# JUNIOR HIGH SCHOOL DISTRICT SYLLABI / COURSE HANDBOOK

Van Wyck Junior High School Wappingers Junior High School



## **COMPUTER APPLICATIONS - GRADE 7**

Code 007 I 0 Weeks

Prerequisite: None

Computer Applications is offered as an exploratory course to ensure that all students become knowledgeable about common software programs and on-line tools. These programs will benefit students in higher education and business. The Computer Applications course addresses the ISTE (International Society of Technology in Education) national standards for middle level students. In addition, students will learn about Internet Safety; the importance of avoiding plagiarism; the different guidelines for citing works; and the concept of intellectual property and copyright laws.

## Areas of Study Include:

- Microsoft Word
- Microsoft PowerPoint
- Microsoft Excel
- · Graphic Organizers/Thinking Maps
- Technology Safety (Laws)
- Plagiarism
- Intellectual Property/Copyright

#### **SKILLS**

- Word Processing
- Presentations
- · Internet Research
- Proper way to work cite information
- Create an Excel Spreadsheet and Graph
- · Organize information for school report
- · Web page evaluation
- Effective web searching

Assessment: Students will be assessed in several ways to address the various learning styles of the students. Calculation of grades in this class will be based on tests, worksheets, quizzes, hands-on projects and class participation.

For a complete list of ISTE Standards for Students see: http://cnets.iste.org/students/s\_stands.html

## **TECHNOLOGY 7**

Code T095 HalfYear

Prerequisite: None

#### Areas of Study Include:

- Measurement
  - Standard/English (Review)
  - Metric
  - Measurement Activities
- Safety
  - General Safety
  - Machine Safety
  - Safety Testing and Evaluation
- Engineering
  - Principles of Engineering
  - Structures
  - Scales and Measurement
  - Bridge Design and Construction
  - Testing and Evaluation
- Transportation
  - New and Emerging Technology
  - Aerospace Technology
  - Newton's Laws

- Aerodynamics
- Construction
- Testing of Projects

#### Manufacturing

- Craft Vs. Mass Production
- Advertising
- Machine Safety
- Manufacturing Process
- Production Product Run

#### · Problem Solving

- Problem Solving Method
- Implementation of Problem Solving on Project Based Work
- Evaluation of Project
- Re-Design and Testing

## Categories Of Technology

- Technology History
- Categories of Technology
- Technology Project (I-Movie, Powerpoint, Poster, Report)

Assessment: Based on lab experiences, projects, homework, tests and quizzes.

For further information on the NYS core curriculum for Technology

http://www.emsc.nysed.gov/ciai/pub/pubmst.html

## **TECHNOLOGY 8**

Code T195 Full Year (meets every other day)

Prerequisite: Completion of Technology 7.

## Areas of Study Include:

- Measurement
  - Standard/English (Review)
  - Metric
  - Measurement Activities

#### Safety

- General Safety
- Machine Safety
- Safety Testing and Evaluation

## Electricity

- Principles of electronics
- Circuits
- Electrical Engineering
- Circuit board game (Activity)

#### Transportation

- Design
- Orthographic Projection/measurement
- Aerodynamics
- Construction
- Finishing
- Testing of Projects

## Construction (Solar Home)

- Energy Sources and Production
- Passive Vs. Active Solar Collection (Solar Orientation)
- Design, Solar Home Materials
- Floor Plans, Elevations, Plot Plans
- Construction of houses
- Testing (Efficiency of homes)
- Evaluate Project's Positive/Negative Outcomes (Possible Re-Design)

Assessment: Based on lab experiences, projects, homework, tests and quizzes.

For further information on the NYS core curriculum for Technology Education see:

http://www.emsc.nysed.gov/ciai/pub/pubmst.html

