Driscoll ISD

Middle School Technology - Syllabus

Campus: Driscoll Middle School

Course and Grade Level: Technology - Middle School

Course Description: Middle School Technology Applications is a dynamic, project-based elective designed to transition students from passive digital consumers into active digital creators and problem-solvers. This course aligns directly with the **Texas Essential Knowledge and Skills (TEKS)** standards. Students explore real-world tech systems, develop essential computational thinking skills, and prepare for high school Computer Science or Career and Technical Education (CTE) pathways. Using Learning.com, a state-adopted TechApps for Texas curriculum, industry-standard digital tools, students will work individually and collaboratively to create innovative digital products while practicing ethical global citizenship.

The Course is offered once a semester.

Foundational Systems & Cyber-Safety

- **Module 1: Practical Technology Concepts & Adaptive Keyboarding**
  - **Focus:** Core device anatomy, hardware vs. software troubleshooting, and local vs. cloud file management systems.
  - **Learning.com Tools:** *Adaptive Keyboarding* engine to build individualized typing speed and accuracy.
  - **TEKS Strand:** Practical Technology Concepts.

Module 2: Digital Citizenship & Cybersecurity

- **Focus:** Deep dive into cyberbullying prevention, digital footprint awareness, intellectual property laws (copyright/fair use), and proactive cybersecurity defense strategies.
- **Learning.com Tools:** Interactive scenarios evaluating online safety, privacy controls, and "netiquette".
- **TEKS Strand:** Digital Citizenship.

Digital Literacy & Workplace Productivity Tools

- **Module 3: Principles of Word Processing (Google Docs / Microsoft Word)**
  - **Focus:** Advanced document design, collaborative editing, indexing, referencing, and professional formatting layouts.
  - **Learning.com Tools:** Guided application simulations and peer-collaboration challenges.
  - **TEKS Strand:** Practical Technology Concepts.

Module 4: Principles of Visual Design & Multimedia Presentations

- **Focus:** Principles of graphic layout, visual contrast, typography, and interactive presentation design using presentation tools (Slides/PowerPoint).
- **Learning.com Tools:** Multimedia capstone design projects.
- **TEKS Strand:** Creativity and Innovation.

Data Analytics & Computational Logic

- **Module 5: Principles of Data Literacy & Spreadsheets (Google Sheets / Excel)**
  - **Focus:** Data collection, formatting, using core mathematical formulas/functions, organizing massive datasets, and generating predictive charts.
  - **Learning.com Tools:** Interactive spreadsheet labs and infographic compilation builders.
  - **TEKS Strand:** Data Literacy, Management, and Representation.

Module 6: Computational Thinking Foundations

- **Focus:** Deconstructing large problems into systematic steps. Students learn pattern recognition, data abstraction, and foundational block-based logic modeling.
- **TEKS Strand:** Computational Thinking.

Programming, AI Literacy, & Career Horizons

- **Module 7: Introduction to Coding & Scripting (EasyCode)**
  - **Focus:** Transitioning from block programming logic to text-based coding basics (such as Python or custom syntax structures). Mastering loops, conditional logic statements, variables, and code debugging.
  - **Learning.com Tools:** *EasyCode* student-paced coding challenges and logic playgrounds.
  - **TEKS Strand:** Computational Thinking.

Module 8: Emerging Technologies & AI Literacy Expansion

- **Focus:** Practical fundamentals of Artificial Intelligence. Evaluating ethical implications, recognizing algorithmic bias, and utilizing functional AI engines responsibly.
- **Learning.com Tools:** *AI Literacy Curriculum Add-On* hands-on decision-making simulations.
- **TEKS Strand:** Creativity and Innovation.
- **Module 9: Connecting Technology to STEM Careers**
  - **Focus:** Evaluating how computer science and tech application mastery integrate across contemporary modern fields.
  - **Learning.com Tools:** Virtual career simulation modules (e.g., Software Engineering, Digital Design, System Analysis).

*Subject to Change