

2011 Utah State FFA Agricultural Mechanics Career Development Event

Please read and follow the instructions on this sheet to be prepared for the event.

Date, Location, and Time: Tuesday, April 26, 2011, Agricultural Systems Technology and Education Building, 1498 North 800 East, Logan Utah, Registration will take place in Room 129 at 2:00 PM

Each team participating in the Agricultural Mechanics CDE consists of three students and one alternate. A team may not be larger than three student members and one alternate. No more than one team from each school is allowed to participate in a particular State CDE in Utah. Teachers and advisors who are assisting with or observing this event should not talk with, visit, advise, assist, or instruct their students during the time this event is in progress. This includes the time spent scoring the projects after the students have finished participating. Teachers, please remind the students participating in this event and other events to wait and talk with you after you are finished with all event responsibilities.

Due to the possibility of damaging clothes, official dress is not required for participation in the Agricultural Mechanics CDE. Long pants, closed-toed shoes with socks, and collared shirt are recommended as the minimum requirement for appropriate clothing. Shorts, sandals, dresses, skirts, ties, and t-shirts are not appropriate clothing. Participants are encouraged to wear clothing appropriate for the type of activities planned (see descriptions below). Identical coveralls, laboratory coats, or shirts are appropriate for team members. Clothes that are torn, worn, stained, or damaged are not appropriate.

Please send questions related to the Ag. Mech. CDE to Richard Beard at Richard.Beard@usu.edu
Please send questions about registration, insurance, or rules to Brett Evans at brettevans@utffa.org

Each student will need clear safety glasses, a calculator, and two pencils. Cellular telephones or other communication devices are not to be used or handled during the completion of this event. Any student using or handling such communication devices during the State Agricultural Mechanics CDE can be disqualified. Scores from at least three members who have not been disqualified are required for a team to win or place in this event.

Please make sure that EACH student has these items in her or his possession throughout the event.

Calculators will be used on the exam, during the team activity, and to complete the skill activities. Each student will need her or his own calculator because students may not share calculators during the exam or skill activities and students may NOT use their cellular telephone or other electronic communication devices during this event.

Each student will need CLEAR safety glasses that fit properly and are comfortable to wear. Do not bring safety goggles. Do not bring tinted safety glasses. Make sure the glasses are free of excessive scratches or blurred areas that impair vision. If a student removes his or her safety glasses during the activities where glasses are required, that student's score will be penalized. If the problem occurs during the team activity, the entire team score is penalized. Students who have prescription glasses may wear those glasses in place of other safety glasses.

2011 Theme: Animal Production Systems

Written Exam: 55 minutes, twenty multiple choice questions (1 point each) and twelve math problems (5 points each)

Team Activity: 55 minutes, 250 points – Team members will work together to complete a variety of electrical wiring activities that can include electrical lights, three-way switches, duplex receptacles, and a four way switch. All tools and supplies will be provided. There will also be questions about electrical voltage, amperage, Wattage, and/or ohms and calculations involving these electrical units. There is also a chance that this activity will include some troubleshooting questions related to common electrical problems.

1st Skill Activity: 25 minutes, 75 points – Each student will work independently to complete activities involving the threading of a rod and/or the tapping of a hole using standard tapping and threading equipment. Each student will also have copies of standard tapping and threading charts and be asked to look up correct sizes for these operations. There will also be questions/identification related to course threads, fine threads, pipe threads, and the differences in bolt grade marking and holding strength.

2nd Skill Activity: 25 minutes, 75 points - Each student will work independently to complete PVC measuring, cutting, cleaning, gluing, and installation. There will be questions about PVC pipe and fitting sizes and the selection of appropriate PVC fittings (elbows, tees, caps, couplings, reducer couplings, dresser couplings, male and female adapters, etc.) for various installations. Finished projects will be pressure checked for leaks and quality of work.