# ALABAMA FIRE COLLEGE
## RESCUE TECHNICIAN: TRENCH RESCUE I/II
### SYLLABUS
#### FSC 227
#### 40 CLOCK HOURS

<table>
<thead>
<tr>
<th>Prerequisite(s)</th>
<th>(Pro Board or IFSAC) Certified Rescue Technician: Rope I</th>
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<tbody>
<tr>
<td>Course Description</td>
<td>This course is based on NFPA 1006: Standard for Technical Rescue Personnel Professional Qualifications, and may lead to Pro Board and IFSAC certifications. The course is designed to offer a combination of classroom and practical evolutions that allow the student to learn proper techniques to make open trenches and excavations safe for victim access and removal. The class is made realistic by actual sheeting and shoring operations of “unsafe” trenches by using wood, mechanical and pneumatic shoring equipment. The student will also learn and apply multiple skills in lifting practices within the trench environment.</td>
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| Student Learning Objectives | • Conduct a size-up of a collapsed trench.  
• Implement a trench emergency action plan.  
• Use and document tactical worksheets; disseminate information; understand mechanics and extent of collapse effects, and perform risk-benefit analysis.  
• Implement support operations at trench emergencies.  
• Construct load stabilization systems.  
• Lift a load.  
• Coordinate the use of heavy equipment.  
• Support a nonintersecting straight wall trench of 8 ft. or less as a member of a team.  
• Support an intersecting trench as a member of a team.  
• Install supplemental sheeting and shoring for each 0.61 m (2 ft.) of depth dug below an existing approved shoring system.  
• Release a victim from entrapment by components of a collapsed trench.  
• Remove a victim from a trench.  
• Interpret tabulated data information and tables, place shoring and shielding systems and install supplemental shoring.  
• Interpret tabulated data information and tables, place shoring/shielding systems, and identify the types of intersecting trenches.  
• Use hand signals, radio equipment, recognize hazards, and assess heavy equipment for precision of movement.  
• Identify crush syndrome clinical settings.  
• Disassemble support systems at an intersecting trench emergency incident.  
• Terminate a trench emergency incident. |
| Required Textbook and Course Materials | **Alabama Fire College Bookstore**  
**Technical Rescuer Trench Levels I & II**  
*Trench Rescue Principles and Practice, Third Edition, Jones and Bartlett*  
**Other materials:**  
• Hard hat  
• Work gloves  
• Work boots (not firefighting boots)  
• Clothing suitable for outside activities  
• OSHA approved safety glasses |
| Reading Prior to Arrival | Textbook material suggested |
| Daily Activities and Class Participation | This course will involve discussion, questions and answers on the materials, and case studies. Class participation is expected from all students. |
| Basis | Alabama Fire College and Personnel Standards Commission, Administrative Code, Chapter 360-X-19- |

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Page 1 of 3
.03: Requirements for Certified Rescue Technician: Trench Rescue

Certification Requirements
To be issued certification, the candidate will:
- provide documentation of prerequisites.
- complete required training hours including skills training.
- successfully complete cognitive written exam.
- successfully complete practical exam.

Grade Assessment
- Written Examination: Perform to a minimum 70% competency on the examination, calculated at 50% of the final score for the course. (One retest is allowed after 30 days but within one year of course end date.)
- Practical Examination (if applicable): Successfully complete a skills/project evaluation to a minimum of 70% competency and successful completion of all critical points. Evaluators will test at least 25% of the skills for each level of skill sheets. Skill sheets will be randomly selected by the AFC Certification Unit for this practical examination. The Practical Examination Portion is calculated at 50% of the final score. (One retest is allowed after 30 days but within one year of course end date.)

**Example:**
Written examination - 70/100 possible points
70 x 50% = 35 points awarded for written exam portion
Practical/project - 40/100 possible points
40 x 50% = 20 points awarded for practical portion
Total Points = 55 points (student awarded F, score not 70%>)

Accreditation
Alabama Fire College and Personnel Standards Commission maintains accreditation with the Pro Board and IFSAC. Each student will automatically receive national registration and certification upon successful completion of all requirements for certification.

Contact Information
**Link:** Alabama Fire College Website
1-800-241-2467
**Link:** Alabama Fire College Bookstore Website
1-866-984-3545

Academic Misconduct
Academic misconduct or dishonesty, such as cheating and plagiarism, is not permitted in class. Suspected cases of academic misconduct will be reported to the Executive Director. Conduct detrimental to the fire service, on or off campus, will not be tolerated. AFC will investigate any complaints. If a complaint is valid, the student will be dismissed and his/her agency will be notified.

Attendance Policy
Attendance will be recorded at every class or lab meeting at the beginning of class and after long breaks for required hours. For a week-long certification course, students are required to attend all sessions to obtain certification. For VA students, it is especially important because they will receive benefits only for those days in attendance.

Special Policy: Fire Fighter I/II: Students are expected to attend all classes. Failure to appear in class for a scheduled activity will be considered an absence unless prior permission is received from the instructor. For any absence to be excused and makeup work to be allowed, it must be accompanied by a written description of extenuating circumstances.

No-Show: Students who have registered for a fee-waived or stipend course and fail to withdraw according to Alabama Fire College withdrawal policy will not be allowed to register for another fee-waived or stipend course for a period of one year.

Department Delivery: To qualify to attend department delivery courses, students must be Alabama residents or a member of an Alabama fire department.

Tardiness
Students must adhere to class schedules. Students are required to be punctual for all classes and class activities. Classes will begin promptly at the scheduled time unless specific instructions are given otherwise.

Safety
Safety of the students is a top priority for Alabama Fire College. Students must adhere to safety regulations while attending a class at the Fire College. Safety instructions are posted in every classroom, as well as escape routes and tornado actions.

Quality Enhancement Plan
An evaluation form will be provided for each student at the end of the course. Students may use this evaluation form as a means of communicating their opinion of the overall course, course content, instructor, and facilities.

Course Schedule
**Suggested course schedule**
**Day One:**
(class): Introduction to Trench Rescue; Preparing the Rescue System; Soil classification and testing; Soil physics and Trench collapse; Incident and Support operations (Drill Field): Review Basic Rescue

**Day Two:**
(class): Equipment; Incident Assessment; Hazard Control and Atmospheric Monitoring; Lifting and Moving and Stabilization; Protective Systems (Drill Field): Sheeting and Shoring (wood shores, screw jacks, and air shores)

**Day Three:**
(class): Trench Rescue Shoring Techniques; Victim Access and Care; Rescue Team Leadership (Drill Field): Trench Rescue scenarios (air bags, ladder A-frame, M/A block and tackle, disentanglement pipe)

**Day Four:**
(class): N/A (Drill Field): Trench Rescue scenarios (air bags, ladder A-frame, M/A block and tackle, disentanglement pipe)

**Day Five:**
(Drill Field): Scenario-Based JPR Skills Testing; Equipment Returned to Trailer
(Classroom): Review; Paperwork; Survey; Certification Examination

*The schedule is subject to change.*