Glendale Unified School District

<u>Middle School</u>

October 7, 2014


Department:              Career Technical Education (CTE)

Course Title:            Introduction to Applied Technologies 1

Course Number:           5138G2

Grade Level:             7-8 (8th Strongly Recommended)

Semester Credits:        5

Recommended
Prerequisite:            Teacher Recommendation

Recommended
Textbook/Resource:       Generation Yes Online Curriculum

Course Description:      Students learn cutting edge technologies and collaborate directly with teachers to implement 21st century skills into the classroom, developing skills related to computer technologies, concepts, and terminology. Students learn the functions of computers in education, business, and society, exploring and considering computer-related issues such as ethical solutions, social networking, and media sharing. Students will use word processing, spreadsheet, database, and presentation software in hands-on experiences include exploring Web 2.0, diverse operating systems, and emerging technologies for potential classroom implementation. While working with teachers as mentors, students will troubleshoot computer problems in hardware and software in general computer usage.

I.    Standards

      A.    Common Core State Standard – Technology Integration

            1.    ELA Writing.9-10/11-12. 2a: Introduce a topic or thesis statement; organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting, graphics, and multimedia when useful to aiding comprehension.

2.	ELA Writing.9-10/11-12. 6:  Use technology, including the Internet, to produce, publish, and update individual or shared writing products, in response to on going feedback, including new arguments or information. Taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.

3.	ELA Writing.9-10/11-12. 8:  Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation including footnotes and endnotes.

4.	ELA Speaking and Listening.9-10/11-12. 2

	a.	Integrate multiple sources of information presented in divers formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluation the credibility and accuracy of each source and noting any discrepancies among the data.

5.	ELA Speaking and Listening.9-10/11-12. 5

	a.	Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.

6.	Literacy in History/Social Studies, Science, and Technical Subjects: Reading Standards for Literacy in History/Social Science.9-10/11-12. 7

	a.	Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.

7.	Literacy in History/Social Studies, Science, and Technical Subjects: Reading Standards for Literacy in History/Social Science.9-10/11-12. 8

	a.	Assess the extent to which the reasoning and evidence in a text support the author's claims. Evaluate an author's premises, claims, and evidence by corroborating or challenging them with other information.

B.   21st Century Student Outcomes – Information, Media and Technology Skills

1.   Information Literacy

a.   Access and Evaluate Information
i.   Access information efficiently (time) and effectively (sources).
ii.   Evaluate information critically and competently.

b.   Use and Manage Information
i.   Use information accurately and creatively for the issue or problem at hand.
ii.   Manage the flow of information from a wide variety of sources.
iii.   Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of information.

2.   Media Literacy

a.   Analyze Media
i.   Understand both how and why media messages are constructed, and for what purposes.
ii.   Examine how individuals interpret messages differently, how values and points of view are included or excluded, and how media can influence beliefs and behaviors.
iii.   Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of media.

b.   Create Media Products
i.   Understand and utilize the most appropriate media creation tools, characteristics and conventions.
ii.   Understand and effectively utilize the most appropriate expressions and interpretations in diverse, multi-cultural environments.

C.   21st Century Student Outcomes - ICT (Information, Communications and Technology) Literacy

1.   Apply Technology Effectively

a.   Use technology as a tool to research, organize, evaluate and communicate information.

      b.      Use digital technologies (computers, PDAs, media players, GPS, etc.), communication/networking tools and social networks appropriately to access, manage, integrate, evaluate and create information to successfully function in a knowledge economy.

      c.      Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of information technologies.

D.      National Education Technology Standards (NETS) For Students

      1.      Creativity and Innovation – MAKE IT
      2.      Communication and Collaboration – SHARE IT
      3.      Research and Information Fluency – FIND IT
      4.      Critical Thinking, Problem Solving, and Decision Making – SOLVE IT
      5.      Digital Citizenship – PROTECT IT
      6.      Technology Operations and Concepts – USE IT

II.      Sample Assessments

A.      Technology Assistance Projects
B.      Performance Task Rubrics
C.      GenYES Website Student Evaluation Tools

III.      Topic of Study - Suggested Time Distribution

A.      GenYES Basics

      1.      Getting Started with GenYES.      4 Weeks

      a.      The activities in this unit introduce students to the GenYES program. They cover using the GenYES tools, working and collaborating with teachers, and planning projects that will have real impact on technology integration school-wide. The activities help establish the fundamental student-centered philosophy of GenYES, and build Student Tech Leader (STL) skills not just as tech experts, but also as leaders. Expansion activities are included for differentiation.

      2.      GenYES in Action      4 Weeks

      a.      Once GenYES students start to understand their roles and responsibilities, they can prepare for the next stage of GenYES, working with a partner-teacher on Technology Assistance Project (TAPs). These activities prepare students to prepare for their first

b. TAP, work in collaboration with the teacher, create and implement a TAP, share their work with other GenYES students, and finally deliver the TAP to their teacher-partner.

3. Cyber Safety and Digital Citizenship          2 Weeks

a. This unit tackles the major safety issues that accompany online communications. Just as children learn to look both ways before they cross the street on their own, students need to internalize the common-sense safety guidelines of the digital world. The activities in this unit cover personal safety, financial fraud, and computer security, helping students understand the reasons behind online safety rules and preparing them to promote safe, responsible digital citizenship to their peers. In the culminating activity, students create a webpage to educate others about how understanding online safety makes using the Web easier and more effective.

4. TAPs (Technology Assistance Projects)          10 Weeks
   Planning Leadership Projects

a. Now that students know how the TAP tool works, they are ready to learn how TAPs help teachers and other adults in their school. Collaboration between students and teachers is key to the GenYES process and students need to understand their responsibilities as co-partners in the model. In this activity, students discuss interpersonal skills and critique the student-teacher interactions in a role-play exercise. As with any tool, there are effective and ineffective ways to use technology to enhance learning. This activity is designed to get students thinking about the ways that they learn best, and how TAPs can help teachers create more engaging and active learning experiences for students. The themes of this discussion should be an ongoing component of your GenYES program as students work on TAPs and continue to think critically about their own learning.