

BLACKHAWK SCHOOL DISTRICT

CURRICULUM

Course Title: **Geospatial Technology II**
Course Number: **1056**
Grade Level(s): **9-12**
Periods Per Week: **5**
Length of Course: **½ year**
Credits: **.5**
Faculty Author(s): **Tim Linkenheimer**
Date: **January 2013**

COURSE DESCRIPTION: This Course is an advanced skill of geographic information systems (G.I.S.) ArcView 9.3® software. Emphasis of this course will be placed in the following areas: Geodatabases, Map Digitizing, Georeferencing, Spatial Adjustment, Geocoding, Map Labels and Annotation, Map Hyperlinking, and customizing ArcGis. Students will be working on project teams and will need prior basic computer knowledge. In order to be eligible, students must have a minimum of a “C” in Geospatial Technology I.

The following outline provides a general overview of the course content, not a chronological timetable. The weeks denoted for each area provide an idea for the overall time spent working with a given topic throughout the school year.

COURSE OUTLINE	OBJECTIVES (PA standard)	PROPOSED TIME / ACTUAL TIME	RESOURCES	LESSON REFLECTION (for future revisions)
1. Class Orientation	3.4.12.A3. Demonstrate how technological progress promotes the advancement of science, technology , engineering and mathematics (STEM).	2 days	Syllabus	
2. Geodatabases II	3.4.10.B2. Demonstrate how humans devise technologies to reduce the negative consequences of other technologies .	5 days	Arc GIS Software (Moodle)	
3. Georefercing	3.4.10.C1. Apply the components of the technological design process.	5 days	Arc GIS Software (Moodle)	
4. Spatial Adjustment	3.4.12.C3.	5 days	Arc GIS Software (Moodle)	

<p>5. Digitizing II</p> <p>6. Digitizing III</p> <p>7. Geocoding our community</p> <p>8. Density Mapping</p> <p>9. Hyperlinking</p> <p>10. Labels and Annotations</p> <p>11. Advanced Attributes & SQL Queries</p> <p>12. Working with Rasters</p> <p>13. Customizing ArcGIS</p> <p>14. Classification</p> <p>15. Google Sketchup (Our Community)</p>	<p>Apply the concept that many technological problems require a multi-disciplinary approach.</p> <p>3.4.12.E4</p> <p>Synthesize the effects of information and communication systems and subsystems as an integral part of the development of the Information Age.</p>	<p>5 days</p> <p>5 days</p> <p>5 days</p> <p>5 days</p> <p>5 days</p> <p>5 days</p> <p>2 days</p> <p>5 days</p> <p>5 days</p> <p>5 days</p> <p>5 days</p>	<p>Arc GIS Software (Moodle)</p> <p>Arc GIS Software (Moodle)</p> <p>Arc GIS Software (Moodle)</p> <p>Arc GIS Software (Moodle)</p> <p>Arc GIS Software (Moodle)</p> <p>Arc GIS Software (Moodle)</p> <p>Arc GIS Software (Moodle)</p> <p>Arc GIS Software (Moodle)</p> <p>Arc GIS Software (Moodle)</p> <p>Arc GIS Software (Moodle)</p> <p>Arc GIS Software (Moodle)</p> <p>Arc GIS Software (Moodle)</p>	
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16. GIS II Final		1 day	Arc GIS Software (Moodle)	
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