

EXPLORING TECHNOLOGY
GRADES 9-10
(1 Semester)

COURSE OVERVIEW:

This class is essentially what the title implies. Students will explore on a five day rotating schedule with a partner new and different technologies common to society today. Through the use of the Activities Guides, students will explore concepts and applications of technologies using trainers, computers, videotapes, mock-ups and actual equipment. This is a hands-on course where students will lead themselves, as well as their team, through the technology. This course includes units of study in transportation, production, communications, and energy technology.

UNITS OF INSTRUCTION:

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| UNIT I | - Radio Production | UNIT X | - Satellite Communications |
| UNIT II | - Explorations in Animator Pro | UNIT XI | - Mechanisms |
| UNIT III | - Robotics | UNIT XII | - Fluid Power |
| UNIT IV | - Bio-Medical Technology | UNIT XIII | - Computer Animation |
| UNIT V | - Video Production | UNIT XIV | - Aerodynamic Fundamentals |
| UNIT VI | - Flight Simulation '95 | UNIT XV | - Alternate Energy |
| UNIT VII | - Fiber Optics | UNIT XVI | - Architectural CAD |
| UNIT VIII | - Electricity/Electronics | UNIT XVII | - Exploration in Multimedia |
| UNIT IX | - Computer Aided Manufacturing | UNIT XVIII | - Fundamentals of Electronics |
| | | UNIT XIX | - Car Builder |

STUDENT OUTCOMES:

1. Acquaint students with what technology is and what it can do.
2. Have students develop an appreciation of the different technologies.
3. Develop a computer based autobiographical portfolio.
4. Develop cooperative learning skills by working as a member of a team.

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| 5. | Develop problem-solving skills. |
| 6. | Develop skills to make a presentation. |

MAJOR LEARNING EXPERIENCES TO ACHIEVE OUTCOMES:

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| 1. | Students will develop and tape their own TV newscast using the TV Production Studio. |
| 2. | Students will program a robot to perform tasks of their own design. |
| 3. | Students will design and produce a nametag on a computer controlled milling machine. |
| 4. | Students will set-up and use the satellite dish to receive programs from satellites. |
| 5. | Students will build their own electronics project. |
| 6. | Students will develop and tape their own radio broadcast. |

ADOPTED TEXT OR PRINCIPAL MATERIALS USED:

Classroom Activity Guides have been developed for each individual technology explored.
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(04/25/00)