

Basic Patient Care Skills

Class

PTHA 1405

The application of basic patient handling, functional skills, communication, and selected data collection techniques. Thirty-two lecture hours and ninety-six lab hours per semester.

Professional Behavior

Professional behavior is absolutely essential both while the individual is a student in this program as well as after graduation. The Professional Behaviors Assessment form provides a standard for behavior and a mechanism for self-assessment by the student as well as assessment by faculty during the academic component of the program. If a faculty member observes consistent failure to demonstrate acceptable professional behavior by a student, the faculty member will utilize the assessment form as a tool for counseling the student. Failure to respond appropriately to counseling regarding professional behaviors will result in dismissal from the program.

Course Learning Objectives

1. Utilize terminology and abbreviations unique to physical therapy (F1, F11, C5, C7):
 1. Define terminology as presented in class.
 2. Define abbreviations as presented in class.
 3. Effectively employ terminology and abbreviations in written and verbal communication.
2. Understand principles of body mechanics related to safety of patient and caregiver (F1, F5, F5, F6, F10, F11, C4, C10):
 1. Describe the principles of proper body mechanics.
 2. Recognize normal spinal curves during standing and lifting activities and utilize appropriate terminology to describe them.
 3. Identify proper and faulty body mechanics.
 4. Describe practices that contribute to proper and faulty body mechanics.
 5. Utilize proper body mechanics in all laboratory sessions.
3. Monitor vital signs (F1, F2, F3, F11, C5, C7):
 1. Take accurate measurements of blood pressure, pulse, respiration, and temperature in various positions.
 2. Record measurements of blood pressure, pulse, respiration and temperature.
 3. Identify normal adult ranges for blood pressure, pulse, respiration, and temperature.
 4. Identify and describe factors affecting blood pressure, pulse, respiration, and temperature.
4. Measure selected anthropometrical characteristics (F1, F2, F3, F11, CD, C7):
 1. Explain accurate height measurement.
 2. Explain accurate weight measurement.
5. Understand principles of patient positioning (F1, F5, F6, F8, F9, F10, F11, C10):
 1. Recognize resting position and alignment of trunk and extremities in supine, prone, side-lying, $\frac{3}{4}$ supine, $\frac{3}{4}$ prone, and sitting and utilize appropriate terminology to describe position and alignment.
 2. Describe the causes of decubiti and contractures.
 3. Describe the classifications of decubiti and contractures
 4. Describe the areas at risk for development of decubiti and contractures.
 5. Identify the types of patients at risk for developing decubiti and contractures.
 6. Explain signs of and appropriate response to imminent skin breakdown.
 7. Describe the rationale for positioning techniques to prevent decubiti and contractures.
 8. Describe selected supportive measures for the prevention of decubiti and contractures to include positioning as well as supportive and protective equipment and supplies.
 9. Describe proper alignment of body parts in supine, prone, side-lying, $\frac{3}{4}$ supine, $\frac{3}{4}$ prone, and sitting positions for the prevention of decubiti and contractures.
10. Demonstrate skill in the performance of supine, prone, side-lying, and sitting positioning techniques for the prevention of decubiti and contractures.
11. Describe the rationale for physical therapy treatment positioning and draping techniques.
12. Demonstrate skill in the performance of supine, prone, side-lying, and sitting physical therapy treatment positioning and draping techniques.

6. Understand isolation procedures and sterile techniques (F1, F11):
 1. Define and describe standard precautions and isolation and sterile techniques.
 2. Describe the rationale for use of standard precautions and isolation and sterile techniques.
 3. Demonstrate skill in the performance of hand washing, set up and maintenance of a sterile field, and gowning and gloving techniques.
7. Understand basic wound care, dressing, and bandaging techniques within the plan of care established by the physical therapist (F1, F2, F11, F8, F9, F11, C3, C5, C7, C18):
 1. Identify selected types of dressings and bandages.
 2. Describe the rationale for selection of dressings and bandages.
 3. Identify safety factors and precautions related to application and removal of dressings.
 4. Demonstrate skill in the application and removal of selected dressings and bandages.
 5. Identify other agents used in wound care.
 6. Describe the rationale for selection of other wound care agents.
 7. Explain appropriate use of other wound care agents.
 8. Describe the purposes of compression wraps.
 9. Identify precautions related to compression wraps.
10. Correctly apply the following compression wraps: ankle, wrist, knee, transtibial amputation and transfemoral amputation.
 11. Define debridement
 12. Describe the rationale for debridement.
 13. Describe various types of debridement and their advantages and disadvantages.
 14. Describe the rationale for selection of debridement type.
 15. Describe differentiation of viable vs. nonviable tissue.
 16. Describe the components necessary for wound care documentation.
 17. Identify and explain patient responses that necessitate immediate action or adjustments within the plan of care and communication with the supervising physical therapist.
 18. Explain the role of wound care in achieving short and long term goals within the plan of care.
8. Understand the classification and characteristics of burns and the physical therapy component of burn management. (F1, F9, F11, C5, C7)
 1. Identify critical aspects of acute burn care.
 2. Describe the rationale for physical therapy intervention in burn care.
 3. Identify and describe important components of a physical therapy program for burn injury.
 4. Identify safety factors and precautions specific to a physical therapy program for burn injury.
 5. Identify and explain patient responses that necessitate immediate action or adjustments within the plan of care and communication with the supervising physical therapist.
 6. Explain the role of physical therapy interventions for burn care in achieving short and long term goals within the plan of care
9. Understand principles of basic mobility and ADL training within the plan of care established by the physical therapist (F1, F5, F6, F8, F9, F10, F11, C10, C18):
 1. Define levels of assistance.
 2. Describe basic bed mobility skills.
 3. Plan and correctly execute selected basic bed mobility training techniques.
 4. Define various transfer techniques.
 5. Describe the rationale for selection of appropriate transfer technique based on patient status.
 6. Select and demonstrate skill in the performance of transfer techniques.
 7. Describe use of tilt table for accommodation to the upright position.
 8. Demonstrate skill in the performance of selected tilt table activities.
 9. Identify and correctly manipulate the parts of a wheelchair.
10. Describe basic wheelchair management techniques.
 11. Describe the rationale for basic wheelchair management techniques.
 12. Demonstrate skill in the performance of basic wheelchair techniques
 13. Plan and correctly execute wheelchair mobility training.
 14. Plan and correctly execute selected preambulation mat activities.
 15. Describe the rationale for progressive gait training.
 16. Describe the rationale for selection of gait training parameters and techniques.
 17. Describe types of assistive devices and the rationale for selection of device.
 18. Describe requirements for safe and effective use of assistive devices.

19. Plan and demonstrate skill in the performance of gait training techniques utilizing effective communication skills to include instruction in gait pattern and adjustment of assistive device.
 20. Describe the components necessary for assessment/communication/documentation of mobility training to include safety, level of required assistance, weight bearing status, transfer type or bed mobility skill, method of wheelchair propulsion, gait pattern, assistive device, surface, and/or distance, and progression toward goals.
 21. Identify and explain patient responses that necessitate immediate action or adjustments within the plan of care and communication with the supervising physical therapist.
 22. Explain the role of mobility training in achieving short and long term goals within the plan of care.
10. Understand principles and application of physical therapy techniques in specialized patient care units.
 1. Describe selected equipment and devices found in specialized patient care units.
 2. Describe precautions necessary when treating patients using the selected equipment and devices.
 3. Describe appropriate responses to problems with the selected equipment and devices.
 4. Communicates any change in patient status to patients nurse, and supervising PT.

Teaching Methods and Learning Experiences

Lectures, laboratory activities, reading assignments, individual and/or group projects and assignments. Some components of this course will be computer based. Student access to a computer/printer will be required for completing assignments. Computers are available to students in the Academic Support Center in the Mineral Wells Education Center.

Required Textbooks

Principles and Techniques of Patient Care; 6th Edition, Sheryl Fairchild, Elsevier ISBN 978-0-32344-584-9

Documentation Basics; 2nd Edition; Erickson & McKnight; Slack; ISBN 978-1-61711-008-5

Course Packet: PTHA 1405 Lecture Outlines/Notes (available in Canvas classroom)

Evaluation Standards

Course Requirements

1. Complete all unit tests.
2. Complete all quizzes.
3. Complete all projects and assignments.
4. Complete all lab check-offs and Lab Practical Exams with a minimum grade of C.
5. Complete the final exam.

Grade Compilation

Unit Exams	50%
Lab Practical Exams/Check Offs	10%
Quizzes (including Abbreviations)	15%
Professional/Community	5%
Final Exam	20%

Grading Scale

A	90-100%
B	80-89%
C	75-79%
F	<75%

Failed Lab Practical and Skills Check offs

Lab practical examinations and/or skills check-offs will be given to assess the student's proficiency in laboratory skills taught. **ALL** lab skill check-off assessments and Lab Practical examinations must be successfully completed and passed. When lab skill check-offs are assigned prior to a lab practical examination, failure to complete **ANY** of the laboratory skills check offs will result in the inability to sit for the lab practical, resulting in a grade of zero. **Students are required to pass all lab practical examinations and skills check offs with a minimum of 75% in order to pass the class. The student will be given 3 opportunities to correct a failed lab practical exam (LPE) and/or check-offs with grade deductions for each attempt.** In the event that the student does not pass a LPE or a check off, the student will fail the lab portion of the class, and fail the course and will not be allowed to continue in the PTA program. Both the lab and lecture portions of each class must be passed with a 75% for the student to receive a passing grade in the class. The grade deductions are noted in the course syllabus and on the LPE and check-off forms.

FAILURE OF AN EXAM

If a student makes below a passing grade on an exam (makes a grade below 75%) they are required to seek counseling and remediation from the instructor for the course. It is the students' responsibility to seek out the instructor promptly for this counseling and remediation during the instructors posted office hours by appointment. If the student fails to contact the instructor within an appropriate time to get remediation prior to the next examination, they are outside the department policy and are subject to disciplinary action. The instructor and student will develop a plan for the student to show competency in knowledge of the material.

If the student fails to show competency in the subject matter, or fails to maintain an overall average above 75% on major exams, the student will not be allowed to pass the class, continue onto other coursework, or continue to clinical rotations. Major exams are defined as the all unit exams and include the final exam. They do not include quizzes, assignments, or daily coursework. All lab Practical exams and check offs must be successfully passed with a 75 or above in order to continue with the program. See the failed lab practical policy above.

For the student who scores below a 75% on a major exam, remediation and reassessment of knowledge must be done. The instructor may employ various methods to determine and reassess the competency and may require a student to retest. However, a student who makes below a **65%** on a major exam, **must** re-test for competency. The student can bring their exam score up to a maximum of a 75% one time only, on the first failed test making a grade below a 65%. If the grade on the re-test is lower than the first attempt, the lower grade will be used in recording and calculation the exam and overall course average. Additional counseling and remediation will be necessary to ensure competency in that material. Students must make a minimum overall score of 75% and a minimum average of 75% on major exams to pass all PTHA classes and continue in the program. If a student academically fails out of the program they have a right to appeal by following the Health Science Technology Appeals procedure located in the PTA Program Student handbook. The student has the opportunity to re-apply to the program. See the Readmission policy for more information.

ACADEMIC DISMISSAL

Students in the PTA Program must successfully complete all general education courses with at least a "C" to continue in the PTA program. If a student makes below a 75% in any PTHA course, they will not be allowed to continue in the program and will be academically dismissed. Additionally, you must maintain a passing average of 75% of major exams, and pass all check offs and lab practical exams in each course to be able to show competency and continue in the program. Major exams are defined as unit tests and includes the final exam. Bonus points or extra credit points will only be awarded after competency is met. If a student does not meet the competency guidelines bonus points will not be applied. See the Bonus Point/Extra Credit Policy in the PTA Program Handbook.

Students must also complete each clinical course with at least a "C" or 75% grade (see Clinical Failure policy). If these standards are not met, dismissal from the program will occur.

If the student fails a class, the student's progression in the program will be halted. The student is then subject to the same readmission criteria as students who withdraw from the program.

Professional/Community Points: (See Canvas for Professional/Community Form)

Students are expected to demonstrate commitment to learning and the PT profession by participating in activities of the professional association and in community activities. Points can be earned to achieve this goal in a variety of ways:

Grading is as follows: The total number of points earned is your grade. You may accumulate bonus points above a grade of 100 (max 125 points) but up to a max of 2.5 bonus points. Bonus points, however cannot be used to bring a final course grade below a 75% to a passing grade.

Attend/participate in a district meeting	25 points
Join PTA Club	25 points
Attend/participate in PTA club meeting	10 points
Hold Office	10 points
Community Volunteer/club activity	25 points

This cannot be for your own church or child's team or classroom.

Participate in a local fundraising activity for a health/disease related cause

If fund raising then you have to raise funds for the cause. A minimum of \$25.00 is expected. If you volunteer to work the even for your community points you will need to provide some proof of the volunteer experience. **Please get all Community Volunteer activities approved before the event to make sure they are applicable.4**

Quizzes

There are two types of quizzes in this course: quizzes over medical terminology and abbreviations and quizzes over the reading assignments and lecture materials. Specific dates for abbreviations quizzes can be found on the course schedule. Missed quizzes cannot be made up. A zero will be the grade recorded for any missed quizzes. The instructor reserves the right to give unannounced quizzes should it become necessary to provide added motivation to stay current on class assignments. Any exceptions to this policy will be announced in class.

Lab Check-Offs

Lab check-offs are procedures in which the student must perform selected skills to a predetermined minimum level of competence; they form the foundation for assuring competence prior to clinical assignment. Lab Practical's are more formal procedure in which the student must perform a sampling of selected skills to a predetermined level of competence: they; along with the check offs form the foundation for assuring competence prior to clinical assignment. Critical safety elements are identified on each check-off/lab practical sheet. If students do not achieve the minimum level of competence, that includes satisfactory performance on all the critical safety elements, the check-off or lab practical exams must be repeated until their performance is adequate. Students will be allowed a maximum of three attempts; all required check-offs must be completed satisfactorily in order to pass the course. Please see the PTA program handbook for grade deductions on lab check offs and lab practical examinations.

Course Progression

1. TERMINOLOGY AND ABBREVIATIONS
 1. Standard/Facility-Approved
 2. Appropriate Use
2. BODY MECHANICS
 1. Principles and Rationale
 2. Basic Anatomy
 3. Care of the Back
 4. Body Mechanics
3. MEASUREMENTS
 1. Vital Signs
 1. Introduction

- 2. Heart Rate
 - 3. Blood Pressure
 - 4. Respiration
 - 5. Temperature
 - 6. Other Measures
- 2. Anthropometric Measurements
 - 1. Height
 - 2. Weight
- 4. MEDICAL ASEPSIS
 - 1. Transmission of Disease
 - 2. Standard Precautions
 - 3. Transmission-Based Precautions
 - 4. Personal Protective Equipment
 - 5. Clean and Sterile Technique
 - 6. Other Aspects
- 5. WOUND CARE
 - 1. Introduction
 - 2. Assessment of Wound Characteristics
 - 3. Debridement
 - 4. Red Flags
- 6. BURN MANAGEMENT
 - 1. Incidence of Burn Injuries in the U.S
 - 2. Etiology of Burns
 - 3. Classification by Depth
 - 4. Classification by Severity
 - 5. Complications of Severe Burns (more than 10% TBSA)
 - 6. Wound Care
 - 7. Splinting / Positioning
 - 8. Scar Management
 - 9. Ambulation and Exercises
- 7. DRESSINGS AND BANDAGES
 - 1. Dressings
 - 2. Preparation and Application
 - 3. Compression Wraps
- 8. DECUBITI
 - 1. What is a Decubitus?
 - 2. Classification of Lesions
 - 3. Defenses Against Decubiti
 - 4. Identifying the Patient at Risk
 - 5. Bony Prominences Vulnerable to Breakdown
 - 6. Prevention of Decubiti
 - 7. Supportive Measures
 - 8. Documentation
- 9. CONTRACTURES
 - 1. Definitions
 - 2. Categories
 - 3. Causes of Contractures
 - 4. Prevention and Treatment
 - 5. Common Sites for Contractures
- 10. LONG-TERM POSITIONING
 - 1. Principles
 - 2. Guidelines
 - 3. Purposes
 - 4. Positions
 - 5. Special Considerations
- 11. SHORT-TERM POSITIONING AND DRAPING
 - 1. Principles
 - 2. Guidelines

- 3. Positions
- 4. Special Considerations
- 12. LIFTS AND TRANSFERS
 - 1. Introduction
 - 2. Lift Equipment
 - 3. Lifts
 - 4. Transfers
 - 5. Special Considerations
- 13. BED MOBILITY
 - 1. Introduction
 - 2. Technique
- 14. WHEELCHAIRS
 - 1. Equipment
 - 2. Transporting patients
 - 1. Level Surfaces
 - 2. Elevators
 - 3. Ramps and Inclines
 - 4. Technique Of Tilting A Wheelchair Backward
 - 5. Curbs
 - 6. Steps
 - 7. Escalators
- 15. TILT TABLE
 - 1. Introduction
 - 2. Indications
 - 3. Effects:
 - 4. Procedures
 - 5. Precautions/ Problems
- 16. GAIT TRAINING
 - 1. Parallel Bars
 - 1. Adjustment of height
 - 2. Gait Belt
 - 3. Wheelchair
 - 4. Demonstrate
 - 5. Assuming Standing
 - 6. Initial Activities
 - 2. Assistive Devices
 - 1. Three Major Categories
 - 2. Indications for Use
 - 3. Canes
 - 4. Crutches
 - 5. Walkers
 - 3. Guarding Techniques
 - 1. WC to standing
 - 2. Bed to standing
 - 3. Gait with assistive devices
 - 4. To get into and out of bed using a step stool
 - 4. Standing and Sitting with Assistive Devices
 - 1. Cane
 - 2. Crutches
 - 3. Forearm Crutches
 - 4. Walker
 - 5. Gait Patterns
 - 1. 3-point gait
 - 2. 2 and 4 point
 - 3. Swing to and swing through
 - 6. Weight Bearing
 - 1. Full Weight Bearing
 - 2. Partial Weight Bearing

3. Touch Down and Toe Touch Weight Bearing
 4. Non - Weight Bearing
17. SPECIALIZED PATIENT CARE UNITS
1. Introduction
 2. Equipment and Devices
 3. Precautions

Absences

Regular attendance in lecture and lab is critical and has a direct effect on the final grade that a student earns in class. *Non-attendance on the part of a student may result in grade penalty or may lead to dismissal from the program.*

A student should attend all lecture and laboratory sessions. Good "working" habits would mean arriving 10 - 15 minutes ahead of the scheduled start time of the class, staying for the complete session and returning from breaks promptly. Habitual or patterned absenteeism in lecture or lab will not be tolerated. Absences in laboratory sessions are particularly problematic because of the lost opportunity to practice skills for them self, and for their lab partner; therefore, students are responsible for arranging to acquire any skills missed during a laboratory absence. Note, not all lab experiences can be made up.

All absences must be reported to the appropriate faculty member prior to the start of class. Try to reach the faculty member by phone at their office phone number. If the faculty member cannot be reached directly, a voice mail message may be left the day of the absence. Email notification is not acceptable and should only be used if phone systems are not available. Contacting a classmate to have him/her notify the faculty member is not acceptable. Failure to notify the faculty prior to class for any absence will result in an automatic deduction of 2 points from the student's final grade for each episode.

The student may be allowed to miss 2 class/lab days without it adversely affecting their grade (exception: exam days, lab practical or check off days) if proper notification has been made. Every absence over the allotted 2 days will result in the student's final course grade being reduced by 2 points each absence. If the student misses more than 30 minutes of class due to being tardy or leaving early, it will constitute an absence. Three tardies, regardless of how late the student is, count as 1 day absence.

If it is necessary for a student to miss an exam, the instructor must be notified prior to the scheduled exam time and arrangements must be made for make-up. It is the instructor's option to give the same exam as the one missed or a different exam over the same content. It is the students' responsibility to make arrangements to make up the exam. A 5% penalty will be assessed for taking an exam out of the scheduled time. An additional 5% penalty will be assessed for each day the exam has not been made up. See missing an Exam/Test/Quiz in the PTA Program Handbook for more information.

Acceptance of Late Assignments

Projects or outside assignments are due at the beginning of class on the assigned due date. Late papers will not always be accepted. Those assignments that will be received late receive a 5% per day grade penalty. This penalty will continue to be assessed each day the assignment is not turned in.

Missing an Exam

Exams are defined as formally scheduled examinations covering a major portion of the course content and cumulatively comprising a relatively large percentage of the overall grade for a course. Every effort should be made by the student to be present for all exams. If it is necessary for a student to miss an exam, the instructor must be notified prior to the scheduled exam time and arrangements must be made for make-up. It is the instructor's option to give the same exam as the one missed or a different exam over the same content. If arrangements to make up the exam are not made within one class day, a 5% per day penalty will be assessed each day the exam is not taken.

Disabilities

ADA Statement:

Any student with a documented disability (e.g. learning, psychiatric, vision, hearing, etc.) may contact the Office on the Weatherford College Weatherford Campus to request reasonable accommodations. *Phone:* 817-598-6350 *Office Location:* Office Number 118 in the Student Services Building, upper floor. *Physical Address:* Weatherford College 225 College Park Drive Weatherford, TX.

Academic Integrity

Academic Integrity is fundamental to the educational mission of Weatherford College, and the College expects its students to maintain high standards of personal and scholarly conduct. Academic dishonesty of any kind will not be tolerated. Academic dishonesty includes, but is not limited to, cheating on an examination or other academic work, plagiarism, collusion, and the abuse of resource materials including unauthorized use of Generative AI. Departments may adopt discipline specific guidelines on Generative AI usage approved by the instructional dean. Any student who is demonstrated to have engaged in any of these activities will be subject to immediate disciplinary action in accordance with institutional procedures.

Program Learning Outcomes

WECM End of Course Outcomes

Describe principles and techniques of patient handling and functional skills; demonstrate performance of basic patient handling and functional skills; demonstrate selected data collection techniques; and demonstrate communication skills.

SCANS

The Secretary’s Commission on Achieving Necessary Skills (SCANS) identified Competencies in the area of Resources, Interpersonal, Information, Systems, and Technology; and foundation skills in the areas of Basic Skills, Thinking Skills, and Personal Qualities. This course is part of a program in which each of these Competencies and skills are integrated. The specific SCANS Competencies that are recognized throughout this course are noted at the end of the appropriate competencies or task listed. The key for the Competencies is located at the end of this syllabus.

SCANS COMPETENCIES

Foundation Skills	Workplace Competencies		
Basic Skills: Reads, writes, performs arithmetic & mathematical operations, listens, and speaks	Resources: Identifies, organizes, plans & allocates resources		
F1	Reading: Locates, understand, & interprets written information in prose & in documents such as manuals, graphs, & schedules	C1	Time & Selects goal-relevant activities, ranks them, allocates time, & prepares & follows schedules
F2	Writing: Communicates thoughts, ideas, information, & messages in writing; & creates documents such as letters, directions, manuals, reports, graphs, & flow charts	C2	Money & Uses or prepares budgets, makes forecasts, keeps records, & makes adjustments to meet objectives
F3	Arithmetic: Performs basic computations ; uses basic numerical concepts such as whole numbers, etc.	C3	Material & Facilities & Acquires, stores, allocates, & uses materials or space efficiently
F4	Mathematics: Approaches practical problems by choosing appropriately from a variety of mathematical techniques	C4	Human Resources & Assesses skills & distributes work accordingly, evaluates performance & provides feedback
F5	Listening: Receives, attends to, interprets, & responds to verbal messages & other cues	Information: Acquires & uses information	
F6	Speaking: Organizes ideas & communicates orally	C5	Acquires & evaluates information
Thinking Skills: Thinks creatively, makes	C6	Organizes & maintains information	

decisions, solves problems, visualizes, knows how to learn, & reasons			
F7	Creative Thinking: Generates new ideas	C7	Interprets & communicates information
F8	Decision Making: Specifies goals & constraints, generates alternatives, considers risks, & evaluates & chooses best alternative	C8	Uses computers to process information
F9	Problem Solving: Recognizes problems & devises & implements plan of action	Interpersonal: Works with others	
F10	Seeing Things in the Mind's Eye: Organizes, & processes symbols, pictures, graphs, objects & other information	C9	Participates as a Member of a Team: Contributes to group effort
F11	Knowing How to Learn: Uses efficient learning techniques to acquire & apply new knowledge & skills	C10	Teaches others new skills
F12	Reasoning: Discovers a rule or principle underlying the relationship between two or more objects & applies it when solving a problem	C11	Serves Clients/Customers: Works to satisfy customers' expectations
Personal Qualities: Displays responsibility, self-esteem, sociability, self-management, integrity, & honesty	C12	Exercises Leadership: Communicates ideas to justify position, persuades & convinces others, responsibly challenges existing procedures & policies	
F13	Responsibility: Exerts a high level of effort & perseveres towards goal attainment	C13	Negotiates: Works toward agreements involving exchange of resources, resolves divergent interests
F14	Self-Esteem: Believes in own self-worth & maintains a positive view of self	C14	Works with Diversity: Works well with men & women from diverse backgrounds
F15	Sociability: Demonstrates understanding, friendliness, adaptability, empathy, & politeness in group settings	Systems: Understand complex interrelationships	
F16	Self-Management: Assesses self accurately, sets personal goals, monitors progress, & exhibits self-control	C15	Understands Systems: Knows how social, organizational, & technological systems work & operates effectively with them
F17	Integrity/Honesty: Chooses ethical courses of action	C16	Monitors & Corrects Performance: Distinguishes trends, predicts impacts on system operations, diagnoses systems' performance & corrects malfunctions
		C17	Improves or Designs Systems: Suggests modifications to existing systems & develops new or alternative systems to improve performance
		Technology: Works with a variety of technologies	
		C18	Selects Technology: Chooses procedures, tools or equipment including computers & related technologies
		C19	Applies Technology to Task: Understands overall intent & proper procedures for setup & operation of equipment
		C20	Maintains & Troubleshoots Equipment: Prevents, identifies, or solves problems with equipment, including computers & other technologies.