# Pocahontas County Science and Engineering Fair Middle School (Grades 6-8) Rules

## **All Projects**

- 1. Students must be in grades 6-8 and live in Pocahontas County.
- 2. Each student may only enter one project.
- 3. Students enrolled in full-time virtual instruction are eligible to submit projects for competition at the school level.
- 4. Homeschool students who contact the school to participate in the fair may be accepted on a case-by-case basis.
- 5. No group or team projects.
- 6. Each project may only include research conducted this calendar year, beginning January 2020.
- 7. Projects must be registered within one of the eighteen divisions on page 7 of the <u>Science</u> & <u>Engineering Fair Project Guide</u>. The school can further narrow these down: for example, into Engineering, Life Sciences, Chemistry, and Physical Sciences.
- 8. No copying of another researcher's work is allowed.
- 9. Projects must follow all local, state, and federal laws and regulations.
- 10. No copying of another researcher's work is allowed.
- 11. Projects must follow all local, state, and federal laws and regulations.
- 12. The following forms are **required for each project:** 
  - a. WV Approval Form Found here.
  - b. WV Rules Agreement Form Found <u>here</u>.
  - c. WVSEF Abstract for Middle School Found here.
  - d. WVSEF Checklist of Adult Sponsor Found here.
  - e. WVSEF Student Checklist Found here.
  - f. WVSEF Research Plan Found here.
- 13. Projects that are demonstrations, "library" research, informational projects, or "explanation" models are not recommended nor appropriate.
- 14. No student or school names may appear on abstracts or projects.
- 15. No students' or participants' facial photographs may appear on abstracts or projects.

# **Project Displays and Videos**

- 16. The display must be no more than 108 inches tall, 48 inches wide, and 30 inches deep, and must be freestanding (does not need to lean against a wall).
- 17. The following are **prohibited** from displays:
  - a. Student or school names
  - b. Student or participant facial photographs
  - c. Live animals
  - d. Flames, highly flammable materials, or heat sources (hot plates, etc.)

- e. Dry ice
- f. Weapons and ammunition (including toys and replicas)
- g. Sharp items (knives, needles, etc.)
- h. Tobacco products
- i. All hazardous or potentially hazardous substances or deices (poisonous chemicals, drugs, etc.)
- j. Batteries with open-top cells (car, motorcycle batteries, etc.)
- k. Any item intended for distribution
- I. Any personal information, including websites, email accounts, social media handles, etc.
- m. Any item prohibited by Board of Education policies
- n. Any item a fair coordinator deems to be unsafe or inappropriate.
- 18. Any video submitted to the state fair must be between 3 and 5 minutes long.

## **Competition and Judging**

- 19. Schools may direct judges to use the WV Science & Engineering Science Fair Judging Form on page 12 of the <u>Science & Engineering Fair Project Guide</u>, or they may develop their own judging guide
- 20. Projects in the same division and the same grade band (elementary, middle, and high school) will be judged against each other.
- 21. For each grade band, the judges will determine one "best of fair" project.
- 22. The "best of fair" project will submit a 3-5 minute video presentation to the West Virginia State Fair between March 1 and March 12, 2020.

## **Prohibited Projects**

- 23. The following are prohibited with no exceptions:
  - a. Projects done at home that involve microorganisms, including (but not limited to) mold, bacteria, viruses, prions, fungi, and parasites.
  - b. Vertebrate animal research (including humans) that involves pain or withholding of food or water.
  - c. Projects involving class IV lasers.
    - i. Projects involving lower-class lasers must be under direct supervision of a qualified adult.
  - d. Projects involving radioactive substances or equipment that emits any form of ionizing radiation.
  - e. Projects involving hazardous or potentially hazardous chemicals or reagents, DEA controlled substances, tobacco, alcohol, prescription drugs, firearms, or explosives.
  - f. The introduction or disposal of non-native, genetically-altered, and/or invasive species, pathogens, toxic chemicals, or foreign substances into the environment.

See the <u>USDA Animal and Plant Health Inspection Service</u> website for information on quarantines.

## **Projects Involving Human Participants**

- 24. All projects involving humans must be reviewed by an Institutional Review Board, which includes an educator, a school administrator, and a medical or mental health professional, **before** experimentation begins.
  - a. For more information on IRBs, see page 10 of the <u>Science & Engineering Fair Project Guide</u>.
  - b. The Green Bank Observatory will assist in setting up an IRB upon request. Contact Luci Finucan at Ifinucan@nrao.edu to request help with this.
- 25. All human participants must be provided the opportunity to opt-out of participation.
- 26. All participants (or their legal guardian, if under the age of 18) must sign an informed consent form.
  - a. An informed consent form can be found on the ISEF site here.

#### **Projects Involving Non-Human Vertebrate Animals**

- 27. All vertebrate animal research must be reviewed by a Scientific Review Committee, which includes a Doctor of Veterinary Medicine, an educator, and one additional member, **before** experimentation begins.
  - a. For more information on SRCs, see page 10 of the <u>Science & Engineering Fair</u>

    <u>Project Guide.</u>
  - b. The Green Bank Observatory will assist in setting up an SRC upon request. Contact Luci Finucan at Ifinucan@nrao.edu to request help with this.
- 28. All vertebrate animal research must be of an observational nature.
- 29. Vertebrate animal research may not be done on an animal other than a family pet.

#### **Projects Involving Biological Agents**

- 30. Any experimentation that involves bacteria, viruses, prions, fungi, parasites, or any other microorganism that must be cultured should be done in a BioSafety Level 2 Laboratory.
- 31. Any project that involves biological agents must be reviewed by a Scientific Review Committee, which includes a Doctor of Veterinary Medicine, an educator, and one additional member, before experimentation begins.
  - a. For more information on SRCs, see page 10 of the <u>Science & Engineering Fair Project Guide</u>.
  - b. The Green Bank Observatory will assist in setting up an SRC upon request. Contact Luci Finucan at Ifinucan@nrao.edu to request help with this.