and relationships of the muscular system.
 - j. Compare and contrast the structure and function of the three major subtypes of skeletal muscles.
 - k. Describe the types of muscle contractions and give functional examples for each type.
 - l. Name the proximal/distal attachments and function of the major skeletal muscles.
 - m. Analyze how the skeletal system and the muscular system function together to allow normal movement.

1. Analyze osteokinematics and arthrokinematics related to the human body.
 - a. Define planes and axes.
 - b. Identify the relationship of axes to the cardinal planes of motion and the anatomical position for individual joints.
 - c. Define Newton’s Laws applicable to physical therapy and provide examples.
 - d. Define the terminology applicable to forces and loading.

<ul style="list-style-type: none"> e. Differentiate between pressure and forces. f. Describe the relationship between physical laws and biomechanical principles of the musculoskeletal system. g. Examine the components of levers and their use in the human body. h. Describe the mechanical property of tissues. i. Describe how the length-tension relation of muscle affects force production. j. Explain the forces involved when an object is in equilibrium.
<p>2. Palpate and identify anatomical surface landmarks.</p> <ul style="list-style-type: none"> a. Describe the correlation between bony structures and surface anatomy. b. Demonstrate the ability to palpate bony structures. c. Describe the correlation between muscular structures and surface anatomy. d. Demonstrate the ability to palpate muscular structures. e. Describe the correlation between connective structures and surface anatomy. f. Demonstrate the ability to palpate connective structures.
<p>3. Demonstrate manual muscle testing using correct procedure.</p> <ul style="list-style-type: none"> a. Define manual muscle testing and measuring techniques. b. Demonstrate competency in performing manual muscle testing for all major muscle groups including assigning the appropriate grade. c. Demonstrate competency in the palpation of the appropriate muscle(s) related to manual muscle testing. d. Demonstrate competency in the ability to stabilize the appropriate joints during manual muscle testing.
<p>4. Demonstrate goniometry and range of motion assessment using correct procedure.</p> <ul style="list-style-type: none"> a. Demonstrates correct use of goniometry and alternative measurement devices for range of motion assessment. b. Demonstrate competency in the use of appropriate landmarks for goniometry. c. Demonstrate competency in performing goniometry for all major joints for both active and passive range of motion. d. Describe the normal range of motion for all major joints. e. Describe normal joint end-feel for all major joints. f. Describe special tests used for assessment purposes. g. Explain common special tests used by the supervising PT to provide more in depth assessment of pathologies.
<p>5. Analyze the components of the normal gait cycle.</p> <ul style="list-style-type: none"> a. Identify the components of the normal gait cycle. b. Delineate the muscle groups and joint motions related to the normal gait cycle. c. Analyze the normal gait cycle.
<p>6. Explain basic postural alignment and body mechanics.</p> <ul style="list-style-type: none"> a. Differentiate between basic normal and abnormal postural alignment. b. Demonstrate competency related to body mechanics to meet requirements outlined in the skill check and lab exam.
<p>7. Analyze normal human movement.</p> <ul style="list-style-type: none"> a. Identify bony structures and osteokinematics involved with movement. b. Identify muscles/groups involved with agonist/antagonist/synergistic movement. c. Identify nerves required for innervation of muscle groups used in movement patterns. d. Identify anatomy and physiology of bone, muscle, and nerve tissue as related to the creation of movement.
<p>8. Apply generic abilities related to course content. (<i>Generic Abilities adapted from the Physical Therapy Program, University of Wisconsin-Madison, May et al. Journal of Physical Therapy Education, 9:1, Spring, 1995.</i>)</p>

- a. *Commitment to Learning* – Demonstrate the ability to self-assess, self-correct, and self-direct. Identify needs and sources of learning. Seek new knowledge and understanding.
- b. *Interpersonal Skills* – Demonstrate the ability to interact effectively with patients, families, colleagues, other health care professionals, and the community. Demonstrate the ability to effectively deal with cultural and ethnic diversity issues.
- c. *Communication Skills* – Demonstrate the ability to communicate effectively (i.e., speaking, body language, reading, writing, and listening) for a varied audiences and purposes.
- d. *Effective Use of Time* – Demonstrate the ability to obtain maximum benefit from a minimum investment of time and resources.
- e. *Use of Constructive Feedback* – Demonstrate the ability to identify sources and seek out feedback and to effectively use and provide feedback for improving personal interaction.
- f. *Problem-Solving* – Demonstrate the ability to recognize and define problems, analyze data, develop and implement solutions, and evaluate outcomes.
- g. *Professionalism* – Demonstrate the ability to exhibit appropriate professional conduct and to represent the profession effectively.
- h. *Responsibility* – Demonstrate the ability to fulfill commitments and to be accountable for actions and outcomes.
- i. *Critical Thinking* – Demonstrate the ability to question logically; to recognize and differentiate facts, illusions, assumptions, and hidden assumptions; and to distinguish the relevant from the irrelevant.
- j. *Stress Management* – Demonstrate the ability to identify sources of stress and to develop effective coping behaviors.
- k. Use a SOAP note format to document lab skills.

- 9. Describe basic concepts related to the *APTA Guide to Physical Therapist Practice*.
 - a. Integrate basic concepts presented in the *APTA Guide to Physical Therapist Practice* related to course content.
 - b. Identify the parameters of the scope of practice of the PTA related to course content.

COURSE OBJECTIVES -

At the completion of this course the student will have the cognitive, psychomotor, and affective competencies

1. Identify advanced human anatomy of the musculoskeletal system.
2. Analyze osteokinematics and arthrokinematics related to the human body.
3. Palpate and identify anatomical surface landmarks.
4. Demonstrate manual muscle testing using correct procedure.
5. Demonstrate goniometry and range of motion assessment using correct procedure.
6. Analyze the components of the normal gait cycle.
7. Explain basic postural alignment and body mechanics.
8. Analyze normal human movement.
9. Apply generic abilities related to course content.
10. Describe basic concepts related to the *APTA Guide to Physical Therapist Practice*.

EVALUATION METHODS

Computer-based exams, written exams, written assignments, quizzes, and other projects as assigned.

ACADEMIC INTEGRITY

It is the aim of the faculty of South Plains College to foster a spirit of complete honesty and a high standard of integrity. The attempt of any student to present as his or her own any work which he or she has not honestly

performed is regarded by the faculty and administration as a most serious offense and renders the offender liable to serious consequences, possibly suspension.

Cheating - Dishonesty of any kind on examinations or on written assignments, illegal possession of examinations, the use of unauthorized notes during an examination, obtaining information during an examination from the textbook or from the examination paper of another student, assisting others to cheat, alteration of grade records, illegal entry or unauthorized presence in the office are examples of cheating. Complete honesty is required of the student in the presentation of any and all phases of coursework. This applies to quizzes of whatever length, as well as final examinations, to daily reports and to term papers.

Plagiarism - Offering the work of another as one's own, without proper acknowledgment, is plagiarism; therefore, any student who fails to give credit for quotations or essentially identical expression of material taken from books, encyclopedias, magazines and other reference works, or from themes, reports or other writings of a fellow student, is guilty of plagiarism.

BLACKBOARD

Blackboard is an e-Education platform designed to enable educational innovations everywhere by connecting people and technology. This educational tool will be used in this course throughout the semester.

FACEBOOK

The PTA program has a Facebook page at <https://www.facebook.com/South-Plains-College-PTA-270314052992426/?ref=bookmarks> In addition to the South Plains College website; this Facebook page will be used to keep students up-to-date on program activities, weather delays, South Plains College announcements and will help with program recruitment. "Liking" the South Plains College PTA Facebook page is not mandatory, nor are personal Facebook accounts, in order to access this page.

SCANS and FOUNDATION SKILLS

Refer also to Course Objectives. Scans and Foundation Skills attached

SPECIFIC COURSE INFORMATION

TEXT AND MATERIALS

Required Materials:

Students must have internet access and an internet browser and MS Office. If you do not have a computer with a modem at home, you can access South Plains College's Computer Lab. Jessica Tucker ext. 2180 jetucker@southplainscollege.edu will be your tech support contact for Blackboard.

Text Books:

Trail Guide to the Body Workbook ISBN 978-0-9829786-6-5 [optional]

Trail Guide to the Body ISBN 978-0-9987850-6-6

Trail Guide to Movement 978-0-9914666-2-7

Physical Therapy Clinical Handbook for PTA 978-1-284-10556-8

Visible Body App [suggested resource]

ADDITIONAL CLASSROOM ITEMS

Students should come to class prepared with pens, pencils, and a spiral notebook for taking notes or completed quizzes or assignments in class. Students should be prepared to take notes over lecture material if they choose. Students may use laptop computers or other sources of technology to take notes if desired.

ATTENDANCE POLICY (*READ CAREFULLY)

Class Attendance

Students are expected to attend all classes in order to be successful in a course. The student may be administratively withdrawn from the course when absences become excessive as defined in the course syllabus.

When an unavoidable reason for class absence arises, such as illness, an official trip authorized by the college or an official activity, the instructor may permit the student to make up work missed. It is the student's responsibility to complete work missed within a reasonable period of time as determined by the instructor. Students are officially enrolled in all courses for which they pay tuition and fees at the time of registration. Should a student, for any reason, delay in reporting to a class after official enrollment, absences will be attributed to the student from the first class meeting.

Students who enroll in a course but have "Never Attended" by the official census date, as reported by the faculty member, will be administratively dropped by the Office of Admissions and Records. A student who does not meet the attendance requirements of a class as stated in the course syllabus and does not officially withdraw from that course by the official census date of the semester, may be administratively withdrawn from that course and receive a grade of "X" or "F" as determined by the instructor. Instructors are responsible for clearly stating their administrative drop policy in the course syllabus, and it is the student's responsibility to be aware of that policy.

It is the student's responsibility to verify administrative drops for excessive absences through MySPC using his or her student online account. If it is determined that a student is awarded financial aid for a class or classes in which the student never attended or participated, the financial aid award will be adjusted in accordance with the classes in which the student did attend/participate and the student will owe any balance resulting from the adjustment.

(http://catalog.southplainscollege.edu/content.php?catoid=47&navoid=1229#Class_Attendance)

ASSIGNMENT POLICY

All assignments must be completed by the assigned due date. Late and/or incomplete work will not be accepted and a grade of zero will be recorded. Assignments, quizzes, exams, and skills missed due to an unexcused absence may not be made up. Assignments are due by the assigned dates and times in Central Standard Time (CST) on the class schedule. Students should contact faculty prior to the due date and time if they anticipate material will be late. Please note contacting faculty will not guarantee the receipt of an extension for the assignment. Please allow enough time for preparation and submission of each assignment prior to the scheduled due date. Failure to complete any assignment by due date will result in professional standard point deductions on final grade.

Student must scan required documents before uploading into Blackboard. Scanners are located in the classroom and the video reviewing room. Students may also choose an app of choice (I-scan, etc.). Assignments must be uploaded as a PDF.

COMPUTER USAGE

As computer technology in the field of health occupations continues to become more popular, computers will be used in this course for several assignments. All students have access to computers and printers on the South Plains College campus. Students will be expected to utilize computers to access assignments and classroom resources. All registered students are supplied with a working email account from South Plains College. In order to take exams, students must have their username and password.

ALL STUDENTS ARE EXPECTED TO KNOW THEIR SPC STUDENT USERNAME AND PASSWORD.

COMPUTER LAB USAGE

The computer lab(s) on any campus may be used by students during scheduled open hours or as assigned by an instructor. Printer paper will not be provided for students to print materials but students may seek assistance from faculty or staff to request lab paper from the college if needed. Lack of computer lab paper is not an excuse for not having homework assignments, skills lab sheets, or any other required documents. Students should come prepared for class.

EXAMS

The lecture exams will be administered via computer to prepare them for the NPTE-PTA exam. Possible pop quizzes will be handwritten which will encourage memory and mastery of the material. Additionally, many exam questions will be constructed in the same manner as NPTE-PTA, allowing students to prepare for that testing format.

ASSESSMENT USED BUT NOT LIMITED TO:

1. Lecture Exams
2. Mid Term and Final Lab Exams
3. Quizzes
4. Comprehensive final exam

COURSE GRADING

Students will successfully complete clinical course PTHA 1301 with a grade of 75 % or higher. Students who fall below passing requirements will not be allowed to continue in the PTA program.

A= 90-100%

B = 80-89%

C = 75-79%

BELOW 77% at midterm of the semester will result in the development of a learning contract and the student being responsible for meeting established goals

The exam policy includes the following:

- Personal belongings are not allowed in the lab during testing.
- Pencils and scratch paper will be issued to students prior to exam. These items must be returned prior to exiting testing area.
- Cell phones and/or smart watches are not allowed in the lab during testing.
- Students must adhere to lab rules.
- Hats or hoodies may not be worn.
- Talking will not be permitted; questions will be answered by an instructor.
- Any action interpreted as cheating by facilitating instructor may result in immediate removal from testing lab, a zero recorded for the test grade and possible removal from SPC PTA program.

GRADING POLICY

Grade will be arrived at through attendance, class participation, written assignments, and exams. Lab grades will be based on participation, assignments, and Lab Skills exam. Minimum passing grade for a skills exam is 75. All Critical Safety requirements must be successfully demonstrated on lab exams or the student will receive a failing grade on the exam.

1. Lecture Unit exams – 40%
2. Lab exams – 40%
3. Class assignments – 10%
4. Professionalism – 10%

The student must achieve a weighted average of 75% or greater on the Lecture and Lab exams exam to pass the course.

COURSE SCHEDULE- Monday and Wednesday 1:00-4:00 PM

WEEK	MONDAY	WEDNESDAY	ASSIGNMENTS, QUIZZES & EXAMS
WEEK 1 Jan. 13-19	Introduction to PTHA 1314 Movement Essentials (TGTM Ch. 1 & 2)	Connective Tissue (TGTM Ch. 3 & 4)	All weekly quizzes and assignments are due by Sunday at 11:59 PM on the week assigned
WEEK 2 Jan. 20-26	MLK HOLIDAY	Connective Tissue Palpation Lab	Weekly Quiz 1 final attempt 2/3/19
WEEK 3 Jan. 27 – Feb 2	Joints (TGTM Ch. 5 & 6) [Palpation mock lab exam]	Joints	Exam 1 - 1/29/2020 1-2 PM Assignment 1
WEEK 4 Feb. 3-9	Muscle (TGTM Ch. 7-9)	Muscle	Weekly –Quiz 2 final attempt 3/24/19
WEEK 5 Feb. 10-16	Nerve (TGTM Ch. 10)	Nerve Myotomes	Exam 2 – 2/12/2020 1-2 PM Assignment 2
WEEK 6 Feb. 17-23	Biomechanics	Biomechanics	Assignment 3
WEEK 7 Feb. 24- Mar. 1	Posture TGTM CH 14	Posture	Weekly –Quiz 3 final attempt 3/10/19 Assignment 4
WEEK 8 Mar. 2-8	Gait TGTM Ch 15	Gait	Exam 3 - 3/5/2020 1-2PM Assignment 5
WEEK 9 Mar. 9-15	LOWER EXTREMITY Goniometry (PTCH pp.107-114)	LE ROM Skills Check-Off	Weekly Quiz 4 (DUE Sunday, March 8 th by 11:59P)
Spring Break March 16-22			
WEEK 10 Mar. 23- 29	LOWER EXTREMITY Manual Muscle Testing (PTCH pp.130-139) & SPECIAL TESTS (PTCH pp.141-145)	LE MMT Skills Check-Off	Weekly Quiz 5 (DUE Sunday, March 22 nd by 11:59P)
WEEK 11 Mar. 30-Apr.5	Lab Exam 1	TRUNK ROM & Strength Assessments and Special Tests (materials on Blackboard)	Weekly Quiz 6 (DUE Tuesday, March 31 st by 11:59P) Lab Exam 1 Mon., March 30th
WEEK 12 Apr. 6-12	TRUNK ROM/MMT Skills Check-Off	Lab Exam 2	Lab Exam 2 Wed., April 8th
WEEK 13 Apr. 13-19	UPPER EXTREMITY Goniometry (PTCH pp.101-107)	UE ROM Skills Check-Off	Weekly Quiz 7 (DUE Sunday, April 12 th by 11:59P)
WEEK 14 Apr. 20-26	EASTER HOLIDAY	UPPER EXTREMITY Manual Muscle Testing (PTCH pp.115-129) & SPECIAL TESTS (PTCH pp.141-145)	Weekly Quiz 8 (DUE Tuesday, April 21 st by 11:59P)
WEEK 15 Apr. 27 – May 3	UE MMT Skills Check-Off	Lab Exam 3 & ASSESSMENT CARNIVAL	Lab Exam 3 Wed., April 29th Final Lab Exam Thurs., April 30th at 9AM

WEEK 16 May 4-8	Functional Anatomy Project Presentations	Functional Anatomy Project Presentations	Cumulative Take-Home Exam Replacement Opportunity
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READING KEY

TGTM : Trail Guide to Movement PTCH : Physical Therapy Clinical Handbook for PTAs

COMMUNICATION POLICY

Electronic communication between instructor and students in this course will utilize the South Plains College “My SPC” and email systems. I will utilize text messaging and you may communicate with me this way also. The instructor will not initiate communication using private email accounts. Students are encouraged to check SPC email on a regular basis each week of class. Students will also have access to assignments, web-links, handouts, and other vital material which will be delivered via the classroom website. Any student having difficulty accessing the classroom website or their email should immediately contact their instructor for direction. The instructor will work with any student to ensure the student has access to a computer on campus and can obtain the needed class content that is located on the course website.

CAMPUS CARRY

Campus Concealed Carry - Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in South Plains College buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and South Plains College policy, license holders may not carry a concealed handgun in restricted locations. For a list of locations, please refer to the SPC policy at:

http://www.southplainscollege.edu/human_resources/policy_procedure/hhc.php

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all South Plains College campuses. Report violations to the College Police Department at 806-716-2396 or 9-1-1.

PREGNANCY ACCOMMODATIONS STATEMENT

If you are pregnant, or have given birth within six months, Under Title IX you have a right to reasonable accommodations to help continue your education. To activate accommodations you must submit a Title IX pregnancy accommodations request, along with specific medical documentation, to the Director of Health and Wellness. Once approved, notification will be sent to the student and instructors. It is the student’s responsibility to work with the instructor to arrange accommodations. Contact Crystal Gilster, Director of Health and Wellness at 806-716-2362 or email cgilster@southplainscollege.edu for assistance.

STUDENT CONDUCT

Rules and regulations relating to the students at South Plains College are made with the view of protecting the best interests of the individual, the general welfare of the entire student body and the educational objectives of the college. As in any segment of society, a college community must be guided by standards that are stringent enough to prevent disorder, yet moderate enough to provide an atmosphere conducive to intellectual and personal development.

A high standard of conduct is expected of all students. When a student enrolls at South Plains College, it is assumed that the student accepts the obligations of performance and behavior imposed by the college relevant to its lawful missions, processes and functions. Obedience to the law, respect for properly constituted authority, personal honor, integrity and common sense guide the actions of each member of the college community both in and out of the classroom.

Students are subject to federal, state and local laws, as well as South Plains College rules and regulations. A student is not entitled to greater immunities or privileges before the law than those enjoyed by other citizens. Students are subject to such reasonable disciplinary action as the administration of the college may consider

appropriate, including suspension and expulsion in appropriate cases for breach of federal, state or local laws, or college rules and regulations. This principle extends to conduct off-campus which is likely to have adverse effects on the college or on the educational process which identifies the offender as an unfit associate for fellow students.

Any student who fails to perform according to expected standards may be asked to withdraw.

Rules and regulations regarding student conduct appear in the current Student Guide.

SPECIAL REQUIREMENTS (*Read Carefully)

- Students must complete the acknowledging quiz found in the START Here folder on BlackBoard, that the student has read and understands the content of syllabus, program and clinical handbook, grievance policy, and appeals process.
- **These acknowledgements are due by Thursday of the first week of classes.**
- **Cell Phones** – Cell phones are to be turned OFF or silenced during scheduled class periods. **Text messaging is not allowed during scheduled class/lab times.** Cell phones are to be used outside the classroom or lab only on designated breaks. Students are not allowed to have cell phones on their person during exams.
- **Class Dress Code** – Due to the environment of the scheduled lab dates, students are required to wear the following: Students are expected to follow the dress code as stated in the PTA student Handbook. You will need appropriate attire for lab.

COURSE DISCLAIMER

You may not apply what you are learning to the general public as you are a student PTA and are learning physical therapy techniques. You will be practicing these skills on each other when you are in lab under the course instructor's supervision. If you are presently working in a clinic you cannot practice these skills on patients. Once you have passed the class, you still cannot practice the acquired skills in a clinic. You will only be permitted to apply these skills to the general public under a clinical instructor's supervision once you begin your clinical internships.

Additionally, enrollment in this course does not guarantee a passing grade, successful completion of the PTA curriculum, or licensure.

Jackie Underwood
PTA Program Director
Associated Professor

ACCOMMODATIONS

DIVERSITY STATEMENT

In this class, the teacher will establish and support an environment that values and nurtures individual and group differences and encourages engagement and interaction. Understanding and respecting multiple experiences and perspectives will serve to challenge and stimulate all of us to learn about others, about the larger world and about ourselves. By promoting diversity and intellectual exchange, we will not only mirror society as it is, but also model society as it should and can be.

DISABILITIES STATEMENT

Students with disabilities, including but not limited to physical, psychiatric, or learning disabilities, who wish to request accommodations in this class should notify the Disability Services Office early in the semester so that the appropriate arrangements may be made. In accordance with federal law, a student requesting accommodations must provide acceptable documentation of his/her disability to the Disability Services Office. For more information, call or visit the Disability Services Office at Levelland Student Health & Wellness Center 806-716-2577, Reese Center (also covers ATC) Building 8: 806-716-4675, Plainview Center Main Office: 806-716-4302 or 806-296-9611, or the Health and Wellness main number at 806-716-2529.

FOUNDATION SKILLS

BASIC SKILLS—Reads, Writes, Performs Arithmetic and Mathematical Operations, Listens and Speaks

F-1 Reading—locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules.

F-2 Writing—communicates thoughts, ideas, information and messages in writing and creates documents such as letters, directions, manuals, reports, graphs, and flow charts.

F-3 Arithmetic—performs basic computations; uses basic numerical concepts such as whole numbers, etc.

F-4 Mathematics—approaches practical problems by choosing appropriately from a variety of mathematical techniques.

F-5 Listening—receives, attends to, interprets, and responds to verbal messages and other cues.

F-6 Speaking—organizes ideas and communicates orally.

THINKING SKILLS—Thinks Creatively, Makes Decisions, Solves Problems, Visualizes and Knows How to Learn and Reason

F-7 Creative Thinking—generates new ideas.

F-8 Decision-Making—specifies goals and constraints, generates alternatives, considers risks, evaluates and chooses best alternative.

F-9 Problem Solving—recognizes problems, devises and implements plan of action.

F-10 Seeing Things in the Mind's Eye—organizes and processes symbols, pictures, graphs, objects, and other information.

F-11 Knowing How to Learn—uses efficient learning techniques to acquire and apply new knowledge and skills.
F-12 Reasoning—discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem.

PERSONAL QUALITIES—Displays Responsibility, Self-Esteem, Sociability, Self-Management, Integrity and Honesty

F-13 Responsibility—exerts a high level of effort and perseveres towards goal attainment.

F-14 Self-Esteem—believes in own self-worth and maintains a positive view of self.

F-15 Sociability—demonstrates understanding, friendliness, adaptability, empathy and politeness in group settings.

F-16 Self-Management—assesses self accurately, sets personal goals, monitors progress and exhibits self-control.

F-17 Integrity/Honesty—chooses ethical courses of action.

SCANS COMPETENCIES

C-1 **TIME** - Selects goal - relevant activities, ranks them, allocates time, prepares and follows schedules.

C-2 **MONEY** - Uses or prepares budgets, makes forecasts, keeps records and makes adjustments to meet objectives.

C-3 **MATERIALS AND FACILITIES** - Acquires, stores, allocates, and uses materials or space efficiently.

C-4 **HUMAN RESOURCES** - Assesses skills and distributes work accordingly, evaluates performances and provides feedback.

INFORMATION - Acquires and Uses Information

C-5 Acquires and evaluates information.

C-6 Organizes and maintains information.

C-7 Interprets and communicates information.

C-8 Uses computers to process information.

INTERPERSONAL—Works With Others

C-9 Participates as a member of a team and contributes to group effort.

C-10 Teaches others new skills.

C-11 Serves Clients/Customers—works to satisfy customer’s expectations.

C-12 Exercises Leadership—communicates ideas to justify position, persuades and convinces others, responsibly challenges existing procedures and policies.

C-13 Negotiates—works toward agreements involving exchanges of resources; resolves divergent interests.

C-14 Works With Diversity—works well with men and women from diverse backgrounds.

SYSTEMS—Understands Complex Interrelationships

C-15 Understands Systems—knows how social, organizational, and technological systems work and operates effectively with them.

C-16 Monitors and Corrects Performance—distinguishes trends, predicts impacts on system operations, diagnoses systems performance and corrects malfunctions.

C-17 Improves or Designs Systems—suggests modifications to existing systems and develops new or alternative systems to improve performance.

TECHNOLOGY—Works with a Variety of Technologies

C-18 Selects Technology—chooses procedures, tools, or equipment, including computers and related technologies.

C-19 Applies Technology to Task—understands overall intent and proper procedures for setup and operation of equipment.

C-20 Maintains and Troubleshoots Equipment—prevents, identifies, or solves problems with equipment, including computers and other technologies.