

# Technology Tools

## Grades 9-12

**Units of Credit:** One Semester (Elective)

**Recommended Prerequisites:** Recommended typing 30 words per minute

### **Course Description:**

In this course, students learn basic operation and function of the computer, to select appropriate software for various applications, and become aware of the fast-changing world of business and information technology. Students will select and use word processing, desktop publishing, data base, spreadsheet, presentation, graphics, multimedia, and Internet (search engine strategies, Internet protocol) and imaging software (scanners, digital cameras). This course provides students with knowledge that is readily applicable in other subject areas (especially useful for senior projects). It is recommended that this course be taken prior to enrolling in Graphics Design and Web Design. This is a lab class—all work is completed using computers on site. Students engage in a variety of learning experiences, including hands-on computer applications (word processing, spreadsheet, database, Internet research projects, multimedia presentations). Students will have access to the most recent hardware and software available. Students will be assessed on completion of projects and performance on practical application exams.

### **Topics:**

- Windows 7/File Management
- Hardware/Software
- Digital Environments
- Word Processing
- Spreadsheets (real word application)
- Publishing
- Presentations
- Movie Making
- Photo Editing

*NOTE: Throughout this document, learning target types are identified as knowledge (“K”), reasoning (“R”), skill (“S”), or product (“P”).*

**STANDARD 1: Students experience various career opportunities and assess personal career pathways.**

### **Benchmark 1:**

Explore and identify personal interests, aptitudes, and abilities and develop strategies to achieve tentative career goals.

### **Learning Targets (Type):**

1. I can use Montana Career Information Systems (MCIS) and/or other systems or web resources to investigate and evaluate my personal interests, aptitudes and abilities. (S,R)

2. I can formulate tentative career goals. (R)
3. I can evaluate approaches for meeting my goals. (R)
4. I can identify my personal goals and values. (K)
5. I can identify my personal strengths and weaknesses. (K)

**Benchmark 2:**

Utilize local resources to research career plans.

**Learning Targets (Type):**

1. I can identify local resources to develop career plans. (K)
2. I can contact my school career counselor or teacher to pursue career pathways. (S)

**Benchmark 3:**

Recognize the interrelationships of family, community, career, and leisure roles.

**Learning Targets (Type):**

1. I can describe the importance of balance between family and community in regards to career and leisure activities. (K)
2. I can compare and contrast the needs of career and leisure activities and how they relate to and/or affect family and community. (R)
3. I can identify child development theories and their implications for educational and childcare practices. (K, R)
4. I can analyze cultural and environmental influences when assessing children's development. (R)
5. I can analyze abilities and needs of children and their effects on children's growth and development. (R)
6. I can identify appropriate guidelines for positive interactions with children. (K)
7. I can identify changes in family roles and family types. (K)
8. I can interpret the family life cycle/roles of parents. (R)
9. I can define and identify ways parenting skills can be developed. (K)
10. I can evaluate factors to consider in determining personal preparedness for parenthood: (i.e., biological, social, emotional, financial, and educational.) (R)
11. I can evaluate the demands and rewards of parenting. (R)

**STANDARD 2: Students demonstrate an understanding and apply principles of Resource Management (i.e., financial, time, personal management).**

**Benchmark 1:**

Prepare a budget and keep financial records.

**Learning Targets (Type):**

1. I can research and report cost of materials and time. (S)
2. I can document financial inputs and outputs. (S)
3. I can identify the necessity to maintain accurate financial records. (K)
4. I can apply and stay within a fixed budget. (S)
5. I can identify the costs involved with prenatal care, childbirth, and the first year of life. (K)

**Benchmark 2:**

Prioritize, allocate time, prepare and follow schedules to complete a project.

**Learning Targets (Type):**

1. I can estimate the required time to complete a project. (S)
2. I can prioritize resources, equipment and tasks. (S)
3. I can reflect upon completion. (S)

**Benchmark 3:**

Apply appropriate time to task.

**Learning Targets (Type):**

1. I can implement a time schedule for task completion. (S)

**Benchmark 4:**

Use physical resources wisely to accomplish a goal.

**Learning Targets (Type):**

1. I can identify the resources necessary to accomplish the task. (K)
2. I can maintain the tools of the trade. (S)
3. I can maximize the use of my resources (S).
4. I can investigate the costs of birth defects to family and society. (S)

**STANDARD 3: Students acquire and utilize personal and leadership skills to become successful, productive citizens.****Benchmark 1:**

Demonstrate active leadership skills by participation in group activities and projects.

**Learning Targets (Type):**

1. I can investigate various leadership styles. (S)
2. I can apply leadership styles in group activities and projects. (S)

**Benchmark 2:**

Demonstrate positive personal and work ethics.

**Learning Targets (Type):**

1. I can show up for class and work on time. (S)
2. I can develop personal and work related goals. (S)
3. I can describe ethical behavior in the workplace. (K)

**Benchmark 3:**

Demonstrate skills to be a productive citizen.

**Learning Targets (Type):**

1. I can develop professional relationships with community members. (S)
2. I can contribute to my community in a positive manner. (S)

**Benchmark 4:**

Apply self-esteem building practices.

**Learning Targets (Type):**

1. I can define and provide evidence of my strengths in my career interest areas. (K)
2. I can persevere through set backs and stay focused on my goals. (S)

**Benchmark 5:**

Demonstrate appreciation for diverse perspective needs and characteristics.

**Learning Targets (Type):**

1. I can develop a working relationship with diverse populations. (S)
2. I can demonstrate communication skills that contribute to positive relationships. (S)
3. I can work to understand diverse points of view. (S)
4. I can participate in classroom discussions while respecting diverse opinions. (S,R)

**Benchmark 6:**

Practice several methods of effective communication.

**Learning Targets (Type):**

1. I can demonstrate good listening skills. (S)

2. I can effectively communicate verbally through collaborative projects. (S)
3. I can develop quality written professional communications. (S)
4. I can model and demonstrate appropriate communication skills. (S)

**STANDARD 4: Students acquire and demonstrate current technical skills leading to an occupation.**

**Benchmark 1:**

Practice technical skills and procedures required for an occupation.

**Learning Targets (Type):**

1. I can apply knowledge of hardware and software appropriately to accomplish tasks. (K,R,S,P)
2. I can demonstrate the ability to efficiently navigate the network and operating system. (K,R,S,P)
3. I can demonstrate the ability to manage files and navigate the network. (K,R,S,P)
4. I can compose organize, and edit information using a computer. (K,R,S)
5. I can create, modify, store, retrieve, scan and print files. (K,R,S)
6. I can proofread and edit files for accuracy, content, appearance and/or creativity, and for correct grammar, spelling, and punctuation. (K,R,S,P)

**Benchmark 2:**

Practice safe and appropriate use of technology.

**Learning Targets (Type):**

1. I can identify the appropriate resource needed to accomplish my goals. (K,R,S)
2. I can select and utilize the appropriate equipment to complete a task. (K,R)
3. I can identify dangerous situations and keep myself safe in online environments. (K,R)
4. I can comply with copyright laws regarding the use of technology including citing references appropriately. (K,R,S,P)

**Benchmark 3:**

Select the appropriate tools, equipment, and procedures for the task.

**Learning Targets (Type):**

1. I can identify and apply principles and techniques of publication design. (K,R,S,P)
2. I can use resources including the Internet efficiently and effectively for research and electronic communications. (K,R)
3. I can analyze current technological events and/or issues. (K,R)
4. I can analyze the impact of desktop publishing on society including concepts related to persuasiveness, marketing, and point of view. (K,R)
5. I can demonstrate proper etiquette and knowledge of acceptable use policies when using networks, especially resources on the Internet and Intranet. (K,R)

**Benchmark 4:**

Manage and maintain technological tools and follow troubleshooting protocol.

**Learning Targets (Type):**

1. I can use and enhance an established repertoire of skills and procedures as needed to operate various technologies. (K,R,S)
2. I can demonstrate competence with basic system and tool set-up, technical terminology, basic care and maintenance. (K,R,S)
3. I can use and refine troubleshooting strategies to resolve technical operations problems. (K,R)
4. I can apply sophisticated skills and strategies to enhance performance and ease task

completions. (K,R,S,P)

5. I can integrate technology in designing, developing, presenting and managing projects. analyze and evaluate a variety of technologies and match the best technology to a task. (K,R,S,P)
6. I can create a portfolio of original work using various technologies. (K,R,S,P)
7. I can apply and evaluate personal understanding to develop an innovative solution to an authentic problem. (K,R,S,P)
8. I can transfer academic and technical skills to the level of industry standards. (K,R,S,P)

**Benchmark 5:**

Apply technical information to a variety of sources.

**Learning Targets (Type):**

1. I can practice, and demonstrate my technical workplace skills in my school lab. (K,R,S)
2. I can research, write and present on the technical content utilizing academic skills found in workplace settings. (K,R,S,P)
3. I can open and close one or more digital images in photo editing software. (K,R,S)
4. I can browse for digital media using a multimedia organizer. (K,R,S)
5. I can import digital media using a digital camera and scanner into a photo editing program. (K,R,S)
6. I can create a new file and close files using a photo editing tools. (K,R,S)
7. I can navigate the workspace panels in a photo editing tools. (K,R,S)

**STANDARD 5: Students know and demonstrate the requirements of the workplace through authentic application.**

**Benchmark 1:**

Practice and demonstrate academic and technical skills to a workplace setting.

**Learning Targets (Type):**

1. I can practice, and demonstrate my technical workplace skills in my school lab. (S)
2. I can research, write and present on the technical content utilizing academic skills found in workplace settings. (S)

**Benchmark 2:**

Apply the concepts of entrepreneurship.

**Learning Targets (Type):**

1. I can explain the concepts of entrepreneurship. (K)
2. I can demonstrate the concepts of entrepreneurship through a unique project. (S)
3. I can present my unique project to an authentic audience. (S)

**Benchmark 3:**

Identify possible outcomes and consequences of decisions.

**Learning Targets (Type):**

1. I can identify possible consequences of carelessness and horseplay. (K)
2. I can explain potential outcomes of not following directions, (i.e. safety, guidelines, rubrics). (K)
3. I can gather, compile and analyze data from a variety of sources, and evaluate relevance and accuracy in making informed decisions in the workplace. (K,R,S)

**Benchmark 4:**

Use acceptable industry standard equipment in a school setting.

**Learning Targets (Type):**

1. I can successfully use acceptable industry standard equipment to produce an authentic product within budget constraints. (S)