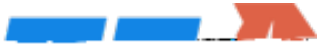


Approved Innovative Course

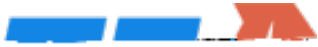
- x Districts must have local board approval to implement innovative courses



Approved Innovative Course

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- x Innovative courses may meet state elective credit only
- x CTE Innovative courses may not be the final course in a coherent sequence for an endorsement
- x Course requirements must be met without modification

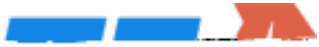
- (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
 - (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.
- (c) Knowledge and skills.
- (1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected:
 - (A) employ advanced reading and writing skills;
 - (B) employ advanced verbal and nonverbal communication skills;
 - (C) demonstrate knowledge of how to dress appropriately, speak politely, and conduct oneself in a manner appropriate for the profession and work site;
 - (D) cooperate, contribute, and collaborate as a member of a group to attain agreement and achieve a collective outcome;
 - (E) demonstrate effective use of time-management skills in prioritizing tasks, following schedules, and tending to goal relevant activities in a way that optimizes efficiency and results;
 - (F) consistently demonstrate punctuality, dependability, reliability, and responsibility in reporting for duty and performing assigned tasks with little or no direction; and
 - (G) identify and demonstrate appropriate actions and identify consequences related to discrimination, harassment, and inequality in the workplace.
 - (2) The student demonstrates knowledge of the GIS field and GIS-related careers. The student is expected to:
 - (A) identify employment and career opportunities in GIS-related fields, including spatial technology;
 - (B) explore or participate in career preparation learning experiences, including job shadowing, mentoring, apprenticeship training; and preparation programs;
 - (C) identify industry certifications for GIS related careers, including careers that use or benefit from spatial technology; and



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- (D) evaluate ethical issues related to spatial technology and remote sensing and technology and incorporate proper ethics in submitted projects.
- (3) The student applies basic GIS software knowledge and skills to explore the use of various geographic projections in GIS software. The student is expected to:
- (A) use and identify Mercator map projection;
 - (B) use and identify Albers conic map projection; and
 - (C) evaluate the evolution of and need for different map projections.
- (4) The student applies the application of global positioning system (GPS) technology. The student is expected to:
- (A) identify and use data terminology related to GPS;
 - (B) identify and use appropriately GPS receiver components;
 - (C) propose potential applications of GPS coordinates such as locating fire hydrants, extinguishers, lighting, and parking lots; and
 - (D) appraise the accuracy of GPS coordinates from different receivers such as smartphones, tablets, and GPS handheld devices.
- (5) The student demonstrates knowledge and understanding of the types and components of unmanned remote sensing platforms. The student is expected to:
- (A) identify major components of aerial, terrestrial, and submersible remote sensing platforms;
 - (B) evaluate conditions for using one type of platform over another;
 - (C) differentiate the types of sensing systems used by each type of platform, including active, passive, spectrometer, radar, LiDAR, scatterometer, and laser altimeter, and
 - (D) compare and contrast situations in which different platforms and sensing systems might be used.
- (6) The student demonstrates skills related to GIS data analysis. The student is expected to:
- (A) apply critical thinking skills to evaluate findings and potential problems using GIS data;
 - (B) create models that represent collected data
 - (C) create, query, map, and analyze cell-based raster data; and



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(D) analyze density, distance, (s)Tj -0.002 TS4s

