

CONTEST DISCRIPTIONS

3-D Visualization and Animation

Mimics the real world production environment where creative output must be accomplished within specific timeframes, resources and design constraints. This is a two-person team event. Contestants must produce high quality images and an animated short subject using 3D computerized images. Students are tested on their technical knowledge, production skills and creative/artistic abilities, take a preliminary written exam and do storyboarding (visual planning).

Advertising Design

Tests technical skills and creative aptitude just as though contestants worked for an ad agency. In addition to a written test, competitors will re-create a given advertisement on the computer. Competitors are judged on their accuracy, proficiency with industry standard software and ability to meet the given deadline. Contestants also compete in a creative portion of the competition. The creative portion involves the application of creative thinking and development of a design problem. Layout, drawing and illustration skills are used, as well as their ability to create vibrant, effective designs using the computer.

American Spirit

A notebook contest documenting SkillsUSA chapters' community service and citizenship projects that demonstrate a belief in the American way of life and the purposes of SkillsUSA.

Architectural Drafting

Contestants will use their drafting skills to solve an Architectural problem. The problem includes a written test, a hand sketch, a computer-generated problem and a problem that may be solved using EITHER board drafting or CAD. The contest tests the contestants' problem solving abilities, not simply their CAD skills.

Automotive Service Technology

Contestants will demonstrate their ability to perform jobs and skills based on the task list outlined by the National Institute for Automotive Service Excellence (ASE) and the National Automotive Technicians Education Foundation (NATEF). Workstations consist of on-vehicle, simulations, bench and component testing and a written test. Contestants will be judged on technical competency, accuracy, quality, safety and ability to follow directions. There are thirteen skill stations plus the written test.

Basic Health Care Skills

There will be 10-12 testing stations. Testing stations will challenge the contestants' beginning level of health occupations knowledge and skills of basic and fundamental health care. Contestants' skills are evaluated through hands-on demonstration, written examination, interviewing, and tabletop presentation.

Cabinetmaking

Requires the building of a small cabinet from materials and drawings supplied. Contestants are expected to read the drawings, lay out and cut the parts using a table saw, laminate trimmer, hand drill, hinge boring machine and various hand tools. The parts must be accurately assembled, sanded and adjusted to tolerances specified by the judges.

Carpentry

Contestants will frame walls using wood and steel studs, cut and install common and hip and jack rafters, install drywall and baseboard moldings and window trim. Contestants will be judged on accuracy, ability to read and interpret blueprints, workmanship and the proper use of tools and equipment.

Chapter Business Procedure

Student teams of six members, will demonstrate their knowledge of parliamentary procedure in both a written exam and a team demonstration. The written exam will consist of 25 multiple choice questions related to materials found in Robert's Rules of Order—Newly Revised. Scores are averaged and included as part of the team's overall score. During the presentation, the team will demonstrate the running of a typical business meeting using a standard order of business. During the presentation, the team must properly insert into the order of business the secretary's minutes, treasurer's report and business items identified by the technical committee. In addition to the debate and transaction of the business items, teams will also properly demonstrate at least 6 different parliamentary procedure motions, including at least one of each of the following: main, privileged, subsidiary, incidental and motions that bring back issues to the floor. Minutes of the demonstration will be read by the secretary upon completion of the demonstration.

Chapter Display

Selects the outstanding promotional exhibit designed and constructed by SkillsUSA student members. The display is built around and articulates a common theme established annually by SkillsUSA.

Collision Repair Technology

The competition includes a series of workstations, a manually written estimate and an interview process designed to assess skills in metalwork, welding, plastic repair, structural analysis and estimating and an ASE written exam. The overall appearance of the finished product, speed and proper safety practices will be judged.

Commercial Baking

Challenges contestants to meet production and quality standards expected by industry. Students must scale, mix, prepare and bake six products (including breads, rolls, Danish, cookies and pies) and demonstrate cake-decorating skills. They must deliver a quality, salable product while working efficiently and under job-like conditions.

Community Service

Evaluates local chapter activities that benefit the community. SkillsUSA chapters present their best community service project for the year to a panel of judges. Contestants are evaluated on: (1) a notebook reporting the chapter's community service project and, (2) a live presentation by a chapter team of three members. The team may be a mix of high school and college/postsecondary students.

Computer Maintenance Technology

The CMT contest requires contestants to identify and repair computer hardware malfunctions, solve configuration problems, and install common components. In addition, the contestants take the A+ Certification exam. Their score on this exam is used as the basis for the written portion of the contest, and contestants who pass the exam receive their A+ Certification.

Cosmetology

Students will demonstrate their skills in haircutting, hair styling and longhair design in four separate tests. All work is performed on mannequins so everyone begins with the same model and the same type of hair. Contestants will recreate 2 women's' and 1 men's' haircut from a finished photo. A display of creativity is seen in the longhair segment of the competition where these future salon professionals demonstrate their own design skills. A parade finale closes the contest with each contestant walking down the stage with their completed mannequins to present to the audience.

Criminal Justice

For students preparing to be police officers or to work in other areas of criminal justice. Typically this contest will utilize both written examination and practical exercises to evaluate the contestants' abilities and knowledge of the field. The contestants are scored on their

knowledge and application of U.S. Constitutional Law, written and verbal communications skills, and their ability to handle an entry-level law enforcement position.

Culinary Arts

The competition will encompass both hot and cold food preparation and presentation. Contestants are rated on their technical culinary skills, sanitation and food safety techniques, and above all, the quality of their prepared items, particularly their creative presentation.

Customer Service

Evaluates students' proficiency in providing customer service. The contest involves live, role-playing situations. Contestants demonstrate their ability to perform customer service in both written and oral forms including telephone and computer skills, communications, problem solving, conflict resolution and business etiquette.

Diesel Equipment Technology

Contestants cycle through fourteen stations testing basic engines; troubleshooting engines; electrical-electronics; chassis; transmissions; carriers; hydraulic systems; vehicle inspection; fundamental failure analysis; brake systems; air-conditioning; general shop skills; job interview skills; and a written test.

Electronics Technology

The contest is divided into four sections testing contestants' knowledge of: analog and digital circuitry; ability to troubleshoot electronic circuits; ability to construct and test experimental circuits; to design and select circuit components; and to assemble an electronic circuit. All aspects of the competition test contestants' abilities to use and calibrate electronic equipment, record and organize data, and demonstrate proper safety practices.

Extemporaneous Speaking

Requires contestants to give a three- to five-minute speech on an assigned topic with five minutes of advance preparation. Contestants enter the preparation area one at a time where they are given a speech topic. They are judged on voice, mechanics, platform deportment, organization and effectiveness.

Firefighting

The Firefighting contest evaluates the contestant's preparation for firefighting careers through hands-on skill demonstrations and both written and oral presentations. Areas tested include: safety; breathing apparatus; fire streams; ladders, ropes, knots and hoses; fire control; ventilation; emergency medical care and rescue; and protecting fire cause evidence. Contestants are evaluated using standards established by the National Fire Protection Association (NFPA).

First Aid/CPR

Evaluates contestant's ability to perform procedures or take appropriate action based on scenarios presented related to CPR and first aid. There is also a written exam. All skills are judged on nationally accepted standards identified by the American Red Cross for first aid emergencies and the American Heart Association for CPR. An AED scenario for all contestants will be included.

Food and Beverage Service

Contestants are tested on skills required in the "front of the house" of a fine restaurant. The focus is on guest service and guest relations in the dining room including: table set up; greeting guests; reservations procedures; presentation of menus; description of food, drinks, soups and specials of the day; taking orders; serving each course and clearing the table after each course; and preparation and presentation of the check and closing remarks. Contestants are judged on personal appearance, tableside manner, professionalism, ease with guests, courtesy, general knowledge and technical and verbal skills.

Health Knowledge Bowl

Tests teams of four students on their collective knowledge of health occupations. Teams are judged on speed and accuracy answering questions in nine categories: (1) Academic Foundations; (2) Communication; (3) Systems; (4) Employability Skills; (5) Legal Responsibility; (6) Ethics; (7) Safety Practices; (8) Teamwork; and, (9) Health Maintenance.

Health Occupations Professional Portfolio

The Health Occupations Professional Portfolio contest recognizes students for their successful development of a professional portfolio. The competition evaluates the ability of the students to present themselves to a prospective employer. The contestants will show the use of the portfolio use effective communication skills in presenting. The contest consists of two parts: a portfolio notebook and a live presentation by the contestant.

HVACR (Heating, Ventilation, Air Conditioning & Refrigeration)

The contestants will be tested in the following areas: written exam, brazing skills, refrigerant component service, air measurement and troubleshooting, refrigerant recovery and electrical troubleshooting. Various industry equipment may include ice machines, refrigerated display cases, small package HVAC units, furnaces, and split system air conditioning units.

Industrial Motor Control

Students will demonstrate their knowledge of electrical principles, equipment and industry standards as it relates to the design and installation of motor control circuits. Students will demonstrate their skills and abilities in applying that knowledge by properly installing motor control equipment and associated enclosures, raceways, pilot devices and circuitry.

Internetworking

The contest consists of three main parts--networking design, general networking knowledge and hands-on evaluations. The networking design problem tests a contestant's ability to design functionality, scalability, adaptability, and manageability of an internetworking system. The online written portion tests the student's complete knowledge of internetworking concepts. The hands-on component demonstrates the abilities of the contestant to make cables, trouble shoot network systems, configure routers and switches and to deliver customer service in a technical assistant center environment. The contestants will find errors in WAN and LAN networks; do an ISP configuration using routers and switches; talk a technician through an error they are having on their network; and, take an online, certification type test.

Job Interview

Divided into three phases: completion of employment applications; preliminary interviews with receptionist; and, in-depth interviews. Contestants are evaluated on their understanding of employment procedures faced in applying for positions in the occupational areas for which they are training.

Job Skill Demonstration A

Contestants demonstrate and explain an entry-level skill used in the occupational area for which they are training. Competitors in Job Skill A must demonstrate a career objective in an occupational area that is included in one of the contest areas of the SkillsUSA Championships.

Job Skill Demonstration Open

Contestants demonstrate and explain an entry-level skill used in the occupational area for which they are training or outside of their training program. Any technical skill may be demonstrated.

Masonry

While production is very important, quality workmanship is vital. The students will be expected to construct a composite brick & block project in a six-hour period that will test their ability to meet industry standards in quality. In addition to a written exam, the critical eye of

journeyman judges will be the deciding factor in determining the winners. The contest project will include components of the most frequently used details in residential construction.

Medical Assisting

Contestants are tested on their skills in the clinical and administrative setting of a medical office. They are judged on speed, the use of correct safety measures, and their ability to interact personally with a patient. They are also judged on general office skills, communication skills, identification of anatomy and instruments, and on a variety of clinical procedures and techniques. The need to be able to assess a situation in a short period of time and perform a skill required for that situation.

Nail Care

The purpose of this contest is to evaluate each contestant's preparation for employment and to recognize outstanding students' excellence and professionalism in the field of nail technology. The contest consists of 6 separate segments; oral communication skills, acrylic application, tip and wrap application, nail polish application, nail art and a written exam. The written exam tests basic knowledge of proper sanitation, chemical safety, salon procedures, etc. The practical applications evaluate the contestant's ability to perform the most common nail services in the salon today.

Nurse Assisting

Students demonstrate knowledge and skill in performing patient care, personal care and standard infection control procedures in basic nurse assisting, including CPR. These include the ability to use and identify equipment; manipulation of medical materials in taking blood pressure, temperature, pulse, respiration, height, and weight; testing urine for sugar and acetone; and applying acuwrap to an ankle. Contestants should be familiar with basic anatomy, communication skills, legal/ethical issues and employment skills.

Opening and Closing Ceremonies

A teamwork and oral presentation contest that evaluates teams' understanding of the symbolic representation of the colors and assembled parts of the SkillsUSA emblem. Each team includes seven registered members in the roles of president, vice president, parliamentarian, reporter, treasurer, secretary and optional officer. The contest is a demonstration of the SkillsUSA Opening and Closing Ceremonies conducted according to the script and description as printed in the SkillsUSA Championships Technical Standards.

Get tips and tools for the [Opening and Closing Ceremonies here](#).

Outstanding Chapter

The Outstanding Chapter consists of activities students have been involved with during the school year. Activities consist of chapter meetings, leadership training, publicity, community projects, professional development, program of work, awards, local and state competition, and other chapter selected activities. Each activity is documented according to guidelines and submitted in a scrapbook for judging. A student representative is interviewed at the SkillsUSA Championship events.

Plumbing

Contestants "rough-in" hot and cold water lines with copper to a water heater and the sanitary drainage waste and vent lines with cast iron and PVC plastic for a water closet, a lavatory, a washer box and a floor drain. Water pipes are pressure tested on completed projects. Professional plumbers and pipe fitters judge the contestants on the basis of accuracy, workmanship, proper selection and use of tools and supplies, and proper safety practices.

Power Equipment Technology

Tests the student's skills in all areas of this technology. They must know and understand both 2 & 4 cycle engines. They should know and understand the related theories that go along with the types of engines that they will come across in the industry. They should also understand

drive trains, hydraulic, as well as wiring schematics. Contestants will need to be versed in customer service. As they rotate through the various stations they are judged and scored on both physical and oral skills. They are further tested with their ability to read and follow the job tasks that are given.

Practical Nursing

Contestants will demonstrate their ability to perform procedures/skills consistent with Practical Nursing competencies as determined by State Boards of Nursing. Contestants are judged on their knowledge of medical terminology, body structure and function, nutrition, medications and nursing care. They must also demonstrate their abilities to perform job skills such as: administration of oral, subcutaneous and nasogastric medications; physical assessment; insertion of a nasogastric tube; sterile dressing change and cardiopulmonary resuscitation. At each workstation they are judged on accuracy of their skill, organization, communication and safety.

Precision Machining Technology

Contestants will compete in NIMS Level I & II manual machining skills and knowledge areas including operation of manual milling machines, lathes, drill presses, and surface grinders. Contestant knowledge of CNC programming skills using a PC will be evaluated. Related knowledge and skill in the areas of engineering drawing interpretation, GD&T, technical math, machining practices, use of precision measuring/hand tools and ability to communicate verbally using proper industry terminology are also part of this competition.

Prepared Speech

Requires students to deliver a speech five to seven minutes in length on a common theme established by National SkillsUSA early in the school year. Contestants are evaluated on their ability to present thoughts relating to a central theme clearly and effectively, and on voice, mechanics, and platform deportment.

Preschool Teaching Assistant

Contestants will demonstrate their ability to prepare and implement learning activities for children 3 to 5 years old. Contestants are required to write a lesson plan. They will demonstrate their understanding of the unique age-related learning characteristics of young children and the relevant social interactions as they implement the lesson. Contestants will read a preschool book. They will take a written test of their knowledge of child development and effective teaching strategies.

Promotional Bulletin Board

Judges bulletin board displays created by SkillsUSA chapters. The bulletin boards promote SkillsUSA, career and technical education in general, and related occupational information. An oral presentation is also included.

Quiz Bowl

The Quiz Bowl tests a team of 5 competitors' ability to quickly respond to questions covering the areas of academic knowledge, professional development and current events. The participants respond to a question by activating a buzzer system. The teams receive one point for a correct answer and lose a point for each incorrect answer. The active rounds (preliminary and finals) are 100 questions each.

Related Technical Math

On a written test, contestants demonstrate skills required to solve mathematical problems commonly found in the skilled trades and professional and technical occupations. Skills demonstrated include addition, subtraction, multiplication and division of whole numbers, fractions and decimals; applied word problems; percentages; ratio proportions; averages; area; volume; metric measures and traditional (Imperial) measures and trigonometry.

Residential Wiring

Contestants are required to complete a written test, a practical conduit bending exercise and a hands-on installation and wiring exercise. Working from drawings and specifications sheets, contestants are required to install residential wiring and electrical devices. Judging is on the basis of general workmanship, accuracy of layout and installation, and adherence to the current national Electrical Code and standard industry safe practices.

Robotics and Automation Technology

Challenges two-person teams to demonstrate operation of an intelitek ER-4U, 5-axis servo-robot along with a set of sensors and motorized devices to resolve a simulated production process problem. They demonstrate and set-up a robotic workcell from a word problem task. Contestants are required to create a flow chart and sequence of operation. Teams are judged on efficiency, speed and teamwork.

TeamWorks

Requires teams of four to Present plans and build a joint project in three days, demonstrating their preparation for employment in residential construction. Team members must: analyze a project drawing; write an action plan and give a presentation (in which each team member is required to have an active part); and demonstrate their ability to work as a team performing skills in residential carpentry, plumbing, electricity and masonry. They are also judged on cleanliness of jobsite, timeliness of completing the project, and proper ordering and inventorying of tools and equipment.

Technical Computer Applications

Contestants will be expected to demonstrate installation, configuration and use of DOS, Windows 95/98/ME/XP/2000 Professional Operating Systems and one or more integrated office suite packages including e-mail, word processing, spreadsheet applications, database applications, web page development, money management applications, presentations applications, internet browser applications, etc. Microsoft Office and other integrated office suites could be used. The contest will include an oral presentation demonstrating the students' ability to communicate with others, the hands-on skills demonstration, and up to one hour will be allowed for a written examination.

Technical Drafting

This contest evaluates contestant's preparation for employment and recognizes outstanding students for excellence and professionalism in the field of technical drafting. The contest will focus on the solution of industry-developed problems by applying appropriate technical drafting skills and tools including computer-aided drafting (CAD).

Web Design

The project will be for each team's to complete a series of challenges, with a focus on web site usability and accessibility with at least one challenge related to scripting. Each challenge must be documented, clearly demonstrating the skills as outlined in the SkillsUSA Championships Technical Standards 2008.

Welding

Competitors receive contest drawings and a set of welding procedure specifications. All drawings, welding symbols, and welding terms conform to the latest edition of the American Welding Society standards. Through a series of stations, contestants are tested on various aspects of welding: measuring weld replicas, using weld measuring gauges; laying out a plate and using oxy-acetylene equipment to cut several holes that are checked for accuracy and quality; gas metal arc welding (GMAW) on steel making welds in various positions using short circuiting transfers; and, using a combination machine capable of providing the correct welding current for shielded metal arc (SMAW) and gas tungsten arc welding (GTAW). Competitors complete the steel project and weld an aluminum project in various positions using a variety of filler metals.

DEMONSTRATIONS FOR 2009

Aviation Maintenance Technology

Contestants perform 12 tasks that represent the types of maintenance they will handle in the aircraft industry. The contest scope is consistent with the airframe and power plant mechanics certification guide published by the Federal Aviation Administration. Aviation maintenance is the only maintenance profession certified by the federal government.

Broadcast News Production

The Broadcast News Production contest is comprised of four student members. Two students would serve as the news anchor team, one student will serve as the team's director/technical director, and one student will service as the floor director. Each team will write, produce, and complete a three-minute newscast as if it were live. Teams are evaluated on their broadcast writing ability, voice quality, diction, timing and pacing and performance techniques.

Dental Assisting

Contestants demonstrate procedures specified in the accreditation standards for Dental Assisting Education Programs of the Commission on Dental Accreditation. Students compete in chair-side assisting; preparation of dental materials; infection control; and emergency, laboratory and office procedures. Skills evaluated may include administrative, clinical or laboratory dental areas.

Esthetics

Students are tested on their knowledge of skin care including identifying and diagnosing skin conditions, massage, basic facials, proper sterilization and sanitation procedures and the application of both day and evening makeup.

Geospatial Technology

Contestants are required to take an online qualifying exam to determine their contest eligibility. Those with scores high enough to meet the national standard (75%) are allowed to advance to the national competition. Contestants invited to attend the national competition will be required to prepare a specified GIS project in advance using a SPACESTARS certification project kit provided to them along with a 50-day license

Medical Math

Contestants demonstrate their knowledge of general math concepts used in the healthcare fields. They complete a written test that may include the use of ratio/proportion, dosage calculation, metric and household equivalents, Roman numerals, abbreviations, and general math including percentages, among other medical math- related problems.

Television (Video) Production

Teams of two contestants are required to shoot a one-minute VHS video on location to convey the "theme" of the event. Editing is done in the contest area with special emphasis on professional production of the video by industry standards, quality of audio and video, and adequate conveyance of the "theme" to the viewer.

Welding Fabrication

A team competition that requires three students from each school to use their welding and fabrication skills to build a designed project from the given material. Each team is required to be skilled in the following welding and cutting processes: SMAW, GTAW, GMAW, FCAW, Oxy Fuel. The students are also required to be proficient in using the common tools of a workshop. Along with the hands-on contest, the students will test their knowledge of the subject matter with a written and oral test.