# 2010 CMaP Institute: Participants Objectives and Schedule

## **MONDAY**

MONDAY  Day/Time	Activity	Description
MON 8:00-9:00	Welcome	<ul> <li>Introductions / Logistics/Week Overview</li> <li>Parking</li> <li>Resources &amp; Handouts</li> <li>Geographic Introduction</li> <li>Geographic Introduction Class Expectations</li> <li>Your CMaP Project</li> <li>Credit (Credit Request Form)</li> </ul>
MON 9:00-9:45	Pre-Project Basics: Introduction to CMaP	<ul> <li>Overview of CMaP</li> <li>Introduction to GIS         <ul> <li>Geospatial Revolution</li> </ul> </li> <li>Local CMaP projects         <ul> <li>Recycle Project</li> </ul> </li> <li>Introduction to Class Resources         <ul> <li>Website www.uen.org/cmap</li> <li>Download CMaP Template</li> <li>Wikispace cmap-ut.wikispaces.com</li> </ul> </li> </ul>
MON 9:45-10:00	Pre-Project Basics: Spatial Inquiry – What do kids need to understand about spatial?	Asking spatial questions     Spatial Challenge: Guess the Locations
Break 10:00-10:15	Break	
MON 10:15-12:00	Sign for GPS Units:	<ul> <li>Distribute GPS Units         <ul> <li>Navigate Screens</li> </ul> </li> <li>Earth Cache- Go outside</li> <li>GPS Hide and Seek Activity</li> </ul>
MON 12:00-1:00	Lunch - on your own	
MON 1:00-2:00	GPS exploration and discovery inside:	<ul> <li>Learn more about GPS-         <ul> <li>GPS videos</li> <li>UTM Grid</li> </ul> </li> <li>Map Activity         <ul> <li>Topo Bingo</li> </ul> </li> <li>Map Reading Skills</li> </ul>
MON 2:00-3:00	GIS exploration and discovery inside:	<ul> <li>Getting Started with GIS: ESRI</li> <li>Register at ESRI Virtual Campus</li> <li>File management</li> <li>Module 1: The Big Picture of GIS from ESRI Virtual Campus</li> </ul>
MON 3:00-3:15	Break	
MON 3:15- 4:30	GIS exploration and discovery inside:	<ul><li>Continue: The Big Picture of GIS</li><li>Self Exploration</li></ul>

MON 4:30- 4:45	GIS online data exploration and discovery inside:	•	Introduce ArcGIS Online  o <a href="http://www.arcgis.com">http://www.arcgis.com</a> o ArcGIS Resource Center <a href="http://resources.arcgis.com/">http://resources.arcgis.com/</a> Wrap-up
MON 4:45-5:00	Take your Pulse	•	How are you doing? Play with GPS Unit at home.

## **TUESDAY**

TUES 8:00-9:00	Welcome to Day 2 GPS Exploration & Practice	<ul> <li>Meet outside to <b>track</b> your Initials and Geometric Shapes</li> <li>Downloading Tracks in Google Earth and ArcMap</li> </ul>
TUES 9:00 – 10:15	ArcMap Explore:	<ul> <li>Brief Introduction to Utah Data         <ul> <li>GIS Portal site</li> </ul> </li> <li>Download Data</li> <li>Measure &amp; Draw tools</li> <li>Layout – Export as .jpg</li> <li>Save Project</li> </ul>
Break- 10:15-10:30	Break	
TUES 10:30-12:00	Building Community Relationships:	Community GIS partner presentation.
TUES 12:00-1:30 LUNCH	<b>Building Community Relationships:</b> Community Introductions	Lunch and discussion with community members interested in working with students
TUES 1:30-2:00	Building Community Relationships:	<ul> <li>Definition &amp; Compare         <ul> <li>Place-based education</li> <li>Project-based learning</li> <li>Community-based learning</li> </ul> </li> <li>Definition share         <ul> <li>Introduce CMaP project components:</li> </ul> </li> <li>Community Partners Brainstorm</li> <li>Share ideas learned</li> </ul>
TUES 2:00-3:30	Project Planning: Project Brainstorm and Feasibility Assessment	<ul> <li>Project Planning         <ul> <li>Realistic project expectations</li> <li>Backward Design</li> </ul> </li> <li>Project Ideas         <ul> <li>View Past CMaP Project</li> </ul> </li> <li>Project Brainstorm         <ul> <li>Write down Project ideas and possible partners</li> <li>Speed Date Activity</li> </ul> </li> </ul>

TUES 3:30-3:45	Break	
TUES 3:45-4:45	Project Planning:	<ul> <li>Begin Project Planning</li> <li>Sample Community Letters</li> <li>Project Template</li> </ul>
TUES 4:45-5:00	Take your Pulse	<ul> <li>9 square Planning Document</li> <li>How are you doing?</li> <li>List some of your project ideas</li> <li>What are we forgetting?</li> </ul>

#### **WEDNESDAY**

WED 8:00-8:30	Project Planning: Define, organize and design a CMaP Project	Questions & Review
WED 8:30-9:30	Project Implementation: Gathering New Data Fieldwork	<ul><li>Attribute Tables</li><li>Data collection project</li><li>Data Gathering Techniques</li></ul>
WED 9:30-10:30		<ul> <li>Data Collection Activity</li> <li>Download Data points into ArcMap</li> <li>Attribute Table Editing</li> <li>Data Display</li> <li>Layouts - Making Maps</li> <li>Software Discussion</li> </ul>
Break- 10:15-10:30	Break	
WED 10:30-12:00	Project Implementation: Transferring Field Data to GIS	<ul><li>Software Distribution</li><li>DNR Garmin Overview</li><li>Add Utah Data to ArcMap</li></ul>
WED 12:00-1:00		
WED 1:00-3:15 (USU)	Project Planning: Define, organize and design River Water Quality Project. Meet our Community Partners Eric Peterson USU Water Quality Extension (435) 797-3310 eric.peterson@aggiemail.usu.edu	<ul> <li>Introduction of Water Quality Project</li> <li>Presentation from USU</li> <li>Learn to use measurement tools</li> </ul>
Break 3:15-3:30	Break	
WED 3:30-4:45	Work Time:	<ul> <li>Work time:         <ul> <li>Project Template</li> <li>Data Collection project</li> </ul> </li> <li>www.arcgis.com</li></ul>

		o Arc Lessons
WED 4:45-5:00	Take Your Pulse	• How are you doing?

## **THURSDAY**

THURS 8:30-11:45 (USU)	Project Implementation: Water Quality Fieldwork	<ul> <li>Meet at class/carpool to river</li> <li>Participants gather &amp; record data: GPS waypoints and water quality readings for <i>Temperature, Turbidity, pH</i>, and <i>Dissolved Oxygen</i></li> </ul>
THURS 11:45-12:45	Lunch on your own OR	Bring sack lunch to picnic in park
THURS 1:00-3:00	Project Implementation:	Transfer GPS points
	Transferring Field Data to GIS	Bring Data in Water Quality project
	Creating Water Quality Project	Edit Tables of GPS waypoints
3:00-3:15	Break	
THURS 3:15-4:15	Project Implementation: Advanced GIS Skills	<ul><li> Join tables</li><li> Hot link photos</li></ul>
		<ul><li>Map layout</li><li>Export map</li></ul>
THURS 4:15-4:45	Project Management: Ongoing Project Evaluation and Assessment	• •

## **FRIDAY**

FRI 8:00-9:30	Project Implementation: Finish Products	<ul> <li>Create final map products</li> <li>Discuss skills for presentations</li> <li>Practice presentations</li> </ul>
Break 9:30 – 9:45		
FRI 9:45-11:30	Project Implementation: Project Presentations & Celebrations	<ul> <li>Celebrations: Participant presentations</li> <li>Feedback &amp; Response</li> <li>Where to get help?</li> </ul>
FRI 11:30-12:30		
FRI 12:30-1:00	Project Implementation:	<ul> <li>Fieldwork- So What? Share lessons learned</li> <li>Project Template</li> <li>Explore ArcGIS Online         <ul> <li><a href="http://www.arcgis.com">http://www.arcgis.com</a></li> <li><a href="http://www.arcgis.com">ArcGIS Resource Center</a></li> </ul> </li> </ul>

FRI 12:30-1:00	Project Implementation:	<ul> <li>Fieldwork- So What? Share lessons learned</li> <li>Project Template</li> <li>Explore ArcGIS Online         <ul> <li><a href="http://www.arcgis.com">http://www.arcgis.com</a></li> <li>ArcGIS Resource Center</li> <li><a href="http://resources.arcgis.com/">http://resources.arcgis.com/</a></li> </ul> </li> </ul>
1:00-1:45	Project Implementation:	<ul> <li>CMaP Class Resources</li> <li>GIS Mailing List</li> <li>Join Utah Geographic Alliance</li> <li>Join GIS Portal</li> <li>Desk Copies for ESRI – Map book</li> </ul>
1:45 -3:00	Project Management:	<ul> <li>Complete workshop evaluation</li> <li>Complete Credit Forms</li> <li>Send off!</li> </ul>