



Course Syllabus

COURSE: EMSP 2206.200 Emergency Pharmacology
SEMESTER: Fall 2021
CLASS TIMES: Thursday 8:30am-11:50am
INSTRUCTOR: Russell Powers, BA, LP, NRP
OFFICE: Reese Center, Building 5, Room 517C
OFFICE HOURS: Monday thru Thursday 1:30-3:30pm and Friday 9:00-11:00 or by appointment.
OFFICE PHONE: 806-716-4627
E-MAIL: rpowers@southplainscollege.edu
Facebook: <https://www.facebook.com/SPCEMSprogram>

“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.

MISSION STATEMENT

To prepare competent entry-level Emergency Medical Technician-Paramedics in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains with or without exit points at the Advanced Emergency Medical Technician and/or Emergency Medical Technicians, and/or Emergency Medical Responder levels

COURSE DESCRIPTION

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

STUDENT LEARNING OUTCOMES

At the completion of the semester students will:
1. Understand the roles and responsibilities of a Paramedic within an EMS System.
2. Be able to apply the advanced concepts of development, pathophysiology, cardiology, medical emergencies, traumatic emergencies, and special populations in the assessment and management of emergency patients.
3. Be able to take a history and perform a comprehensive physical exam on any patient and communicate those findings to others.
4. Be able to communicate effectively with patients, co-workers and other health care professionals.
5. Be able to establish and/or maintain a patent airway, oxygenate, and ventilate a patient.
6. Be able to recognize and treat minor and life threatening emergencies of all natures in regards to the pre-hospital setting.

COURSE OBJECTIVES - Outline form (C-1, C-5, C-6, C-7, C-8, C-9, C-12, C-13, C-14, C-18, C-20; F-1, F-2, F-5, F-7, F-8, F-9, F-11, F-12, F-13, F-16, F-17)

At the completion of this course the student will have:
<ul style="list-style-type: none"> The cognitive, psychomotor, and affective competencies in the recognition and treatment of prehospital emergencies.
<ul style="list-style-type: none"> The cognitive, psychomotor, and affective competencies of prehospital patient assessment and airway management emergencies.
<ul style="list-style-type: none"> The cognitive, psychomotor, and affective competencies of prehospital utilization of medications in treating emergency situations.

- The cognitive, psychomotor and affective competencies of pre-hospital cardiac emergencies at the AEMT entry-level.

EVALUATION METHODS

Computer-based exams, written exams, written assignments, quizzes, psychomotor exams, 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.

Any assignment **0** or **F** will be given on any assignment or test that cheating was utilized. Offender maybe liable for being dropped from the course at the discretion of the instructor.

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 EMS Program has a Facebook page at <https://www.facebook.com/SPCEMSprogram> 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 EMS Program 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

DROPPING A CLASS

Students should submit a [Student Initiated Drop Form](#) online.

Students will not be required to obtain an instructor signature to drop, however, we do encourage students to communicate with instructors or advisors prior to dropping a course when they are able. **There will be no charge for drops for the fall or spring semesters.**

WITHDRAWING FROM ALL CLASSES

If a student wishes to withdraw from all courses, they should initiate that process with the Advising Office. They can schedule an appointment with an advisor by visiting <http://www.southplainscollege.edu/admission-aid/advising/spcadvisors.php> or by calling 806-716-2366.

SCHEDULE CHANGE (after late registration and before census date)

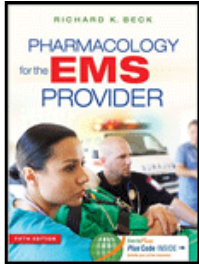
To make a schedule change after late registration and before the census date, students should submit a [Schedule Change Form](#).

After late registration, adding a class requires instructor approval. If a student is requesting to be added to one of your courses and you approve, please email registrar@southplainscollege.edu with your approval. This can take the place of signature on the Schedule Change Form that we have required in the past.

SPECIFIC COURSE INFORMATION

TEXT AND MATERIALS

TEXTBOOK



Pharmacology for the EMS Provider

Publisher

F.A. Davis

ISBN#

9780803643642

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.

CLASS FORMAT

Zoom:

Lectures will be conducted live; but online via Zoom. On occasion, the instructor may, at his discretion, move the live, online lecture to another platform such as Blackboard Collaborate, GoToMeeting, another appropriate platform, or to in-person. Students will be told, in advance, if the class platform is changed from Zoom.

Skills Labs:

Skills labs will be held in person on the Reese Campus. The instructor will inform the students, in advance, of skills labs dates, times, and locations.

ATTENDANCE POLICY (*READ CAREFULLY)

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.

Due to the importance of the emergency medical information being taught, the instructor of this course defines excessive absences as missing the 3rd class day (or having equivalent tardies) in a course section. A student who meets this criteria will be administratively dropped from the course by the instructor.

- Tardies: (Definition): arriving any time after the class has started or not returning from an approved break after class has started. Leaving class early will also constitute a tardy.
- Two tardies will be considered missing one class day and counted as such.
- **Work schedule** is **not** an excuse for missing class.
- Any exceptions to this policy must be discussed on an individual basis with the course instructor and the EMS Program Director. (i.e. – student hospitalization, immediate family member death, etc.).

If a student is experiencing any of the following symptoms, please do NOT attend in-person classes/labs and either seek medical attention or get tested for COVID-19:

- Cough, shortness of breath, difficulty breathing
- Fever or chills
- Muscle or body aches
- Vomiting or diarrhea
- New loss of taste and smell

If you have any of these, please notify DeEtte Edens, BSN, RN, Associate Director of Health and Wellness, at dedens@southplainscollege.edu or 806-716-2376.

SPECIFIC RULES FOR ONLINE ATTENDANCE

- All students must be logged in to Zoom (or other designated platform as indicated by the instructor) by the start of class (0830). Roll call will begin immediately at the starting time. Any student that is having technical difficulties logging in must inform the instructor via email or text BEFORE the beginning of class. Failure to do so may result in a “tardy” being recorded.
- Students shall have their computer video cameras on at all times during online classes, unless authorized by the instructor.
- Breaks will be given periodically for a time period designated by the instructor. Failure to be back on Zoom at the resumption time will be recorded as a tardy.
- Students will be called upon throughout the class.
- Behavior that distracts from the class will not be tolerated. Examples include side conversations, texting, phone calls, etc.
- Students shall be dressed in the appropriate SPC uniform with a professional appearance. (See DRESS CODE in this syllabus).

HOMEWORK/ASSIGNMENT POLICY

All assignments must be completed by the assigned due date and time. **Late and/or incomplete work will not be accepted and a grade of zero will be recorded.** In rare circumstances; such as illness, emergency, etc. the instructor may allow additional time to submit assignments. However, this will be considered on a case-by-case basis and only considered in rare, extraordinary situations. Assignments, quizzes, exams, and skills that are missed due to an unapproved absence may not be made up. See the instructor for more specific information.

COMPUTER USAGE

As computer technology in the field of emergency medical services 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 Reese 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 user name and password.

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

COMPUTER LAB USAGE

The computer lab(s) on campus may be used by students during scheduled open hours or as assigned by an instructor. Printer paper will not be provided by SPC EMS department for students to print materials but students may seek assistance from faculty 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.

PROCTORIO

This course uses a tool called Proctorio. Proctorio is a remote proctoring service software that works within your web browser to confirm student identity and monitor students taking quizzes/exams.

Before Using Proctorio:

- In order to use Proctorio, you must have a **basic webcam or built-in camera with microphone** enabled on your laptop or desktop computer.
- You must have the **Chrome browser** on your computer. [Download Chrome.](#)
- You must install the [Proctorio Chrome extension \(Links to an external site.\)](#).
- Check the [Proctorio Minimum System Requirements \(Links to an external site.\)](#) to ensure Proctorio will work on your computer.
- You will also be required to show a **government or school issued ID** before accessing the **Student Learning Contract** (next page). You will also need to show your ID if your instructor is requiring Proctorio for any quizzes/exams.

Proctorio FAQs:

Q: Can I listen to music while taking the exam?

A: Please refrain from doing so; if there are high noise levels, your exam will be flagged.

Q: Is someone watching me take the test since it is proctored (via Proctorio)?

A: Absolutely not! Although you are being recorded while taking the quiz/exam, the instructor is the only one who has access to your quiz/exam attempt.

Q: What if I have to get up to use restroom during the quiz/exam?

A: Similar to on-site exams, this is highly discouraged! If you MUST leave the room, please send your instructor a message (Canvas Inbox) letting them know that your quiz/exam attempt might be “flagged.” Please do your best to plan ahead and “go” before beginning the quiz/exam!

Q: Can I take the quiz/exam from any location?

A: You may take the quiz/exam from any location as long as you have a strong Internet connection. You should be in a quiet environment and strive to limit your outside distractions as well.

Proctorio Technical Support

(760) 227-7129 - Available 24/7

Email: support@proctorio.com

Live chat (icon located on the quiz/exam page)

[Learn more about Proctorio for students](#)

EXAMS

The majority of student ‘written’ exams will be administered via computer to prepare them for the National Registry exam and some exams will be handwritten which will encourage memory and mastery of the material. Students should practice proper spelling and grammar when answering a written exam.

Additionally, many exam questions will be constructed in the same manner as national registry questions, allowing students to prepare for that testing format. Major exams are administered in a campus computer lab or via Proctorio. Students are expected to be on time for exams and complete the exams within the time frame allowed. **Note:** all major exams will be auto-submitted at the end of the allowed time and all unanswered questions will be counted as incorrect. The grade received will be the official grade that is entered into the official gradebook.

- **There are no retests for Modular Exams.**
- Students are required to make a 75% on the final exam or the student must re-take the course.
- A re-test on the final may be offered to the student automatically if they have a clean behavior record for the overall program, i.e.: no absences, tardies, or previously failed exams. If the retest is passed, the student shall receive a score of 75% for the final exam on the official gradebook; regardless of the raw score for the retest.
- If a student does not meet the automatic re-take criteria, they must submit an appeal letter, within the timeframe as directed by the instructor. That request may go before a committee of the medical director, the Allied Health

Chairperson, a counselor, and others to get a decision. – the committee will decide whether the student is eligible for an exam re-take or course re-take.

- If the retest is granted by the committee, the instructor will set up a time for the retest and must be completed within the timeframe designated by the instructor. All retests will be in-person at the Reese Campus (No Proctorio Retests will be allowed). If a retest is allowed and passed, the student shall receive a 75% for the final exam on the official grade book; regardless of the raw score on the retest. Failure to pass the final retest will result in an “F” entered into the official gradebook and the student must retake the class in order to receive credit and pass the overall AEMT course to receive a course completion certificate.
- The majority of exams are administered through Proctorio (See “Proctorio for Written Exams”). Students are expected to complete the exams within the time frame allowed.

Make-up Exams: If a student is absent during a scheduled exam, that student must make up the exam within 1 week of the scheduled exam date. Note: all makeup exams shall be scheduled with the instructor and must be completed during the designated time set forth by the instructor. A missed final exam must be made up within 24 hours of the scheduled test date. A makeup exam does NOT constitute attendance for the date of the scheduled exam. Failure to make up an exam as listed, a score of “0” shall be entered for that exam.

GRADING POLICY

A student must maintain an average of 75% on sectional exams, homework, quizzes and participation to pass the course. Students are expected to demonstrate material competency by making a 75% or above on the final exam to pass the course. A grade of 75% or above is required on the final exam in order to pass the course.

Final semester grades will be based on the following:

Quizzes	15%
Homework/Assignments	10%
Participation/Lab	5%
Modular Exams	40%
Final Exam	30%

Grading Scale:	90-100	A
	80-89	B
	75-79	C
	74 or Below	F

SKILLS AND SKILLS EXAMS

Skills are a critical aspect of an EMS training program. Each student is solely responsible to complete all peer review skills requirements and documentation on the Platinum Planner platform by the due date as outlined by the lead instructor. Ample time is allocated during the class to complete this component. Each student is expected to utilize the allotted class time appropriately to achieve completion. Failure to complete this requirement shall result in the dismissal from the SPC EMS Training Program.

All students **MUST** pass each of the final skills exams as prescribed by the lead instructor. Each student will have a total of three opportunities to pass each final skills exam. All final skills exams shall be administered by a faculty member. Final skills exams will include an initial final exam and a maximum of two retests. Each retest, as needed, shall be administered by a different faculty member. Failure to pass the final skills exams shall result in the dismissal from the SPC EMS Training Program.

DOCUMENTATION OF SKILLS LABS:

Students will be solely responsible for documenting all skills labs on Platinum Planner. During skills labs, students will “create a lab” and document all peer and instructor skills check sheets on Platinum Planner. Students must assure proper peer and/or instructor signatures are properly obtained. **All skills lab documentation MUST be documented and submitted on Platinum Planner within 48 hours of the skills lab. Failure to submit skills documentation within this time frame will result in the student having to repeat those skills outside of designated skills lab times.** Repeated violations of this policy may result in termination from the Program.

COURSE COMPLETION CERTIFICATE

A student must pass ALL individual courses of the AEMT program in order to receive a course completion certificate at the AEMT level. Please refer to the most current version of the SPC EMS Program Handbook for details.

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.

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.

DRESS CODE

Due to EMS being a uniformed profession, all students will be required to wear their clinical uniform during skills labs and during all classes; even on Zoom. The uniform must be clean and presentable. Proper attire will consist of the following:

- **Black Pocket Pants**
- **Black boots**
- **Gray Polo (Student Uniform Shirt) (must be tucked in)**
- **EMSO T-shirt (must be tucked in)**
- **Watch with a second hand**
- **Closed toed shoes or boots (solid black)**
- **Stethoscope (optional)**

WHAT NOT TO WEAR: jeans, hats, flip-flops, shorts, jeans, low cut blouses, private EMS uniforms.

- **These guidelines are for your protection due to the nature of the EMS environment and the amount of lifting and moving that will take place in the lab**
- **If you are employed by a local or regional EMS service, do not wear your uniform, badge, pager, or radio to class as this causes distractions from the teaching environment**

SPECIAL REQUIREMENTS (*Read Carefully)

Students must read and understand the following items:

- Syllabus (EMSP 1338) (This Document) (On Blackboard)
- SPC EMS Program Handbook (On Blackboard)
- SPC Clinical Handbook (On Blackboard)
- Grievance Policy (Located in the SPC Student Guide) (On Blackboard)
- South Plains College GRADE AND ACADEMIC DISCIPLINE APPEALS (Located in the SPC Student Guide) (On Blackboard)

- Campus Carry Policy (Page 8 of this Document)

Students must present a signature page acknowledging that the student been shown the location of each of the above items and has read and understands the content of each. This is due the second day of class.

TECHNOLOGY RULES

Cell Phones: During lectures or labs, cell phones are to be turned OFF or on silenced during scheduled class periods, unless prior approval has been given from the instructor. **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, notebooks, tablets, smart watches, or any other technology devices on their person during exams. Students will receive a grade of “F” for the exam if they have a cell phone during an exam. Additionally, possession of a cell phone during an exam may be grounds for dismissal from the EMS program and from SPC. (See Cheating and Plagiarism on pp 2.).

CAMPUS 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 and Frequently Asked Questions, please refer to the Campus Carry page at: <http://www.southplainscollege.edu/campuscarry.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.

COURSE DISCLAIMER

Working with the public in emergency situations is stressful and requires a mentally tough individual to provide medical care in the prehospital environment. This course is designed to teach students about real-world situations the EMT – Paramedic may potentially encounter in the ‘field’ while managing patient care.

In order to better prepare students for a career in the Emergency Medical Services profession, there will be times during this course where students will be exposed to training scenarios and situations that will be unpleasant to the average college student. If the student does not feel they can tolerate this type of learning environment, they should discuss this with me immediately before continuing the course.

Additionally, enrollment in this course does not guarantee a passing grade, successful completion of the AEMT, or AEMT or paramedic curriculum, or paramedic certification at the national or state level.

SYLLABUS DISCLAIMER

Serious effort and consideration were used in preparing the syllabus presented. While viewed as an educational contract between instructor and student, unforeseen events may cause changes to the scheduling of exercises, quizzes, etc. Every effort will be made NOT to change scheduled items. Nonetheless, SPC EMS instructors reserve the right to make any changes deemed necessary to best fulfill the course objectives. Students registered for this course will be made aware of any changes in a timely fashion using reasonable means.

Russell “Rusty” Powers, BA, LP, NRP
SPC EMS Program Instructor

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 Office) 806-716-2577, Reese Center (Building 8) 806-716-4675, or Plainview Center (Main Office) 806-716-4302 or 806-296-9611.

TITLE IX 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 the Director of Health and Wellness at 806-716-2362 or email cgilster@southplainscollege.edu for assistance.

EQUAL OPPORTUNITY, HARASSMENT, AND NON-DISCRIMINATION STATEMENT

South Plains College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Vice President for Student Affairs, South Plains College, 1401 College Avenue, Box 5, Levelland, TX 79336. Phone number 806-716-2360.

South Plains College is dedicated to providing a safe and equitable learning environment for all students. Discrimination, sexual assault, and harassment are not tolerated by the college. The Health and Wellness Center offers confidential support (806-716-2529) and Voice of Hope has a 24-hour hotline (806-763-7273). You are encouraged to report any incidents online at <http://www.southplainscollege.edu/about/campussafety/complaints.php>.

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-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.