

## Category Descriptions

### **Behavioral and Social Sciences:**

Human and animal behavior, social and community relationships— psychology, sociology, anthropology, archaeology, ethology, ethnology, linguistics, learning, perception, urban problems, reading problems, public opinion surveys, educational testing, etc.

### **Biochemistry:**

Chemistry of life processes—cell biology, molecular genetics, enzymes, photosynthesis, blood chemistry, protein chemistry, food chemistry, hormones, etc.

### **Botany:**

Study of plant life—agriculture, agronomy, horticulture, forestry, plant taxonomy, plant physiology, plant pathology, plant genetics, hydroponics, algae, etc.

### **Chemistry:**

Study of nature and composition of matter and laws governing it— physical chemistry, organic chemistry (other than biochemistry), inorganic chemistry, materials, plastics, fuels, pesticides, metallurgy, soil chemistry, etc.

### **Computer Science:**

Study and development of computer software and hardware and associated logical devices.

### **Consumer Science:**

The testing and comparison of consumer products for their intended use.

### **Earth and Space Sciences:**

Geology, mineralogy, physiography, oceanography, meteorology, climatology, astronomy, geology, speology, seismology, geography, etc.

### **Engineering:**

Technology; projects that directly apply scientific principles to manufacturing and practical uses—civil, mechanical, aeronautical, chemical, electrical, photographic, sound, automotive, marine, heating and refrigerating, transportation, environmental engineering, etc.

### **Environmental Sciences:**

Study of pollution (air, water, and land) sources and their control; ecology.

### **Mathematics:**

Development of formal logical systems or various numerical and algebraic computations, and the application of these principles— calculus, geometry, abstract algebra, number theory, statistics, complex analysis, and probability.

**Medicine and Health:**

Study of diseases and health of humans and animals—dentistry, pharmacology, pathology, ophthalmology, nutrition, sanitation, pediatrics, dermatology, allergies, speech and hearing, etc.

**Microbiology:**

Biology of microorganisms—bacteriology, virology, protozoology, fungi, bacterial genetics, yeast, etc.

**Physics:**

Theories, principles, and laws governing energy and the effect of energy on matter—solid state, optics, acoustics, particle, nuclear, atomic, plasma, superconductivity, fluid and gas dynamics, thermodynamics, semiconductors, magnetism, quantum mechanics, biophysics, etc.

**Zoology:**

Study of animals—animal genetics, ornithology, ichthyology, herpetology, entomology, animal ecology, paleontology, cellular physiology, circadian rhythms, animal husbandry, cytology, histology, animal physiology, invertebrate neurophysiology, studies of invertebrates, etc.

**Team Projects:**

All disciplines—multidisciplinary or interdisciplinary. Projects consist of 2 or 3 team members.