



EMS Professions
EMSP 1150 – Shock and Trauma for the EMT
HYBRID COURSE SYLLABUS
Spring Semester 202114

COURSE INFORMATION

Credit Hours/Minutes: 3 / 3000

Campus/Class Location: Health Science Annex West - Room 118

Class Meets: **25% Hybrid / 75% Face-to-Face**: Monday 9:00 am – 5:00pm

Course Reference Number (CRN): 40139

Preferred Method of Contact: The preferred method of contact for the instructor is by office phone. If there is no answer, please call the cell phone number provided below.

INSTRUCTOR CONTACT INFORMATION

Adjunct Instructor Name: Mike Young

Adjunct College Email Address: [Mike Young myoung@southeasterntech.edu](mailto:myoung@southeasterntech.edu)

Campus/Office Location: Health Science Annex West Room 107, Vidalia

Office Hours: By appointment

Phone: 912-538-3218 (office) 229-315-9483 (cell)

Fax Number: 912-538-3259

Full-Time Instructor Name: Jim Jones

Email Address: [Jim Jones \(jjones@southeasterntech.edu\)](mailto:jjones@southeasterntech.edu)

Campus/Office Location: Health Science Annex West Room 109, Vidalia

Office Hours: By appointment (Due to shift friendly schedule)

Phone: 912-538-3218 (office) 912-293-5161 (cell)

Fax Number: 912-538-3259

Tutoring Hours (if applicable): By Appointment

This course is taught in a hybrid format. Hybrid classes require students to complete a portion of the required contact hours traditionally by attending classes on campus while completing the remaining portion online at the student's convenience with respect to the instructor's requirements.

SOUTHEASTERN TECHNICAL COLLEGE (STC) CATALOG AND HANDBOOK

Students are responsible for all policies and procedures and all other information included in Southeastern Technical College's [Catalog and Handbook \(http://www.southeasterntech.edu/student-affairs/catalog-handbook.php\)](http://www.southeasterntech.edu/student-affairs/catalog-handbook.php).

REQUIRED TEXT

Prehospital Emergency Care 11th edition - Authors: Joseph Mistovich, Keith Karren, ISBN-10: 013-470445-2



REQUIRED SUPPLIES & SOFTWARE:

Pencils, Black Ink Pens, 3-ring binder, paper

Note: Although students can use their smart phones and tablets to access their online course(s), exams, discussions, assignments, and other graded activities should be performed on a personal computer. Neither Blackboard nor Georgia Virtual Technical Connection (GVTC) provide technical support for issues relating to the use of a smart phone or tablet so students are advised to not rely on these devices to take an online course.

Students should not share login credentials with others and should change passwords periodically to maintain security.

COURSE DESCRIPTION

This course is designed to prepare the Emergency Medical Technician (EMT) student to apply pre-hospital emergency care to patients who have sustained injuries resulting from various mechanisms of injury including: Abdominal and Genitourinary trauma; Orthopedic trauma; Soft Tissue trauma; Head, Facial, Neck, and Spine Trauma and Nervous System trauma. Special considerations in trauma related injuries will be presented including the physiology of shock as well as multi-system trauma and environmental emergencies.

MAJOR COURSE COMPETENCIES

1. Shock and Resuscitation;
2. Trauma Overview;
3. Bleeding;
4. Chest Trauma;
5. Abdominal and Genitourinary Trauma;
6. Orthopedic Trauma;
7. Soft Tissue Trauma;
8. Head, Facial, Neck, and Spine Trauma;
9. Nervous System Trauma;
10. Special Considerations in Trauma;
11. Environmental Emergencies;
12. Multi-System Trauma,
13. Trauma Assessments.

PREREQUISITE(S)

Program Admission

COURSE OUTLINE

Shock and Resuscitation

Order	Description	Learning Domain	Level of Learning
1	Apply fundamental knowledge of the causes, pathophysiology, and management of shock, respiratory failure or arrest, cardiac failure or arrest, and post resuscitation management.	Cognitive	Application
2	Demonstrate the appropriate assessment and management of a patient experiencing shock, or one who is needing resuscitative efforts.	Psychomotor	Guided Response

Trauma Overview

Order	Description	Learning Domain	Level of Learning
1	Apply fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely injured patient.	Cognitive	Application
2	Articulate the pathophysiology, assessment, and management of the trauma patient including: trauma scoring; rapid transport and destination issues; and transport mode.	Cognitive	Application

Bleeding

Order	Description	Learning Domain	Level of Learning
1	Describe the pathophysiology, assessment, and management of bleeding.	Cognitive	Comprehension
2	Demonstrate the assessment and management of various types of bleeding.	Psychomotor	Guided Response

Chest Trauma

Order	Description	Learning Domain	Level of Learning
1	Discuss the recognition and management of blunt versus penetrating mechanisms; open chest wound and impaled object.	Cognitive	Comprehension
2	Articulate the pathophysiology, assessment and management of the following: blunt versus penetrating mechanisms; hemothorax; pneumothorax (open, simple, and tension); cardiac tamponade; rib fractures; flail chest; and commotio cordis.	Cognitive	Application
3	Perform an appropriate assessment and management of a patient with chest trauma.	Psychomotor	Guided Response

Abdominal and Genitourinary Trauma

Order	Description	Learning Domain	Level of Learning
1	Discuss the recognition and management of the following: blunt versus penetrating mechanisms; evisceration; and impaled object.	Cognitive	Comprehension
2	Articulate the pathophysiology, assessment and management of the following: solid and hollow organ injuries; blunt versus penetrating mechanisms; evisceration; injuries to the external genitalia; vaginal bleeding due to trauma; and sexual assault.	Cognitive	Application
3	Perform the assessment and management of a patient with abdominal and/or genitourinary trauma.	Psychomotor	Guided Response
4	Anticipate the emotional needs of a patient who has experienced a genitourinary injury caused by sexual assault.	Affective	Valuing

Orthopedic Trauma

Order	Description	Learning Domain	Level of Learning
1	Discuss the recognition and management of the following: open fractures; closed fractures; dislocations; and amputations.	Cognitive	Comprehension
2	Articulate the pathophysiology, assessment, and management of the following: upper and lower extremity orthopedic trauma; open fractures; closed fractures; dislocations; sprains/strains; pelvic fractures; and amputations/replantation.	Cognitive	Application
3	Perform an appropriate assessment and management of a patient with orthopedic trauma.	Psychomotor	Guided Response

Soft Tissue Trauma

Order	Description	Learning Domain	Level of Learning
1	Discuss the recognition and management of chemicals in the eye and on the skin.	Cognitive	Comprehension
2	Articulate the pathophysiology, assessment, and management of the following wounds: avulsions; bite wounds; lacerations; puncture wounds; and incisions.	Cognitive	Application
3	Demonstrate the pathophysiology, assessment, and management of the following burns: electrical; chemical; thermal; and radiation.	Cognitive	Application
4	Discuss the assessment and management of crush syndrome.	Cognitive	Comprehension
5	Perform an appropriate assessment and management of a patient with soft tissue trauma.	Psychomotor	Guided Response

Head, Facial, Neck, and Spine Trauma

Order	Description	Learning Domain	Level of Learning
1	Discuss the recognition and management of life threats as they relate to head, facial, neck and spinal trauma.	Cognitive	Comprehension
2	Articulate the pathophysiology, assessment, and management of the following: penetrating neck trauma; laryngeotracheal injuries; and spinal trauma.	Cognitive	Application
3	Discuss the recognition and management of the following: facial fractures; skull fractures; foreign bodies in the eyes; and dental trauma.	Cognitive	Comprehension
4	Perform an appropriate assessment and management of a patient with head, facial, neck, and spinal trauma.	Psychomotor	Guided Response

Nervous System Trauma

Order	Description	Learning Domain	Level of Learning
1	Articulate the pathophysiology, assessment, and management of traumatic brain injury and spinal cord injury.	Cognitive	Application
2	Perform an appropriate assessment and management of a patient with nervous system trauma.	Psychomotor	Guided Response

Special Considerations in Trauma

Order	Description	Learning Domain	Level of Learning
1	Articulate the pathophysiology, assessment, and management of trauma in the following: pregnant patients; pediatric patients; geriatric patients; and cognitively impaired patients.	Cognitive	Application
2	Perform the assessment and management of various traumatic injuries for the following types of patients: pregnant; pediatric; geriatric; and cognitively impaired.	Psychomotor	Guided Response

Environmental Emergencies

Order	Description	Learning Domain	Level of Learning
1	Discuss the recognition and management of submersion incidents.	Cognitive	Comprehension
2	Articulate the pathophysiology, assessment, and management of the following: near drowning; temperature-related illness; bites and envenomation's; dysbarism (high-altitude; diving injuries); electrical injury; and radiation exposure.	Cognitive	Application
3	Perform an appropriate assessment and management of a patient experiencing an environmental emergency.	Psychomotor	Guided Response

Multi-System Trauma

Order	Description	Learning Domain	Level of Learning
1	Articulate the pathophysiology, assessment, and management of multi-system trauma and blast injuries.	Cognitive	Application
2	Perform an appropriate assessment and management of a patient with multi-system trauma and/or blast injuries.	Psychomotor	Guided Response

Trauma Assessments

Order	Description	Learning Domain	Level of Learning
1	Demonstrate the appropriate assessment and management for various complaints of the following types of acute injuries for all patients (including pregnant, pediatric, geriatric, and cognitively impaired): bleeding; chest trauma; abdominal and genitourinary trauma; orthopedic trauma; soft tissue trauma; head, facial, neck and spine trauma; nervous system trauma; environmental emergencies; and multi-system trauma.	Psychomotor	Guided Response
2	Consider the critical nature of accurate field impressions for patients with various traumatic injuries.	Affective	Valuing

GENERAL EDUCATION CORE COMPETENCIES

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

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

STUDENT REQUIREMENTS (HYBRID)

Students are expected to complete all work shown on the attached assignment sheet. Students are also expected to complete all tests and comprehensive problems on the dates specified on the attached calendar. Students are responsible for policies and procedures included in the STC Catalog and Handbook. Emergency Medical Services (EMS) Professions program students must earn a minimum grade of C in this course to advance to EMSP 1140.

AFFECTIVE LEARNING EVALUATION

EMS Professions students will be evaluated weekly to identify and correct deficits in affective learning. Students will be evaluated in up to 11 areas of affective behavior. A score will be entered into the grade book to reflect the affective behaviors exhibited during each week of the semester. See the scoring rubric included on the Affective Learning Evaluation form in the program handbook.

HYBRID ATTENDANCE

Class attendance is a very important aspect of a student's success. Being absent from class prevents students from receiving the full benefit of a course and interrupts the learning process. Southeastern Technical College considers both tardiness and leaving early as types of absenteeism. Responsibility for class attendance rests with the student. Regular and punctual attendance at all scheduled classes is required for student success. Students will be expected to complete all work required by the instructor as described in the individual course syllabus.

Instructors have the right to give unannounced quizzes/assignments. Students who miss an unannounced quiz or assignment will receive a grade of 0. Students who stop attending class, but do not formally withdraw, may receive a grade of "F" (Failing 0-59) and face financial aid repercussions in upcoming semesters.

Instructors are responsible for determining whether missed work may be made up and the content and dates for makeup work is at the discretion of the instructor.

Attendance is counted from the first scheduled class meeting of each semester. To receive credit for a course a student must attend at least 90% of the scheduled instructional time. All work missed due to tardiness or absences must be made up at the convenience of the instructor. Any student attending less than the required scheduled instructional time (90%) may be dropped from the course as stated below in the Withdrawal Procedure.

Tardy means arriving after the scheduled time for instruction to begin. Early departure means leaving before the end of the scheduled time. Three (3) tardies or early departures equal one (1) absence for the course.

For this class, which meets 1 days a week for 5 weeks, the maximum number of days a student may miss is 1 day during EMSP 1150.

STUDENTS WITH DISABILITIES

Students with disabilities who believe that they may need accommodations in this class based on the impact of a disability are encouraged to contact the appropriate campus coordinator to request services.

Swainsboro Campus: [Macy Gay mgay@southeasterntech.edu](mailto:MacyGay@southeasterntech.edu), 478-289-2274, Building 1, Room 1210

Vidalia Campus: [Helen Thomas hthomas@southeasterntech.edu](mailto:HelenThomas@southeasterntech.edu), 912-538-3126, Building A, Room 165

SPECIFIC ABSENCES

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

PREGNANCY

Southeastern Technical College does not discriminate on the basis of pregnancy. However, we can offer accommodations to students who are pregnant that need special consideration to successfully complete the course. If you think you will need accommodations due to pregnancy, please make arrangements the appropriate campus coordinator.

Swainsboro Campus: [Macy Gay mgay@southeasterntech.edu](mailto:MacyGay@southeasterntech.edu), 478-289-2274, Building 1, Room 1210

Vidalia Campus: [Helen Thomas hthomas@southeasterntech.edu](mailto:HelenThomas@southeasterntech.edu), 912-538-3126, Building A, Room 165

It is strongly encouraged that requests for consideration be made **PRIOR** to delivery and early enough in the pregnancy to ensure that all the required documentation is secured before the absence occurs. Requests made after delivery **MAY NOT** be accommodated. The coordinator will contact your instructor to discuss accommodations when all required documentation has been received. The instructor will then discuss a plan with you to make up missed assignments.

WITHDRAWAL PROCEDURE

Students wishing to officially withdraw from a course(s) or all courses after the drop/add period and prior to the 65% point of the term in which student is enrolled (date will be posted on the school calendar) must speak with a Career Counselor in Student Affairs and complete a Student Withdrawal Form. A grade of “W” (Withdrawn) is assigned for the course(s) when the student completes the withdrawal form.

Students who are dropped from courses due to attendance after drop/add until the 65% point of the semester will receive a “WF” for the course.

Important – Student-initiated withdrawals are not allowed after the 65% point. Only instructors can drop students after the 65% point for violating the attendance procedure of the course. Students who are dropped from courses due to attendance after the 65% point will receive either a “WP” (Withdrawn Passing) or “WF” (Withdrawn Failing) for the semester.

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

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

MAKEUP GUIDELINES (TESTS, QUIZZES, HOMEWORK, PROJECTS, ETC...)

If a student misses a test, a grade of zero will be assigned. Only students with extenuating circumstances (who contact the instructor on or before the day of the test regarding their absence) will be allowed to take a makeup test, which will replace the zero. Extenuating circumstances are determined at the instructor’s discretion. Unless otherwise scheduled with the instructor, it is expected that the test will be taken prior to the next class, and will be scheduled outside of regular class time. Failure to follow this procedure will result in a grade of zero.

Assignment due dates are listed on the attached lesson schedule and in MyBradyLab. Students are expected to have the assignment completed when it is due. It is within the instructor’s discretion to accept or reject late assignments. Any late assignments accepted will be subject to a ten point penalty each day the assignment is late. After three class meetings, no late assignments will be accepted; a zero will be recorded.

Unannounced quizzes are subject to be given on any day. A grade of zero will be assigned for any quizzes missed. There will be no makeup of quizzes.

Any zeros recorded will be included in the final score calculation.

Students must have a 70% or above average on all chapter exams AND, a 70% or above average on all homework assignments to be eligible to sit for the final exam of each class. Any student not meeting this requirement will not be allowed to take the class final exam and will not be allowed to advance to the next scheduled class.

IMPORTANT: Upon the successful completion of EMSP 1140, students will be eligible to sit for the EMT Comprehensive Final exam. Upon the successful completion of the EMT comprehensive Final exam, students will be eligible to sit for the NREMT EMT comprehensive written and practical exams. Students are encouraged to take the NREMT EMT exam as soon as possible. Students **MUST** complete at least one full attempt of both the NREMT EMT comprehensive written and practical exam prior to beginning EMSP 1520, scheduled to begin Spring semester.

Students must score a 70% or better on a comprehensive written examination at the end of the course to be eligible to sit for the NREMT- EMT and Advanced EMT exams. A score of 69.9% will not be rounded up.

ACADEMIC DISHONESTY POLICY

The STC Academic Dishonesty Policy states All forms of academic dishonesty, including but not limited to cheating on tests, plagiarism, collusion, and falsification of information, will call for discipline. The policy can also be found in the STC Catalog and Handbook.

PROCEDURE FOR ACADEMIC MISCONDUCT

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

1. First Offense

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

2. Second Offense

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

3. Third Offense

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

STATEMENT OF NON-DISCRIMINATION

The Technical College System of Georgia (TCSG) and its constituent Technical Colleges do not discriminate on the basis of race, color, creed, national or ethnic origin, gender, religion, disability, age, political affiliation or belief, genetic information, disabled veteran, veteran of the Vietnam Era, spouse of military member, or citizenship status (except in those special circumstances permitted or mandated by law). This nondiscrimination policy encompasses the operation of all technical college-administered programs, federally financed programs, educational programs and activities involving admissions, scholarships and loans, student life, and athletics. It also applies to the recruitment and employment of personnel and contracting for goods and services.

All work and campus environments shall be free from unlawful forms of discrimination, harassment and retaliation as outlined under Title IX of the Educational Amendments of 1972, Title VI and Title VII of the Civil Rights Act of 1964, as amended, the Age Discrimination in Employment Act of 1967, as amended, Executive Order 11246, as amended, the Vietnam Era Veterans Readjustment Act of 1974, as amended, Section 504 of the Rehabilitation Act of 1973, as amended, the Americans With Disabilities Act of 1990, as amended, the

Equal Pay Act, Lilly Ledbetter Fair Pay Act of 2009, the Georgia Fair Employment Act of 1978, as amended, the Immigration Reform and Control Act of 1986, the Genetic Information Nondiscrimination Act of 2008, the Workforce Investment Act of 1998 and other related mandates under TCSG Policy, federal or state statutes.

The Technical College System and Technical Colleges shall promote the realization of equal opportunity through a positive continuing program of specific practices designed to ensure the full realization of equal opportunity.

The following individuals have been designated to handle inquiries regarding the nondiscrimination policies:

American With Disabilities Act (ADA)/Section 504 - Equity- Title IX (Students) – Office of Civil Rights (OCR) Compliance Officer	Title VI - Title IX (Employees) – Equal Employment Opportunity Commission (EEOC) Officer
Helen Thomas, Special Needs Specialist Vidalia Campus 3001 East 1 st Street, Vidalia Office 165 Phone: 912-538-3126 Email: Helen Thomas hthomas@southeasterntech.edu	Lanie Jonas, Director of Human Resources Vidalia Campus 3001 East 1 st Street, Vidalia Office 138B Phone: 912-538-3230 Email: Lanie Jonas ljonas@southeasterntech.edu

ACCESSIBILITY STATEMENT

Southeastern Technical College is committed to making course content accessible to individuals to comply with the requirements of Section 508 of the Rehabilitation Act of Americans with Disabilities Act (ADA). If you find a problem that prevents access, please contact the course instructor.

GRIEVANCE PROCEDURES

Grievance procedures can be found in the Catalog and Handbook located on Southeastern Technical College’s website.

ACCESS TO TECHNOLOGY

Students can now access Blackboard, Remote Lab Access, Student Email, Library Databases (Galileo), and BannerWeb via the mySTC portal or by clicking the Current Students link on the [Southeastern Technical College's Website \(www.southeasterntech.edu\)](http://www.southeasterntech.edu).

TECHNICAL COLLEGE SYSTEM OF GEORIGIA (TCSG) GUARANTEE/WARRANTY STATEMENT

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

GRADING POLICY

Assessment/Assignment	Percentage
Chapter Exams	50 %
Homework Assignments/Quizzes	10 %
Affective Learning	5 %
Final Exam	35 %
Total	100%

GRADING SCALE

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

EMSP 1150 CRN# 40139
Spring Semester 2021 - Lesson Plan

Date/Week	Chapter/Lesson	Content	Assignments & Tests Due Dates	Competency Area
Monday January 11	Chapter 28 Chapter 29 Chapter 30	In Class: Bleeding and Soft Tissue Trauma Burns Musculoskeletal Trauma	Before Day 1: Read and complete the "MyBradyLab" Pre-Test, Homework, Post-test and Chapter test for Chapter 27, 28, 29. This assignment must be completed by 9:00 am on January 11, 2021 <hr/> Read the AHA CPR for the Health Care Provider textbook. Be prepared for the CPR class on January 14,2021	
Thursday January 14	CPR	CPR	Review the "MyBradyLab" Pre-Test, Homework, Post-test for Chapter 28, 29, 30. Read the AHA BLS Textbook. CPR next Thursday	
Monday January 25	Chapter 28 Chapter 29 Chapter 30 LAB	In Class: Bleeding and Soft Tissue Trauma Burns Musculoskeletal Trauma LAB	Hybrid: Read and complete the "MyBradyLab" Pre-Test, Homework, and Post-test for Chapter 31 & 32. This assignment must be completed by 9:00 am on February 1, 2021 Complete the MyBradyLab Chapter 28, 29 & 30 exam. This assignment is due by 11:59pm on January 27, 2021	

Date/Week	Chapter/Lesson	Content	Assignments & Tests Due Dates	Competency Area
Monday February 1	Chapter 31 Chapter 32 Lecture & Lab	Hybrid: Read and complete the “MyBradyLab” Pre-Test, Homework, and Post-test for Chapter 31 & 32. This assignment must be completed by 9:00 am on February 1, 2021	Hybrid: Read and complete the “MyBradyLab” Pre-Test, Homework, and Post-test for Chapter 33, 34 & 35. This assignment must be completed by 9:00 am on February 8, 2021 Complete the MyBradyLab Chapter 31 & 32 exam. This assignment is due by 11:59pm on February 3, 2021	1,2,3,13 a,b,c
Monday February 8	Chapter 33 Chapter 34 Chapter 35	In Class: Eye, Face, and Neck Trauma Chest Trauma Abdominal and Genitourinary Trauma	Hybrid: Read and complete the “MyBradyLab” Pre-Test, Homework, and Post-test for Chapter 27 & 36. This assignment must be completed by 9:00 am on February 15, 2021 Complete the MyBradyLab Chapter 33, 34 & 35 exam. This assignment is due by 11:59pm on February 10, 2021	1,3 a,b,c
Monday February 15	Chapter 27 Chapter 36	In Class: Trauma Overview Multisystem Trauma & Special Patient Populations Final will be taken online prior to next class	The Chapter 27 & 36 exam will be administered at the end of class. Complete the ClassMarker EMSP 1150 Final Exam by 11:59pm on February 17, 2021	1,3 a,b,c

COMPETENCY AREAS:

1. Shock and Resuscitation
2. Trauma Overview
3. Bleeding
4. Chest Trauma
5. Abdominal and Genitourinary Trauma
6. Orthopedic Trauma
7. Soft Tissue Trauma
8. Head, Facial, Neck, and Spine Trauma
9. Nervous System Trauma
10. Special Considerations in Trauma
11. Environmental Emergencies
12. Multi-System Trauma
13. Trauma Assessments

GENERAL CORE EDUCATIONAL COMPETENCIES

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