Course Title: M/J Introduction to Computers Course Number: 0200000 Credit: 0 Grade Level : 6-8 Course Description:

The purpose of this course is to enable students to develop basic knowledge of the functions, capabilities, applications, and social implications of computer technology.

The content should include, but not be limited to, the following:

- Operation and functions of computers
- Telecommunications
- Ethical uses of computers
- Personal and Career uses of technology

	YES	NO	Other
Core Course Requirement		Х	
Course Level	Х		2
1=below grade level,			
2= at grade level,			
3= above grade level			
Receives High School Credit		Х	
Advance Course		Х	

Course Title: M/J Computer Applications 1 Course Number: 0200010 Credit: 0 Grade Level : 6-8 Course Description:

The purpose of this course is to enable students to develop knowledge and skills in computer applications.

The content should include, but not be limited to, the following:

- Input and output devices and principals

- Concepts
- Processes of computer applications
- Ethical use of computers
- Telecommunications concepts

	YES	NO	Other
Core Course Requirement		Х	
Course Level	Х		2
1=below grade level,			
2= at grade level,			
3= above grade level			
Receives High School Credit		Х	
Advance Course		Х	

Course Title: M/J Computer Applications 2 Course Number: 0200020 Credit: 0 Grade Level : 6-8 Course Description:

The purpose of this course is to enable students to apply knowledge and skills in computer applications to the design, presentation, and evaluation of specified projects.

The content should include, but not be limited to, the following:

- Project planning
- Principles
- Concepts
- Processes of computer applications and their integration into projects
- Ethical use of computers
- Telecommunications concepts
- Use of productivity and multimedia tools

	YES	NO	Other
Core Course Requirement		Х	
Course Level	Х		2
1=below grade level,			
2= at grade level,			
3= above grade level			
Receives High School Credit		Х	
Advance Course		Х	

Course Title: M/J Computer Logic and Problem Solving Course Number: 0200030 Credit: 0 Grade Level : 6-8 Course Description:

The purpose of this course is to provide opportunities to expand knowledge of logical concepts used in systems design in a problem-solving environment.

The content should include, but not be limited to, the following:

- The study of the development of systems
- Building simple models
- Using simulation software
- Basic concepts of artificial intelligence and robotics
- Ethical use of computers
- Telecommunications concepts
- Use of productivity and multimedia tools

	YES	NO	Other
Core Course Requirement		Х	
Course Level	Х		2
1=below grade level,			
2= at grade level,			
3= above grade level			
Receives High School Credit		Х	
Advance Course		Х	

Course Title: M/J Emergent Technologies Course Number: 0200040 Credit: 0 Grade Level : 6-8 Course Description:

The purpose of this course is to enable students to develop knowledge of emergent computer-based technologies and telecommunications and related ethics, issues and trends.

The content should include, but not be limited to, the following:

- Computer literacy concepts and skills
- Emergent computer-based technologies
- Emergent telecommunications
- Ethics
- Issues
- Trends
- Evaluation concepts
- Careers in emergent technologies

	YES	NO	Other
Core Course Requirement		Х	
Course Level	Х		2
1=below grade level,			
2= at grade level,			
3= above grade level			
Receives High School Credit		X	
Advance Course		X	

Course Title: M/J Visual Computer Modeling Course Number: 0200050 Credit: 0 Grade Level : 6-8 Course Description:

The purpose of this course is to provide middle school students with an introduction to visualization graphics programming using computers. Visualization graphics, often referred to as the second computer revolution, is changing global and local perspectives. Content will be transdisciplinary and will include areas that use visual computer modeling such as engineering and architecture industrial design and manufacturing, medicine, physics, biology, entertainment arts and advertising.

The content should include, but not be limited to, the following:

- Dimensional modeling
- Rendering simulations and animations
- Image analysis
- Retouching computer vision-image processing

	YES	NO	Other
Core Course Requirement		Х	
Course Level	Х		2
1=below grade level,			
2= at grade level,			
3= above grade level			
Receives High School Credit		Х	
Advance Course		Х	

Course Title: M/J Exploring the Internet Course Number: 0200060 Credit: 0 Grade Level : 6-8 Course Description:

The purpose of this course is to enable students to develop basic knowledge of the functions, capabilities, applications, and social implications of the internet.

The content should include, but not be limited to, the following:

- Ethical use of the internet
- Navigation skills
- Search strategies
- Telecommunications
- Information literacy skills

	YES	NO	Other
Core Course Requirement		Х	
Course Level	Х		2
1=below grade level,			
2= at grade level,			
3= above grade level			
Receives High School Credit		Х	
Advance Course		Х	

Course Title: M/J Introduction to Computer Programming Course Number: 0201000 Credit: 0 Grade Level : 6-8 Course Description:

The purpose of this course is to enable students to develop basic knowledge of programming concepts and one or more languages

The content should include, but not be limited to, the following:

- Programming concepts and techniques
- Development and uses of programming languages-sequential, logical problem solving
- Algorithms
- Ethical use of computers
- Writing and debugging of structured computer programs

	YES	NO	Other
Core Course Requirement		Х	
Course Level			2
1=below grade level,			
2= at grade level,			
3= above grade level			
Receives High School Credit		Х	
Advance Course		Х	

Course Title: M/J Intermediate Computer Programming Course Number: 0201010 Credit: 0 Grade Level : 6-8 Course Description:

The purpose of this course is to develop intermediate programming skills in one or more selected languages.

The content should include, but not be limited to, the following:

- Design of algorithms
- Modification and writing of programs
- Use of structured programming approach

	YES	NO	Other
Core Course Requirement		Х	
Course Level			2
1=below grade level,			
2= at grade level,			
3= above grade level			
Receives High School Credit		Х	
Advance Course		Х	