State Science & Engineering Fair of Florida Categories

Many projects could easily fit into more than one of these categories. We highly recommend that you review the entire listing of the new categories before choosing the category that most accurately describes your project. More information is available on the www.sseffflorida.com. Ask yourself the following questions to help in the selection of a category:

1. Who will be the most qualified to judge my project? What area of expertise is the most important for the judge to have? (For example, a medical background or an engineering background?)
2. What is the emphasis of my project? What characteristic of my project is the most innovative, unique or important? (For example, is it the application in medicine or the engineering of the machine? Is it inserting the proper gene or the method of computer mapping to demonstrate the results?)

Animal Sciences ANIM

This category includes all aspects of animals and animal life, animal life cycles, and animal interactions with one another or with their environment. Examples of investigations included in this category would involve the study of the structure, physiology, development, and classification of animals, animal ecology, animal husbandry, entomology, ichthyology, ornithology, and herpetology, as well as the study of animals at the cellular and molecular level which would include cytology, histology, and cellular physiology.

Behavioral & Social Sciences BEHA

The science or study of the thought processes and behavior of humans and other animals in their interactions with the environment studied through observational and experimental methods.

Biomedical & Health Sciences BMED

This category focuses on studies specifically designed to address issues of human health and disease. It includes studies on the diagnosis, treatment, prevention or epidemiology of disease and other damage to the human body or mental systems. Includes studies of normal functioning and may investigate internal as well as external factors such as feedback mechanisms, stress or environmental impact on human health and disease.

Cellular/Molecular Biology & Biochemistry CMBI

The studies the structure, function, intracellular pathways, and formation of cells. Studies involve understanding life and cellular processes specifically at the molecular level. The study of the chemical basis of processes occurring in living organisms, including the processes by which these substances enter into, or are formed in, the organisms and react with each other and the environment.

Chemistry CHEM

Studies exploring the science of the composition, structure, properties, and reactions of matter not involving biochemical systems. Studies involving biological and chemical processes of renewable energy sources, clean transport, and alternative fuels.

Earth & Environmental Sciences EAEV

Any studies involving the environment and its effect on organisms/systems. This includes investigations of biological processes such as growth and life span, as well as studies of Earth systems and their evolution.

Engineering ENMS

Studies that focus on the science and engineering that involve movement or structure. The movement can be by the apparatus or the movement can affect the apparatus. The study of the characteristics and uses of various materials with improvements to their design which may add to their advanced engineering performance. Studies involving electrical systems in which information is conveyed via signals and waveforms for purposes of enhancing communications, control and/or sensing.

Environmental Engineering ENEV

Studies that engineer or develop processes and infrastructure to solve environmental problems in the supply of water, the disposal of waste, or the control of pollution.

Intelligent Machines, Robotics & Systems Software IMRS

Studies in which the use of machine intelligence is paramount to reducing the reliance on human intervention. The study or development of software, information processes or methodologies to demonstrate, analyze, or control a process/solution.

Mathematics & Computational Sciences MACO

The study of the measurement, properties, and relationships of quantities and sets, using numbers and symbols. The deductive study of numbers, geometry, and various abstract constructs, or structures. Studies that primarily focus on the discipline and techniques of computer science and mathematics as they relate to biological systems. This includes the development and application of data-analytical and theoretical methods, mathematical modeling and computational simulation techniques to the study of biological, behavior, and social systems.

Microbiology MICR

The study of micro-organisms, including bacteria, viruses, fungi, prokaryotes, and simple eukaryotes as well as antimicrobial and antibiotic substances.

Physics & Astronomy PHYS

Physics is the science of matter and energy and of interactions between the two. Astronomy is the study of anything in the universe beyond the Earth. Studies of renewable energy structures/processes including energy production and efficiency.

Plant Sciences PLNT

Studies of plants and how they live, including structure, physiology, development, and classification. Includes plant cultivation, development, ecology, genetics and plant breeding, pathology, physiology, systematics and evolution.